

AirInv

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Contents

1	AirInv Documentation	1
1.1	Getting Started	1
1.2	AirInv at SourceForge	2
1.3	AirInv Development	2
1.4	External Libraries	2
1.5	Support AirInv	3
1.6	About AirInv	3
2	People	3
2.1	Project Admins	3
2.2	Developers	3
2.3	Retired Developers	3
2.4	Contributors	4
2.5	Distribution Maintainers	4
3	Coding Rules	4
3.1	Default Naming Rules for Variables	4
3.2	Default Naming Rules for Functions	4
3.3	Default Naming Rules for Classes and Structures	5
3.4	Default Naming Rules for Files	5
3.5	Default Functionality of Classes	5
4	Copyright and License	5
4.1	GNU LESSER GENERAL PUBLIC LICENSE	5
4.1.1	Version 2.1, February 1999	5
4.2	Preamble	6
4.3	TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND M- ODIFICATION	7
4.3.1	NO WARRANTY	12
4.3.2	END OF TERMS AND CONDITIONS	12
4.4	How to Apply These Terms to Your New Programs	13
5	Documentation Rules	13
5.1	General Rules	13

5.2	File Header	14
5.3	Grouping Various Parts	15
6	Main features	15
6.1	Network generation	15
6.2	Inventory generation	16
6.3	Finding travel solutions	16
6.4	Distributed inventories	16
6.5	Other features	16
7	Make a Difference	16
8	Make a new release	17
8.1	Introduction	17
8.2	Initialisation	17
8.3	Branch creation	17
8.4	Commit and publish the release branch	17
8.5	Update the change-log in the trunk as well	18
8.6	Create distribution packages	18
8.7	Generation the RPM packages	18
8.8	Update distributed change log	19
8.9	Create the binary package, including the documentation	19
8.10	Upload the files to SourceForge	19
8.11	Upload the documentation to SourceForge	19
8.12	Make a new post	20
8.13	Send an email on the announcement mailing-list	20
9	Installation	20
9.1	Table of Contents	20
9.2	Fedora/RedHat Linux distributions	21
9.3	Airinv Requirements	21
9.4	Basic Installation	21
9.5	Compilers and Options	23
9.6	Compiling For Multiple Architectures	23
9.7	Installation Names	24

9.8	Optional Features	25
9.9	Particular systems	25
9.10	Specifying the System Type	26
9.11	Sharing Defaults	27
9.12	Defining Variables	27
9.13	'cmake' Invocation	27
10	Linking with AirInv	32
10.1	Table of Contents	32
10.2	Introduction	32
10.3	Dependencies	32
10.3.1	StdAir	33
10.4	Using the pkg-config command	33
10.5	Using the airinv-config script	34
10.6	M4 macro for the GNU Autotools	34
10.7	Using AirInv with dynamic linking	34
11	Test Rules	35
11.1	The Test File	35
11.2	The Reference File	35
11.3	Testing IT++ Library	35
12	Users Guide	35
12.1	Table of Contents	35
12.2	Introduction	36
12.3	Get Started	36
12.3.1	Get the AirInv library	36
12.3.2	Build the AirInv project	36
12.3.3	Build and Run the Tests	37
12.3.4	Install the AirInv Project (Binaries, Documentation)	37
12.4	Input file of AirInv Project	38
12.5	The schedule BOM Tree	39
12.5.1	Build of the schedule BOM tree	39
12.5.2	Display of the schedule BOM tree	40
12.6	Exploring the Predefined BOM Tree	90

12.6.1 Airline Network BOM Tree	91
12.6.2 Airline Schedule BOM Tree	91
12.7 Extending the BOM Tree	91
12.8 The travel solution calculation procedure	91
13 Supported Systems	91
13.1 Table of Contents	91
13.2 Introduction	92
14 AirInv Supported Systems (Previous Releases)	92
14.1 AirInv 3.9.1	92
14.2 AirInv 3.9.0	92
14.3 AirInv 3.8.1	92
15 Tutorials	92
15.1 Table of Contents	92
15.2 Preparing the AirSched Project for Development	93
15.3 Your first networkBuilde	93
15.3.1 Summary of the different steps	93
15.3.2 Result of the Batch Program	93
15.4 Network building with an input file	94
15.4.1 How to build a network input file?	94
15.4.2 Building the BOM tree with an input file	95
15.4.3 Result of the Batch Program	95
16 Command-Line Test to Demonstrate How To Test the AirInv Project	95
17 Directory Hierarchy	100
17.1 Directories	100
18 Namespace Index	101
18.1 Namespace List	101
19 Class Index	101
19.1 Class Hierarchy	101
20 Class Index	112

20.1 Class List	112
21 File Index	125
21.1 File List	125
22 Directory Documentation	130
22.1 test/airinv/ Directory Reference	130
22.2 airinv/ Directory Reference	130
22.3 airinv/basic/ Directory Reference	131
22.4 airinv/batches/ Directory Reference	131
22.5 airinv/bom/ Directory Reference	131
22.6 airinv/ui/cmdline/ Directory Reference	132
22.7 airinv/command/ Directory Reference	132
22.8 airinv/config/ Directory Reference	133
22.9 airinv/factory/ Directory Reference	133
22.10airinv/server/ Directory Reference	133
22.11airinv/service/ Directory Reference	134
22.12test/ Directory Reference	134
22.13airinv/ui/ Directory Reference	134
22.14airinv/command/vault/ Directory Reference	134
23 Namespace Documentation	135
23.1 AIRINV Namespace Reference	135
23.1.1 Typedef Documentation	138
23.1.2 Variable Documentation	141
23.2 AIRINV::DCPParserHelper Namespace Reference	142
23.2.1 Variable Documentation	143
23.3 AIRINV::InventoryParserHelper Namespace Reference	144
23.3.1 Function Documentation	146
23.3.2 Variable Documentation	147
23.4 AIRINV::ScheduleParserHelper Namespace Reference	148
23.4.1 Function Documentation	149
23.4.2 Variable Documentation	151
23.5 stdair Namespace Reference	151
23.5.1 Detailed Description	152

23.6	swift Namespace Reference	152
23.6.1	Detailed Description	152
24	Class Documentation	152
24.1	AIRINV::AIRINV_Master_Service Class Reference	152
24.1.1	Detailed Description	153
24.1.2	Constructor & Destructor Documentation	153
24.1.3	Member Function Documentation	154
24.2	AIRINV::AIRINV_Master_ServiceContext Class Reference	159
24.2.1	Detailed Description	159
24.2.2	Friends And Related Function Documentation	159
24.3	AIRINV::AIRINV_Service Class Reference	160
24.3.1	Detailed Description	160
24.3.2	Constructor & Destructor Documentation	161
24.3.3	Member Function Documentation	162
24.4	AIRINV::AIRINV_ServiceContext Class Reference	166
24.4.1	Detailed Description	167
24.4.2	Friends And Related Function Documentation	167
24.5	AIRINV::AirInvServer Class Reference	167
24.5.1	Detailed Description	167
24.5.2	Constructor & Destructor Documentation	168
24.5.3	Member Function Documentation	168
24.6	std::allocator Class Reference	168
24.6.1	Detailed Description	168
24.7	std::auto_ptr Class Reference	169
24.7.1	Detailed Description	169
24.8	std::bad_alloc Class Reference	169
24.8.1	Detailed Description	169
24.9	std::bad_cast Class Reference	169
24.9.1	Detailed Description	169
24.10	std::bad_exception Class Reference	170
24.10.1	Detailed Description	170
24.11	std::bad_typeid Class Reference	170
24.11.1	Detailed Description	170

24.12std::basic_fstream Class Reference	170
24.12.1 Detailed Description	171
24.13std::basic_ifstream Class Reference	171
24.13.1 Detailed Description	171
24.14std::basic_ios Class Reference	171
24.14.1 Detailed Description	171
24.15std::basic_iostream Class Reference	171
24.15.1 Detailed Description	172
24.16std::basic_istream Class Reference	172
24.16.1 Detailed Description	172
24.17std::basic_istream Class Reference	172
24.17.1 Detailed Description	172
24.18std::basic_ofstream Class Reference	173
24.18.1 Detailed Description	173
24.19std::basic_ostream Class Reference	173
24.19.1 Detailed Description	173
24.20std::basic_ostringstream Class Reference	173
24.20.1 Detailed Description	174
24.21std::basic_string Class Reference	174
24.21.1 Detailed Description	174
24.22std::basic_stringstream Class Reference	174
24.22.1 Detailed Description	175
24.23std::bitset Class Reference	175
24.23.1 Detailed Description	175
24.24AIRINV::BomAbstract Class Reference	175
24.24.1 Detailed Description	175
24.24.2 Constructor & Destructor Documentation	176
24.24.3 Member Function Documentation	176
24.24.4 Friends And Related Function Documentation	177
24.25stdair::BomPropertyTree Struct Reference	177
24.25.1 Detailed Description	177
24.25.2 Member Function Documentation	177
24.25.3 Member Data Documentation	178
24.26AIRINV::BomRootHelper Class Reference	178

24.26.1 Detailed Description	179
24.26.2 Member Function Documentation	179
24.27AIRINV::BookingClassHelper Class Reference	179
24.27.1 Detailed Description	179
24.28AIRINV::BookingClassStruct Struct Reference	179
24.28.1 Detailed Description	180
24.28.2 Constructor & Destructor Documentation	180
24.28.3 Member Function Documentation	180
24.28.4 Member Data Documentation	181
24.29AIRINV::BookingException Class Reference	184
24.29.1 Detailed Description	184
24.30AIRINV::BucketStruct Struct Reference	184
24.30.1 Detailed Description	185
24.30.2 Constructor & Destructor Documentation	185
24.30.3 Member Function Documentation	185
24.30.4 Member Data Documentation	185
24.31CmdAbstract Class Reference	186
24.32COMMAND Struct Reference	187
24.32.1 Detailed Description	187
24.32.2 Member Data Documentation	187
24.33std::complex Class Reference	187
24.33.1 Detailed Description	187
24.34AIRINV::Connection Class Reference	188
24.34.1 Detailed Description	188
24.34.2 Constructor & Destructor Documentation	188
24.34.3 Member Function Documentation	188
24.35std::basic_string::const_iterator Class Reference	189
24.35.1 Detailed Description	189
24.36std::string::const_iterator Class Reference	189
24.36.1 Detailed Description	189
24.37std::wstring::const_iterator Class Reference	189
24.37.1 Detailed Description	189
24.38std::deque::const_iterator Class Reference	189
24.38.1 Detailed Description	189

24.39	std::list::const_iterator Class Reference	190
24.39.1	Detailed Description	190
24.40	std::map::const_iterator Class Reference	190
24.40.1	Detailed Description	190
24.41	std::multimap::const_iterator Class Reference	190
24.41.1	Detailed Description	190
24.42	std::set::const_iterator Class Reference	190
24.42.1	Detailed Description	190
24.43	std::multiset::const_iterator Class Reference	190
24.43.1	Detailed Description	191
24.44	std::vector::const_iterator Class Reference	191
24.44.1	Detailed Description	191
24.45	std::basic_string::const_reverse_iterator Class Reference	191
24.45.1	Detailed Description	191
24.46	std::string::const_reverse_iterator Class Reference	191
24.46.1	Detailed Description	191
24.47	std::wstring::const_reverse_iterator Class Reference	191
24.47.1	Detailed Description	191
24.48	std::deque::const_reverse_iterator Class Reference	192
24.48.1	Detailed Description	192
24.49	std::list::const_reverse_iterator Class Reference	192
24.49.1	Detailed Description	192
24.50	std::map::const_reverse_iterator Class Reference	192
24.50.1	Detailed Description	192
24.51	std::multimap::const_reverse_iterator Class Reference	192
24.51.1	Detailed Description	192
24.52	std::set::const_reverse_iterator Class Reference	192
24.52.1	Detailed Description	193
24.53	std::multiset::const_reverse_iterator Class Reference	193
24.53.1	Detailed Description	193
24.54	std::vector::const_reverse_iterator Class Reference	193
24.54.1	Detailed Description	193
24.55	AIRINV::DCPEventGenerator Class Reference	193
24.55.1	Detailed Description	194

24.55.2 Friends And Related Function Documentation	194
24.56AIRINV::DCPEventStruct Struct Reference	194
24.56.1 Detailed Description	195
24.56.2 Constructor & Destructor Documentation	195
24.56.3 Member Function Documentation	196
24.56.4 Member Data Documentation	198
24.57AIRINV::DCPParser Class Reference	202
24.57.1 Detailed Description	202
24.57.2 Member Function Documentation	202
24.58AIRINV::DCPRuleFileParser Class Reference	202
24.58.1 Detailed Description	203
24.58.2 Constructor & Destructor Documentation	203
24.58.3 Member Function Documentation	203
24.59AIRINV::DCPParserHelper::DCPRuleParser Struct Reference	203
24.59.1 Detailed Description	205
24.59.2 Constructor & Destructor Documentation	205
24.59.3 Member Data Documentation	206
24.60AIRINV::DefaultMap Struct Reference	209
24.60.1 Detailed Description	210
24.60.2 Member Function Documentation	210
24.61AIRINV::InventoryParserHelper::InventoryParser::definition Struct - Reference	210
24.61.1 Constructor & Destructor Documentation	211
24.61.2 Member Function Documentation	211
24.61.3 Member Data Documentation	211
24.62AIRINV::ScheduleParserHelper::FlightPeriodParser::definition Struct Reference	215
24.62.1 Constructor & Destructor Documentation	216
24.62.2 Member Function Documentation	216
24.62.3 Member Data Documentation	216
24.63std::deque Class Reference	219
24.63.1 Detailed Description	219
24.64AIRINV::DCPParserHelper::doEndDCP Struct Reference	219
24.64.1 Detailed Description	220

24.64.2 Constructor & Destructor Documentation	220
24.64.3 Member Function Documentation	220
24.64.4 Member Data Documentation	220
24.65AIRINV::ScheduleParserHelper::doEndFlight Struct Reference	221
24.65.1 Detailed Description	222
24.65.2 Constructor & Destructor Documentation	222
24.65.3 Member Function Documentation	222
24.65.4 Member Data Documentation	222
24.66AIRINV::InventoryParserHelper::doEndFlightDate Struct Reference	223
24.66.1 Detailed Description	223
24.66.2 Constructor & Destructor Documentation	224
24.66.3 Member Function Documentation	224
24.66.4 Member Data Documentation	224
24.67std::domain_error Class Reference	225
24.67.1 Detailed Description	226
24.68enable_shared_from_this Class Reference	226
24.69std::exception Class Reference	226
24.69.1 Detailed Description	226
24.70AIRINV::FacAirinvMasterServiceContext Class Reference	227
24.70.1 Detailed Description	227
24.70.2 Constructor & Destructor Documentation	227
24.70.3 Member Function Documentation	228
24.71AIRINV::FacAirinvServiceContext Class Reference	228
24.71.1 Detailed Description	229
24.71.2 Constructor & Destructor Documentation	229
24.71.3 Member Function Documentation	229
24.72AIRINV::FacBomAbstract Class Reference	230
24.72.1 Detailed Description	231
24.72.2 Member Typedef Documentation	231
24.72.3 Constructor & Destructor Documentation	231
24.72.4 Member Function Documentation	231
24.72.5 Friends And Related Function Documentation	232
24.72.6 Member Data Documentation	232
24.73AIRINV::FacServiceAbstract Class Reference	232

24.73.1 Detailed Description	233
24.73.2 Member Typedef Documentation	233
24.73.3 Constructor & Destructor Documentation	233
24.73.4 Member Function Documentation	234
24.73.5 Member Data Documentation	234
24.74FacServiceAbstract Class Reference	234
24.75AIRINV::FacSupervisor Class Reference	234
24.75.1 Detailed Description	235
24.75.2 Member Typedef Documentation	235
24.75.3 Constructor & Destructor Documentation	235
24.75.4 Member Function Documentation	236
24.76std::ios_base::failure Class Reference	237
24.76.1 Detailed Description	238
24.77AIRINV::FareFamilyStruct Struct Reference	238
24.77.1 Detailed Description	238
24.77.2 Constructor & Destructor Documentation	238
24.77.3 Member Function Documentation	239
24.77.4 Member Data Documentation	239
24.78FileNotFoundException Class Reference	240
24.79AIRINV::FlightDateDuplicationException Class Reference	240
24.79.1 Detailed Description	240
24.79.2 Constructor & Destructor Documentation	240
24.80AIRINV::FlightDateHelper Class Reference	241
24.80.1 Detailed Description	241
24.80.2 Member Function Documentation	241
24.81AIRINV::FlightDateStruct Struct Reference	242
24.81.1 Detailed Description	243
24.81.2 Constructor & Destructor Documentation	243
24.81.3 Member Function Documentation	243
24.81.4 Member Data Documentation	245
24.82AIRINV::FlightPeriodFileParser Class Reference	249
24.82.1 Detailed Description	249
24.82.2 Constructor & Destructor Documentation	250
24.82.3 Member Function Documentation	250

24.83AIRINV::ScheduleParserHelper::FlightPeriodParser Struct Reference . . .	250
24.83.1 Detailed Description	251
24.83.2 Constructor & Destructor Documentation	251
24.83.3 Member Data Documentation	251
24.84AIRINV::FlightPeriodStruct Struct Reference	252
24.84.1 Detailed Description	253
24.84.2 Constructor & Destructor Documentation	253
24.84.3 Member Function Documentation	253
24.84.4 Member Data Documentation	255
24.85AIRINV::FlightRequestStatus Struct Reference	258
24.85.1 Detailed Description	259
24.85.2 Member Enumeration Documentation	259
24.85.3 Constructor & Destructor Documentation	260
24.85.4 Member Function Documentation	260
24.86AIRINV::FlightTypeCode Struct Reference	261
24.86.1 Detailed Description	261
24.86.2 Member Enumeration Documentation	261
24.86.3 Constructor & Destructor Documentation	262
24.86.4 Member Function Documentation	262
24.87AIRINV::FlightVisibilityCode Struct Reference	263
24.87.1 Detailed Description	264
24.87.2 Member Enumeration Documentation	264
24.87.3 Constructor & Destructor Documentation	264
24.87.4 Member Function Documentation	264
24.88std::fstream Class Reference	265
24.88.1 Detailed Description	265
24.89grammar Class Reference	265
24.90grammar Class Reference	266
24.91AIRINV::GuillotineBlockHelper Class Reference	266
24.91.1 Detailed Description	266
24.91.2 Member Function Documentation	266
24.92AIRINV::header Struct Reference	267
24.92.1 Detailed Description	267
24.92.2 Member Data Documentation	267

24.93	std::ifstream Class Reference	267
24.93.1	Detailed Description	268
24.94	std::invalid_argument Class Reference	268
24.94.1	Detailed Description	268
24.95	AIRINV::InventoryBuilder Class Reference	268
24.95.1	Detailed Description	268
24.95.2	Friends And Related Function Documentation	269
24.96	AIRINV::InventoryFileParser Class Reference	269
24.96.1	Detailed Description	269
24.96.2	Constructor & Destructor Documentation	269
24.96.3	Member Function Documentation	270
24.97	AIRINV::InventoryFileParsingFailedException Class Reference	270
24.97.1	Detailed Description	270
24.97.2	Constructor & Destructor Documentation	270
24.98	AIRINV::InventoryGenerator Class Reference	271
24.98.1	Detailed Description	271
24.98.2	Friends And Related Function Documentation	271
24.99	AIRINV::InventoryHelper Class Reference	272
24.99.1	Detailed Description	272
24.99.2	Member Function Documentation	272
24.100	AIRINV::InventoryInputFileNotFoundException Class Reference	273
24.100.1	Detailed Description	273
24.100.2	Constructor & Destructor Documentation	274
24.101	AIRINV::InventoryManager Class Reference	274
24.101.1	Detailed Description	274
24.101.2	Member Function Documentation	274
24.101.3	Friends And Related Function Documentation	276
24.102	AIRINV::InventoryParser Class Reference	276
24.102.1	Detailed Description	276
24.102.2	Member Function Documentation	277
24.103	AIRINV::InventoryParserHelper::InventoryParser Struct Reference	277
24.103.1	Detailed Description	278
24.103.2	Constructor & Destructor Documentation	278
24.103.3	Member Data Documentation	278

24.104	InventoryTestSuite Class Reference	278
24.104.1	Detailed Description	279
24.104.2	Constructor & Destructor Documentation	279
24.104.3	Member Function Documentation	279
24.104.4	Member Data Documentation	279
24.105	std::ios Class Reference	279
24.105.1	Detailed Description	280
24.106	std::ios_base Class Reference	280
24.106.1	Detailed Description	280
24.107	std::istream Class Reference	280
24.107.1	Detailed Description	281
24.108	std::istringstream Class Reference	281
24.108.1	Detailed Description	281
24.109	std::basic_string::iterator Class Reference	281
24.109.1	Detailed Description	281
24.110	std::string::iterator Class Reference	281
24.110.1	Detailed Description	282
24.111	std::wstring::iterator Class Reference	282
24.111.1	Detailed Description	282
24.112	std::deque::iterator Class Reference	282
24.112.1	Detailed Description	282
24.113	std::list::iterator Class Reference	282
24.113.1	Detailed Description	282
24.114	std::map::iterator Class Reference	282
24.114.1	Detailed Description	282
24.115	std::multimap::iterator Class Reference	283
24.115.1	Detailed Description	283
24.116	std::set::iterator Class Reference	283
24.116.1	Detailed Description	283
24.117	std::multiset::iterator Class Reference	283
24.117.1	Detailed Description	283
24.118	std::vector::iterator Class Reference	283
24.118.1	Detailed Description	283
24.119	AIRINV::LegCabinHelper Class Reference	283

24.119. Detailed Description	284
24.120. AIRINV::LegCabinStruct Struct Reference	284
24.120.1. Detailed Description	284
24.120.2. Member Function Documentation	285
24.120.3. Member Data Documentation	285
24.121. AIRINV::LegStruct Struct Reference	287
24.121.1. Detailed Description	288
24.121.2. Constructor & Destructor Documentation	288
24.121.3. Member Function Documentation	288
24.121.4. Member Data Documentation	289
24.122. std::length_error Class Reference	290
24.122.1. Detailed Description	290
24.123. std::list Class Reference	290
24.123.1. Detailed Description	291
24.124. std::logic_error Class Reference	291
24.124.1. Detailed Description	291
24.125. std::map Class Reference	291
24.125.1. Detailed Description	292
24.126. std::multimap Class Reference	292
24.126.1. Detailed Description	292
24.127. std::multiset Class Reference	292
24.127.1. Detailed Description	293
24.128. noncopyable Class Reference	293
24.129. ObjectCreationgDuplicationException Class Reference	293
24.130. std::ofstream Class Reference	294
24.130.1. Detailed Description	294
24.131. std::ostream Class Reference	294
24.131.1. Detailed Description	294
24.132. std::ostringstream Class Reference	294
24.132.1. Detailed Description	295
24.133. std::out_of_range Class Reference	295
24.133.1. Detailed Description	295
24.134. std::overflow_error Class Reference	295
24.134.1. Detailed Description	295

24.135	ParserException Class Reference	296
24.136	AIRINV::InventoryParserHelper::ParserSemanticAction Struct Reference	296
24.136.1	Detailed Description	297
24.136.2	Constructor & Destructor Documentation	297
24.136.3	Member Data Documentation	298
24.137	AIRINV::ScheduleParserHelper::ParserSemanticAction Struct Reference	299
24.137.1	Detailed Description	300
24.137.2	Constructor & Destructor Documentation	300
24.137.3	Member Data Documentation	300
24.138	AIRINV::DCPParserHelper::ParserSemanticAction Struct Reference	301
24.138.1	Detailed Description	301
24.138.2	Constructor & Destructor Documentation	302
24.138.3	Member Data Documentation	302
24.139	ParsingFileFailedException Class Reference	302
24.140	std::priority_queue Class Reference	303
24.140.1	Detailed Description	303
24.141	std::queue Class Reference	303
24.141.1	Detailed Description	303
24.142	std::range_error Class Reference	303
24.142.1	Detailed Description	303
24.143	AIRINV::Reply Struct Reference	303
24.143.1	Detailed Description	304
24.143.2	Member Function Documentation	304
24.143.3	Member Data Documentation	304
24.144	AIRINV::Request Struct Reference	305
24.144.1	Detailed Description	305
24.144.2	Member Function Documentation	305
24.144.3	Member Data Documentation	305
24.145	AIRINV::RequestHandler Class Reference	306
24.145.1	Detailed Description	306
24.145.2	Constructor & Destructor Documentation	306
24.145.3	Member Function Documentation	307
24.146	AIRINV::RequestParser Class Reference	307
24.146.1	Detailed Description	307

24.146.2	Constructor & Destructor Documentation	307
24.146.3	Member Function Documentation	308
24.147	<code>std::map::reverse_iterator</code> Class Reference	308
24.147.1	Detailed Description	308
24.148	<code>std::basic_string::reverse_iterator</code> Class Reference	308
24.148.1	Detailed Description	308
24.149	<code>std::string::reverse_iterator</code> Class Reference	308
24.149.1	Detailed Description	309
24.150	<code>std::wstring::reverse_iterator</code> Class Reference	309
24.150.1	Detailed Description	309
24.151	<code>std::deque::reverse_iterator</code> Class Reference	309
24.151.1	Detailed Description	309
24.152	<code>std::list::reverse_iterator</code> Class Reference	309
24.152.1	Detailed Description	309
24.153	<code>std::vector::reverse_iterator</code> Class Reference	309
24.153.1	Detailed Description	309
24.154	<code>std::multimap::reverse_iterator</code> Class Reference	310
24.154.1	Detailed Description	310
24.155	<code>std::set::reverse_iterator</code> Class Reference	310
24.155.1	Detailed Description	310
24.156	<code>std::multiset::reverse_iterator</code> Class Reference	310
24.156.1	Detailed Description	310
24.157	<code>RootException</code> Class Reference	310
24.158	<code>std::runtime_error</code> Class Reference	311
24.158.1	Detailed Description	311
24.159	<code>AIRINV::ScheduleFileParsingFailedException</code> Class Reference	311
24.159.1	Detailed Description	311
24.159.2	Constructor & Destructor Documentation	311
24.160	<code>AIRINV::ScheduleInputFileNotFoundException</code> Class Reference	312
24.160.1	Detailed Description	312
24.160.2	Constructor & Destructor Documentation	312
24.161	<code>AIRINV::ScheduleParser</code> Class Reference	312
24.161.1	Detailed Description	313
24.161.2	Member Function Documentation	313

24.162	AIRINV::SegmentCabinHelper Class Reference	313
24.162.1	Detailed Description	314
24.162.2	Member Function Documentation	314
24.163	AIRINV::SegmentCabinStruct Struct Reference	315
24.163.1	Detailed Description	316
24.163.2	Member Function Documentation	316
24.163.3	Member Data Documentation	316
24.164	AIRINV::SegmentDateHelper Class Reference	317
24.164.1	Detailed Description	317
24.164.2	Member Function Documentation	317
24.165	AIRINV::SegmentDateNotFoundException Class Reference	318
24.165.1	Detailed Description	318
24.165.2	Constructor & Destructor Documentation	319
24.166	AIRINV::SegmentStruct Struct Reference	319
24.166.1	Detailed Description	319
24.166.2	Member Function Documentation	320
24.166.3	Member Data Documentation	320
24.167	ServiceAbstract Class Reference	321
24.168	AIRINV::ServiceAbstract Class Reference	322
24.168.1	Detailed Description	322
24.168.2	Constructor & Destructor Documentation	322
24.168.3	Member Function Documentation	322
24.169	td::set Class Reference	323
24.169.1	Detailed Description	323
24.170	twift::SKeymap Class Reference	323
24.170.1	Detailed Description	324
24.170.2	Constructor & Destructor Documentation	324
24.170.3	Member Function Documentation	325
24.170.4	Friends And Related Function Documentation	326
24.171	twift::SReadline Class Reference	326
24.171.1	Detailed Description	327
24.171.2	Constructor & Destructor Documentation	327
24.171.3	Member Function Documentation	328
24.172	td::stack Class Reference	331

24.172. Detailed Description	332
24.173. AIRINV::InventoryParserHelper::storeACP Struct Reference	332
24.173. Detailed Description	332
24.173. Constructor & Destructor Documentation	332
24.173. Member Function Documentation	332
24.173. Member Data Documentation	333
24.174. AIRINV::DCPParserHelper::storeAdvancePurchase Struct Reference	334
24.174. Detailed Description	334
24.174. Constructor & Destructor Documentation	334
24.174. Member Function Documentation	335
24.174. Member Data Documentation	335
24.175. AIRINV::DCPParserHelper::storeAirlineCode Struct Reference	335
24.175. Detailed Description	336
24.175. Constructor & Destructor Documentation	336
24.175. Member Function Documentation	336
24.175. Member Data Documentation	336
24.176. AIRINV::InventoryParserHelper::storeAirlineCode Struct Reference	337
24.176. Detailed Description	337
24.176. Constructor & Destructor Documentation	337
24.176. Member Function Documentation	338
24.176. Member Data Documentation	338
24.177. AIRINV::ScheduleParserHelper::storeAirlineCode Struct Reference	339
24.177. Detailed Description	339
24.177. Constructor & Destructor Documentation	340
24.177. Member Function Documentation	340
24.177. Member Data Documentation	340
24.178. AIRINV::InventoryParserHelper::storeAU Struct Reference	341
24.178. Detailed Description	341
24.178. Constructor & Destructor Documentation	341
24.178. Member Function Documentation	341
24.178. Member Data Documentation	342
24.179. AIRINV::InventoryParserHelper::storeBoardingDate Struct Reference	343
24.179. Detailed Description	343
24.179. Constructor & Destructor Documentation	343

24.179.3	Member Function Documentation	343
24.179.4	Member Data Documentation	344
24.180	AIRINV::InventoryParserHelper::storeBoardingTime Struct Reference . .	345
24.180.1	Detailed Description	345
24.180.2	Constructor & Destructor Documentation	345
24.180.3	Member Function Documentation	345
24.180.4	Member Data Documentation	346
24.181	AIRINV::ScheduleParserHelper::storeBoardingTime Struct Reference . .	347
24.181.1	Detailed Description	347
24.181.2	Constructor & Destructor Documentation	347
24.181.3	Member Function Documentation	348
24.181.4	Member Data Documentation	348
24.182	AIRINV::InventoryParserHelper::storeBookingCounter Struct Reference .	348
24.182.1	Detailed Description	349
24.182.2	Constructor & Destructor Documentation	349
24.182.3	Member Function Documentation	349
24.182.4	Member Data Documentation	349
24.183	AIRINV::InventoryParserHelper::storeBucketAvaibility Struct Reference .	351
24.183.1	Detailed Description	351
24.183.2	Constructor & Destructor Documentation	351
24.183.3	Member Function Documentation	351
24.183.4	Member Data Documentation	352
24.184	AIRINV::DCPPParserHelper::storeCabinCode Struct Reference	353
24.184.1	Detailed Description	353
24.184.2	Constructor & Destructor Documentation	353
24.184.3	Member Function Documentation	353
24.184.4	Member Data Documentation	354
24.185	AIRINV::ScheduleParserHelper::storeCapacity Struct Reference	354
24.185.1	Detailed Description	355
24.185.2	Constructor & Destructor Documentation	355
24.185.3	Member Function Documentation	355
24.185.4	Member Data Documentation	355
24.186	AIRINV::DCPPParserHelper::storeChangeFees Struct Reference	356
24.186.1	Detailed Description	356

24.186.2	Constructor & Destructor Documentation	356
24.186.3	Member Function Documentation	357
24.186.4	Member Data Documentation	357
24.187	AIRINV::DCPParserHelper::storeChannel Struct Reference	357
24.187.1	Detailed Description	358
24.187.2	Constructor & Destructor Documentation	358
24.187.3	Member Function Documentation	358
24.187.4	Member Data Documentation	358
24.188	AIRINV::DCPParserHelper::storeClass Struct Reference	359
24.188.1	Detailed Description	359
24.188.2	Constructor & Destructor Documentation	359
24.188.3	Member Function Documentation	360
24.188.4	Member Data Documentation	360
24.189	AIRINV::InventoryParserHelper::storeClassAvailability Struct Reference	360
24.189.1	Detailed Description	361
24.189.2	Constructor & Destructor Documentation	361
24.189.3	Member Function Documentation	361
24.189.4	Member Data Documentation	361
24.190	AIRINV::InventoryParserHelper::storeClassCode Struct Reference	362
24.190.1	Detailed Description	363
24.190.2	Constructor & Destructor Documentation	363
24.190.3	Member Function Documentation	363
24.190.4	Member Data Documentation	363
24.191	AIRINV::ScheduleParserHelper::storeClasses Struct Reference	364
24.191.1	Detailed Description	365
24.191.2	Constructor & Destructor Documentation	365
24.191.3	Member Function Documentation	365
24.191.4	Member Data Documentation	366
24.192	AIRINV::InventoryParserHelper::storeClassETB Struct Reference	366
24.192.1	Detailed Description	367
24.192.2	Constructor & Destructor Documentation	367
24.192.3	Member Function Documentation	367
24.192.4	Member Data Documentation	367

24.192	AIRINV::InventoryParserHelper::storeCumulatedProtection Struct Reference	368
24.193	Detailed Description	369
24.193	Constructor & Destructor Documentation	369
24.193	Member Function Documentation	369
24.193	Member Data Documentation	369
24.194	AIRINV::ScheduleParserHelper::storeDateRangeEnd Struct Reference	370
24.194	Detailed Description	371
24.194	Constructor & Destructor Documentation	371
24.194	Member Function Documentation	371
24.194	Member Data Documentation	371
24.195	AIRINV::DCPParserHelper::storeDateRangeEnd Struct Reference	372
24.195	Detailed Description	372
24.195	Constructor & Destructor Documentation	373
24.195	Member Function Documentation	373
24.195	Member Data Documentation	373
24.196	AIRINV::ScheduleParserHelper::storeDateRangeStart Struct Reference	374
24.196	Detailed Description	374
24.196	Constructor & Destructor Documentation	374
24.196	Member Function Documentation	374
24.196	Member Data Documentation	375
24.197	AIRINV::DCPParserHelper::storeDateRangeStart Struct Reference	375
24.197	Detailed Description	376
24.197	Constructor & Destructor Documentation	376
24.197	Member Function Documentation	376
24.197	Member Data Documentation	376
24.198	AIRINV::DCPParserHelper::storeDCP Struct Reference	377
24.198	Detailed Description	377
24.198	Constructor & Destructor Documentation	377
24.198	Member Function Documentation	377
24.198	Member Data Documentation	378
24.199	AIRINV::DCPParserHelper::storeDCPIId Struct Reference	378
24.199	Detailed Description	379
24.199	Constructor & Destructor Documentation	379

24.199.3	Member Function Documentation	379
24.199.4	Member Data Documentation	379
24.200	AIRINV::DCPParserHelper::storeDestination Struct Reference	380
24.200.1	Detailed Description	380
24.200.2	Constructor & Destructor Documentation	380
24.200.3	Member Function Documentation	381
24.200.4	Member Data Documentation	381
24.201	AIRINV::ScheduleParserHelper::storeDow Struct Reference	381
24.201.1	Detailed Description	382
24.201.2	Constructor & Destructor Documentation	382
24.201.3	Member Function Documentation	382
24.201.4	Member Data Documentation	382
24.202	AIRINV::ScheduleParserHelper::storeElapsedTime Struct Reference	383
24.202.1	Detailed Description	383
24.202.2	Constructor & Destructor Documentation	383
24.202.3	Member Function Documentation	384
24.202.4	Member Data Documentation	384
24.203	AIRINV::DCPParserHelper::storeEndRangeTime Struct Reference	384
24.203.1	Detailed Description	385
24.203.2	Constructor & Destructor Documentation	385
24.203.3	Member Function Documentation	385
24.203.4	Member Data Documentation	385
24.204	AIRINV::InventoryParserHelper::storeETB Struct Reference	386
24.204.1	Detailed Description	387
24.204.2	Constructor & Destructor Documentation	387
24.204.3	Member Function Documentation	387
24.204.4	Member Data Documentation	387
24.205	AIRINV::ScheduleParserHelper::storeFamilyCode Struct Reference	388
24.205.1	Detailed Description	389
24.205.2	Constructor & Destructor Documentation	389
24.205.3	Member Function Documentation	389
24.205.4	Member Data Documentation	389
24.206	AIRINV::InventoryParserHelper::storeFamilyCode Struct Reference	390
24.206.1	Detailed Description	390

24.206.2	Constructor & Destructor Documentation	390
24.206.3	Member Function Documentation	390
24.206.4	Member Data Documentation	391
24.207	AIRINV::ScheduleParserHelper::storeFClasses Struct Reference	392
24.207.1	Detailed Description	392
24.207.2	Constructor & Destructor Documentation	392
24.207.3	Member Function Documentation	392
24.207.4	Member Data Documentation	393
24.208	AIRINV::InventoryParserHelper::storeFClasses Struct Reference	393
24.208.1	Detailed Description	394
24.208.2	Constructor & Destructor Documentation	394
24.208.3	Member Function Documentation	394
24.208.4	Member Data Documentation	394
24.209	AIRINV::InventoryParserHelper::storeFlightDate Struct Reference	395
24.209.1	Detailed Description	396
24.209.2	Constructor & Destructor Documentation	396
24.209.3	Member Function Documentation	396
24.209.4	Member Data Documentation	396
24.210	AIRINV::ScheduleParserHelper::storeFlightNumber Struct Reference	397
24.210.1	Detailed Description	398
24.210.2	Constructor & Destructor Documentation	398
24.210.3	Member Function Documentation	398
24.210.4	Member Data Documentation	398
24.211	AIRINV::InventoryParserHelper::storeFlightNumber Struct Reference	399
24.211.1	Detailed Description	400
24.211.2	Constructor & Destructor Documentation	400
24.211.3	Member Function Documentation	400
24.211.4	Member Data Documentation	400
24.212	AIRINV::InventoryParserHelper::storeFlightTypeCode Struct Reference	401
24.212.1	Detailed Description	402
24.212.2	Constructor & Destructor Documentation	402
24.212.3	Member Function Documentation	402
24.212.4	Member Data Documentation	402

24.213	AIRINV::InventoryParserHelper::storeFlightVisibilityCode Struct Reference	403
24.213.1	Detailed Description	404
24.213.2	Constructor & Destructor Documentation	404
24.213.3	Member Function Documentation	404
24.213.4	Member Data Documentation	404
24.214	AIRINV::InventoryParserHelper::storeGAV Struct Reference	405
24.214.1	Detailed Description	406
24.214.2	Constructor & Destructor Documentation	406
24.214.3	Member Function Documentation	406
24.214.4	Member Data Documentation	406
24.215	AIRINV::ScheduleParserHelper::storeLegBoardingPoint Struct Reference	407
24.215.1	Detailed Description	408
24.215.2	Constructor & Destructor Documentation	408
24.215.3	Member Function Documentation	408
24.215.4	Member Data Documentation	408
24.216	AIRINV::InventoryParserHelper::storeLegBoardingPoint Struct Reference	409
24.216.1	Detailed Description	409
24.216.2	Constructor & Destructor Documentation	409
24.216.3	Member Function Documentation	410
24.216.4	Member Data Documentation	410
24.217	AIRINV::InventoryParserHelper::storeLegCabinCode Struct Reference	411
24.217.1	Detailed Description	412
24.217.2	Constructor & Destructor Documentation	412
24.217.3	Member Function Documentation	412
24.217.4	Member Data Documentation	412
24.218	AIRINV::ScheduleParserHelper::storeLegCabinCode Struct Reference	413
24.218.1	Detailed Description	414
24.218.2	Constructor & Destructor Documentation	414
24.218.3	Member Function Documentation	414
24.218.4	Member Data Documentation	414
24.219	AIRINV::InventoryParserHelper::storeLegOffPoint Struct Reference	415
24.219.1	Detailed Description	415
24.219.2	Constructor & Destructor Documentation	415

24.219.3	Member Function Documentation	416
24.219.4	Member Data Documentation	416
24.220	AIRINV::ScheduleParserHelper::storeLegOffPoint Struct Reference	417
24.220.1	Detailed Description	417
24.220.2	Constructor & Destructor Documentation	417
24.220.3	Member Function Documentation	418
24.220.4	Member Data Documentation	418
24.221	AIRINV::DCPParserHelper::storeMinimumStay Struct Reference	418
24.221.1	Detailed Description	419
24.221.2	Constructor & Destructor Documentation	419
24.221.3	Member Function Documentation	419
24.221.4	Member Data Documentation	419
24.222	AIRINV::InventoryParserHelper::storeNAV Struct Reference	420
24.222.1	Detailed Description	420
24.222.2	Constructor & Destructor Documentation	421
24.222.3	Member Function Documentation	421
24.222.4	Member Data Documentation	421
24.223	AIRINV::InventoryParserHelper::storeNbOfBkgs Struct Reference	422
24.223.1	Detailed Description	422
24.223.2	Constructor & Destructor Documentation	423
24.223.3	Member Function Documentation	423
24.223.4	Member Data Documentation	423
24.224	AIRINV::InventoryParserHelper::storeNbOfGroupBkgs Struct Reference . .	424
24.224.1	Detailed Description	425
24.224.2	Constructor & Destructor Documentation	425
24.224.3	Member Function Documentation	425
24.224.4	Member Data Documentation	425
24.225	AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs Struct - Reference	426
24.225.1	Detailed Description	427
24.225.2	Constructor & Destructor Documentation	427
24.225.3	Member Function Documentation	427
24.225.4	Member Data Documentation	427
24.226	AIRINV::InventoryParserHelper::storeNbOfStaffBkgs Struct Reference . .	428

24.226.1	Detailed Description	429
24.226.2	Constructor & Destructor Documentation	429
24.226.3	Member Function Documentation	429
24.226.4	Member Data Documentation	429
24.227	AIRINV::InventoryParserHelper::storeNbOfWLBkgs Struct Reference	430
24.227.1	Detailed Description	431
24.227.2	Constructor & Destructor Documentation	431
24.227.3	Member Function Documentation	431
24.227.4	Member Data Documentation	431
24.228	AIRINV::InventoryParserHelper::storeNego Struct Reference	432
24.228.1	Detailed Description	433
24.228.2	Constructor & Destructor Documentation	433
24.228.3	Member Function Documentation	433
24.228.4	Member Data Documentation	433
24.229	AIRINV::DCPPParserHelper::storeNonRefundable Struct Reference	434
24.229.1	Detailed Description	435
24.229.2	Constructor & Destructor Documentation	435
24.229.3	Member Function Documentation	435
24.229.4	Member Data Documentation	435
24.230	AIRINV::InventoryParserHelper::storeNoShow Struct Reference	436
24.230.1	Detailed Description	436
24.230.2	Constructor & Destructor Documentation	437
24.230.3	Member Function Documentation	437
24.230.4	Member Data Documentation	437
24.231	AIRINV::InventoryParserHelper::storeOffDate Struct Reference	438
24.231.1	Detailed Description	439
24.231.2	Constructor & Destructor Documentation	439
24.231.3	Member Function Documentation	439
24.231.4	Member Data Documentation	439
24.232	AIRINV::InventoryParserHelper::storeOffTime Struct Reference	440
24.232.1	Detailed Description	441
24.232.2	Constructor & Destructor Documentation	441
24.232.3	Member Function Documentation	441
24.232.4	Member Data Documentation	441

24.233	AIRINV::ScheduleParserHelper::storeOffTime Struct Reference	442
24.233.1	Detailed Description	443
24.233.2	Constructor & Destructor Documentation	443
24.233.3	Member Function Documentation	443
24.233.4	Member Data Documentation	443
24.234	AIRINV::DCPParserHelper::storeOrigin Struct Reference	444
24.234.1	Detailed Description	444
24.234.2	Constructor & Destructor Documentation	444
24.234.3	Member Function Documentation	445
24.234.4	Member Data Documentation	445
24.235	AIRINV::InventoryParserHelper::storeOverbooking Struct Reference	445
24.235.1	Detailed Description	446
24.235.2	Constructor & Destructor Documentation	446
24.235.3	Member Function Documentation	446
24.235.4	Member Data Documentation	446
24.236	AIRINV::InventoryParserHelper::storeParentClassCode Struct Reference	447
24.236.1	Detailed Description	448
24.236.2	Constructor & Destructor Documentation	448
24.236.3	Member Function Documentation	448
24.236.4	Member Data Documentation	448
24.237	AIRINV::InventoryParserHelper::storeParentSubclassCode Struct Reference	450
24.237.1	Detailed Description	450
24.237.2	Constructor & Destructor Documentation	450
24.237.3	Member Function Documentation	450
24.237.4	Member Data Documentation	451
24.238	AIRINV::DCPParserHelper::storePOS Struct Reference	452
24.238.1	Detailed Description	452
24.238.2	Constructor & Destructor Documentation	452
24.238.3	Member Function Documentation	452
24.238.4	Member Data Documentation	453
24.239	AIRINV::InventoryParserHelper::storeProtection Struct Reference	453
24.239.1	Detailed Description	454
24.239.2	Constructor & Destructor Documentation	454

24.239.3	Member Function Documentation	454
24.239.4	Member Data Documentation	454
24.240	AIRINV::InventoryParserHelper::storeRevenueAvailability Struct - Reference	455
24.240.1	Detailed Description	456
24.240.2	Constructor & Destructor Documentation	456
24.240.3	Member Function Documentation	456
24.240.4	Member Data Documentation	456
24.241	AIRINV::InventoryParserHelper::storeSaleableCapacity Struct Reference	457
24.241.1	Detailed Description	458
24.241.2	Constructor & Destructor Documentation	458
24.241.3	Member Function Documentation	458
24.241.4	Member Data Documentation	458
24.242	AIRINV::DCPPParserHelper::storeSaturdayStay Struct Reference	459
24.242.1	Detailed Description	460
24.242.2	Constructor & Destructor Documentation	460
24.242.3	Member Function Documentation	460
24.242.4	Member Data Documentation	460
24.243	AIRINV::InventoryParserHelper::storeSeatIndex Struct Reference	461
24.243.1	Detailed Description	461
24.243.2	Constructor & Destructor Documentation	461
24.243.3	Member Function Documentation	462
24.243.4	Member Data Documentation	462
24.244	AIRINV::InventoryParserHelper::storeSegmentAvailability Struct - Reference	463
24.244.1	Detailed Description	463
24.244.2	Constructor & Destructor Documentation	463
24.244.3	Member Function Documentation	464
24.244.4	Member Data Documentation	464
24.245	AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint Struct - Reference	465
24.245.1	Detailed Description	465
24.245.2	Constructor & Destructor Documentation	466
24.245.3	Member Function Documentation	466
24.245.4	Member Data Documentation	466

24.246	AIRINV::InventoryParserHelper::storeSegmentBoardingPoint Struct -	
	Reference	467
24.246.1	Detailed Description	467
24.246.2	Constructor & Destructor Documentation	467
24.246.3	Member Function Documentation	467
24.246.4	Member Data Documentation	468
24.247	AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter	
	Struct Reference	469
24.247.1	Detailed Description	469
24.247.2	Constructor & Destructor Documentation	469
24.247.3	Member Function Documentation	470
24.247.4	Member Data Documentation	470
24.248	AIRINV::InventoryParserHelper::storeSegmentCabinCode Struct -	
	Reference	471
24.248.1	Detailed Description	472
24.248.2	Constructor & Destructor Documentation	472
24.248.3	Member Function Documentation	472
24.248.4	Member Data Documentation	472
24.249	AIRINV::ScheduleParserHelper::storeSegmentCabinCode Struct -	
	Reference	473
24.249.1	Detailed Description	474
24.249.2	Constructor & Destructor Documentation	474
24.249.3	Member Function Documentation	474
24.249.4	Member Data Documentation	474
24.250	AIRINV::InventoryParserHelper::storeSegmentOffPoint Struct Reference	475
24.250.1	Detailed Description	475
24.250.2	Constructor & Destructor Documentation	475
24.250.3	Member Function Documentation	476
24.250.4	Member Data Documentation	476
24.251	AIRINV::ScheduleParserHelper::storeSegmentOffPoint Struct Reference	477
24.251.1	Detailed Description	477
24.251.2	Constructor & Destructor Documentation	477
24.251.3	Member Function Documentation	478
24.251.4	Member Data Documentation	478

24.251	AIRINV::ScheduleParserHelper::storeSegmentSpecificity Struct Reference	478
24.252	Detailed Description	479
24.252.1	Constructor & Destructor Documentation	479
24.252.2	Member Function Documentation	479
24.252.3	Member Data Documentation	480
24.253	AIRINV::InventoryParserHelper::storeSnapshotDate Struct Reference	480
24.253.1	Detailed Description	481
24.253.2	Constructor & Destructor Documentation	481
24.253.3	Member Function Documentation	481
24.253.4	Member Data Documentation	481
24.254	AIRINV::DCPPParserHelper::storeStartRangeTime Struct Reference	482
24.254.1	Detailed Description	483
24.254.2	Constructor & Destructor Documentation	483
24.254.3	Member Function Documentation	483
24.254.4	Member Data Documentation	483
24.255	AIRINV::InventoryParserHelper::storeSubclassCode Struct Reference	484
24.255.1	Detailed Description	484
24.255.2	Constructor & Destructor Documentation	484
24.255.3	Member Function Documentation	485
24.255.4	Member Data Documentation	485
24.256	AIRINV::InventoryParserHelper::storeUPR Struct Reference	486
24.256.1	Detailed Description	486
24.256.2	Constructor & Destructor Documentation	486
24.256.3	Member Function Documentation	487
24.256.4	Member Data Documentation	487
24.257	AIRINV::InventoryParserHelper::storeYieldUpperRange Struct Reference	488
24.257.1	Detailed Description	488
24.257.2	Constructor & Destructor Documentation	488
24.257.3	Member Function Documentation	489
24.257.4	Member Data Documentation	489
24.258	std::string Class Reference	490
24.258.1	Detailed Description	491
24.259	std::stringstream Class Reference	491

24.259. Detailed Description	491
24.260. StructAbstract Class Reference	491
24.261. TestFixture Class Reference	492
24.262. std::underflow_error Class Reference	493
24.262. Detailed Description	493
24.263. std::valarray Class Reference	493
24.263. Detailed Description	493
24.264. std::vector Class Reference	493
24.264. Detailed Description	494
24.265. std::wfstream Class Reference	494
24.265. Detailed Description	494
24.266. std::wifstream Class Reference	494
24.266. Detailed Description	494
24.267. std::wios Class Reference	494
24.267. Detailed Description	495
24.268. std::wistream Class Reference	495
24.268. Detailed Description	495
24.269. std::wistringstream Class Reference	495
24.269. Detailed Description	495
24.270. std::wofstream Class Reference	496
24.270. Detailed Description	496
24.271. std::wostream Class Reference	496
24.271. Detailed Description	496
24.272. std::wostringstream Class Reference	496
24.272. Detailed Description	497
24.273. std::wstring Class Reference	497
24.273. Detailed Description	497
24.274. std::wstringstream Class Reference	497
24.274. Detailed Description	498
25 File Documentation	498
25.1 airinv/AIRINV_Master_Service.hpp File Reference	498
25.2 AIRINV_Master_Service.hpp	498
25.3 airinv/AIRINV_Service.hpp File Reference	500

25.4	AIRINV_Service.hpp	501
25.5	airinv/AIRINV_Types.hpp File Reference	502
25.6	AIRINV_Types.hpp	503
25.7	airinv/basic/BasConst.cpp File Reference	504
25.8	BasConst.cpp	505
25.9	airinv/basic/BasConst_AIRINV_Service.hpp File Reference	506
25.10	BasConst_AIRINV_Service.hpp	506
25.11	airinv/basic/BasConst_Curves.hpp File Reference	506
25.12	BasConst_Curves.hpp	507
25.13	airinv/basic/BasConst_General.hpp File Reference	507
25.14	BasConst_General.hpp	507
25.15	airinv/basic/BasParserTypes.hpp File Reference	507
25.16	BasParserTypes.hpp	508
25.17	airinv/basic/FlightRequestStatus.cpp File Reference	510
25.18	FlightRequestStatus.cpp	510
25.19	airinv/basic/FlightTypeCode.cpp File Reference	511
25.20	FlightTypeCode.cpp	511
25.21	airinv/basic/FlightTypeCode.hpp File Reference	513
25.22	FlightTypeCode.hpp	513
25.23	airinv/basic/FlightVisibilityCode.cpp File Reference	514
25.24	FlightVisibilityCode.cpp	514
25.25	airinv/basic/FlightVisibilityCode.hpp File Reference	515
25.26	FlightVisibilityCode.hpp	516
25.27	airinv/batches/airinv_parseInventory.cpp File Reference	516
25.28	airinv_parseInventory.cpp	516
25.29	airinv/batches/parseInventory.cpp File Reference	521
25.30	parseInventory.cpp	521
25.31	airinv/bom/AirportList.hpp File Reference	525
25.32	AirportList.hpp	526
25.33	airinv/bom/BomAbstract.cpp File Reference	526
25.34	BomAbstract.cpp	526
25.35	airinv/bom/BomAbstract.hpp File Reference	527
25.35.1	Function Documentation	527
25.36	BomAbstract.hpp	527

25.37airinv/bom/BomRootHelper.cpp File Reference	528
25.38BomRootHelper.cpp	529
25.39airinv/bom/BomRootHelper.hpp File Reference	529
25.40BomRootHelper.hpp	529
25.41airinv/bom/BookingClassHelper.cpp File Reference	530
25.42BookingClassHelper.cpp	530
25.43airinv/bom/BookingClassHelper.hpp File Reference	530
25.44BookingClassHelper.hpp	531
25.45airinv/bom/BookingClassStruct.cpp File Reference	531
25.46BookingClassStruct.cpp	531
25.47airinv/bom/BookingClassStruct.hpp File Reference	532
25.48BookingClassStruct.hpp	532
25.49airinv/bom/BucketStruct.cpp File Reference	533
25.50BucketStruct.cpp	534
25.51airinv/bom/BucketStruct.hpp File Reference	534
25.52BucketStruct.hpp	535
25.53airinv/bom/DCPEventStruct.cpp File Reference	535
25.54DCPEventStruct.cpp	535
25.55airinv/bom/DCPEventStruct.hpp File Reference	538
25.56DCPEventStruct.hpp	538
25.57airinv/bom/FareFamilyStruct.cpp File Reference	540
25.58FareFamilyStruct.cpp	540
25.59airinv/bom/FareFamilyStruct.hpp File Reference	541
25.60FareFamilyStruct.hpp	541
25.61airinv/bom/FlightDateHelper.cpp File Reference	542
25.62FlightDateHelper.cpp	542
25.63airinv/bom/FlightDateHelper.hpp File Reference	544
25.64FlightDateHelper.hpp	544
25.65airinv/bom/FlightDateStruct.cpp File Reference	544
25.66FlightDateStruct.cpp	545
25.67airinv/bom/FlightDateStruct.hpp File Reference	548
25.68FlightDateStruct.hpp	549
25.69airinv/bom/FlightPeriodStruct.cpp File Reference	550
25.70FlightPeriodStruct.cpp	550

25.71	airinv/bom/FlightPeriodStruct.hpp File Reference	554
25.72	FlightPeriodStruct.hpp	554
25.73	airinv/bom/GuillotineBlockHelper.cpp File Reference	556
25.74	GuillotineBlockHelper.cpp	556
25.75	airinv/bom/GuillotineBlockHelper.hpp File Reference	559
25.76	GuillotineBlockHelper.hpp	560
25.77	airinv/bom/InventoryHelper.cpp File Reference	560
25.78	InventoryHelper.cpp	561
25.79	airinv/bom/InventoryHelper.hpp File Reference	566
25.80	InventoryHelper.hpp	566
25.81	airinv/bom/LegCabinHelper.cpp File Reference	567
25.82	LegCabinHelper.cpp	567
25.83	airinv/bom/LegCabinHelper.hpp File Reference	567
25.84	LegCabinHelper.hpp	568
25.85	airinv/bom/LegCabinStruct.cpp File Reference	568
25.86	LegCabinStruct.cpp	568
25.87	airinv/bom/LegCabinStruct.hpp File Reference	569
25.88	LegCabinStruct.hpp	569
25.89	airinv/bom/LegStruct.cpp File Reference	570
25.90	LegStruct.cpp	570
25.91	airinv/bom/LegStruct.hpp File Reference	571
25.92	LegStruct.hpp	572
25.93	airinv/bom/SegmentCabinHelper.cpp File Reference	573
25.94	SegmentCabinHelper.cpp	573
25.95	airinv/bom/SegmentCabinHelper.hpp File Reference	576
25.96	SegmentCabinHelper.hpp	576
25.97	airinv/bom/SegmentCabinStruct.cpp File Reference	577
25.98	SegmentCabinStruct.cpp	577
25.99	airinv/bom/SegmentCabinStruct.hpp File Reference	578
25.100	SegmentCabinStruct.hpp	578
25.101	airinv/bom/SegmentDateHelper.cpp File Reference	579
25.102	SegmentDateHelper.cpp	579
25.103	airinv/bom/SegmentDateHelper.hpp File Reference	581
25.104	SegmentDateHelper.hpp	581

25.105airinv/bom/SegmentStruct.cpp File Reference	582
25.106SegmentStruct.cpp	582
25.107airinv/bom/SegmentStruct.hpp File Reference	583
25.108SegmentStruct.hpp	583
25.109airinv/command/InventoryBuilder.cpp File Reference	584
25.110InventoryBuilder.cpp	584
25.111airinv/command/InventoryBuilder.hpp File Reference	589
25.112InventoryBuilder.hpp	589
25.113airinv/command/InventoryGenerator.cpp File Reference	590
25.114InventoryGenerator.cpp	591
25.115airinv/command/InventoryGenerator.hpp File Reference	595
25.116InventoryGenerator.hpp	596
25.117airinv/command/InventoryManager.cpp File Reference	597
25.118InventoryManager.cpp	597
25.119airinv/command/InventoryManager.hpp File Reference	613
25.120InventoryManager.hpp	613
25.121airinv/command/InventoryParser.cpp File Reference	614
25.122InventoryParser.cpp	615
25.123airinv/command/InventoryParser.hpp File Reference	615
25.124InventoryParser.hpp	616
25.125airinv/command/InventoryParserHelper.cpp File Reference	616
25.126InventoryParserHelper.cpp	617
25.127airinv/command/InventoryParserHelper.hpp File Reference	633
25.128InventoryParserHelper.hpp	635
25.129airinv/command/ScheduleParser.cpp File Reference	639
25.130ScheduleParser.cpp	640
25.131airinv/command/ScheduleParser.hpp File Reference	640
25.132ScheduleParser.hpp	641
25.133airinv/command/ScheduleParserHelper.cpp File Reference	641
25.134ScheduleParserHelper.cpp	642
25.135airinv/command/ScheduleParserHelper.hpp File Reference	651
25.136ScheduleParserHelper.hpp	652
25.137airinv/command/vault/DCPEventGenerator.cpp File Reference	655
25.138DCPEventGenerator.cpp	655

25.138	airinv/command/vault/DCPEventGenerator.hpp File Reference	656
25.140	DCPEventGenerator.hpp	657
25.141	airinv/command/vault/DCPParser.cpp File Reference	657
25.142	DCPParser.cpp	658
25.143	airinv/command/vault/DCPParser.hpp File Reference	658
25.144	DCPParser.hpp	658
25.145	airinv/command/vault/DCPParserHelper.cpp File Reference	659
25.146	DCPParserHelper.cpp	659
25.147	airinv/command/vault/DCPParserHelper.hpp File Reference	668
25.148	DCPParserHelper.hpp	669
25.149	airinv/config/airinv-paths.hpp File Reference	672
25.149	Define Documentation	673
25.150	airinv-paths.hpp	674
25.151	airinv/config/airinv-paths.hpp.in File Reference	674
25.151	Define Documentation	675
25.152	airinv-paths.hpp.in	677
25.153	airinv/factory/FacAirinvMasterServiceContext.cpp File Reference	677
25.154	FacAirinvMasterServiceContext.cpp	677
25.155	airinv/factory/FacAirinvMasterServiceContext.hpp File Reference	678
25.156	FacAirinvMasterServiceContext.hpp	678
25.157	airinv/factory/FacAirinvServiceContext.cpp File Reference	679
25.158	FacAirinvServiceContext.cpp	679
25.159	airinv/factory/FacAirinvServiceContext.hpp File Reference	680
25.160	FacAirinvServiceContext.hpp	680
25.161	airinv/factory/FacBomAbstract.cpp File Reference	681
25.162	FacBomAbstract.cpp	681
25.163	airinv/factory/FacBomAbstract.hpp File Reference	682
25.164	FacBomAbstract.hpp	682
25.165	airinv/factory/FacServiceAbstract.cpp File Reference	683
25.166	FacServiceAbstract.cpp	683
25.167	airinv/factory/FacServiceAbstract.hpp File Reference	684
25.168	FacServiceAbstract.hpp	684
25.169	airinv/factory/FacSupervisor.cpp File Reference	684
25.170	FacSupervisor.cpp	685

25.174	airinv/factory/FacSupervisor.hpp File Reference	686
25.175	FacSupervisor.hpp	686
25.176	airinv/FlightRequestStatus.hpp File Reference	687
25.177	FlightRequestStatus.hpp	687
25.178	airinv/server/AirInvClient.cpp File Reference	688
25.179	Function Documentation	688
25.180	AirInvClient.cpp	688
25.181	airinv/server/AirInvClient_ASIO.cpp File Reference	689
25.182	Function Documentation	689
25.183	AirInvClient_ASIO.cpp	689
25.184	airinv/server/AirInvServer.cpp File Reference	690
25.185	AirInvServer.cpp	690
25.186	airinv/server/AirInvServer.hpp File Reference	696
25.187	AirInvServer.hpp	696
25.188	airinv/server/AirInvServer_ASIO.cpp File Reference	697
25.189	AirInvServer_ASIO.cpp	698
25.190	airinv/server/BomPropertyTree.cpp File Reference	699
25.191	BomPropertyTree.cpp	699
25.192	airinv/server/BomPropertyTree.hpp File Reference	701
25.193	BomPropertyTree.hpp	701
25.194	airinv/server/Connection.cpp File Reference	702
25.195	Connection.cpp	702
25.196	airinv/server/Connection.hpp File Reference	703
25.197	Connection.hpp	704
25.198	airinv/server/header.hpp File Reference	704
25.199	header.hpp	705
25.200	airinv/server/posix_main.cpp File Reference	705
25.201	Function Documentation	705
25.202	posix_main.cpp	705
25.203	airinv/server/Reply.cpp File Reference	707
25.204	Reply.cpp	707
25.205	airinv/server/Reply.hpp File Reference	707
25.206	Reply.hpp	707
25.207	airinv/server/Request.cpp File Reference	708

25.202Request.cpp	708
25.203airnv/server/Request.hpp File Reference	708
25.204Request.hpp	709
25.205airnv/server/RequestHandler.cpp File Reference	709
25.206RequestHandler.cpp	710
25.207airnv/server/RequestHandler.hpp File Reference	710
25.208RequestHandler.hpp	711
25.209airnv/server/RequestParser.cpp File Reference	711
25.210RequestParser.cpp	712
25.211airnv/server/RequestParser.hpp File Reference	715
25.212RequestParser.hpp	716
25.213airnv/server/win_main.cpp File Reference	717
25.214win_main.cpp	717
25.215airnv/service/AIRINV_Master_Service.cpp File Reference	718
25.216AIRINV_Master_Service.cpp	718
25.217airnv/service/AIRINV_Master_ServiceContext.cpp File Reference	727
25.218AIRINV_Master_ServiceContext.cpp	727
25.219airnv/service/AIRINV_Master_ServiceContext.hpp File Reference	728
25.220AIRINV_Master_ServiceContext.hpp	728
25.221airnv/service/AIRINV_Service.cpp File Reference	729
25.222AIRINV_Service.cpp	730
25.223airnv/service/AIRINV_ServiceContext.cpp File Reference	739
25.224AIRINV_ServiceContext.cpp	739
25.225airnv/service/AIRINV_ServiceContext.hpp File Reference	740
25.226AIRINV_ServiceContext.hpp	740
25.227airnv/service/ServiceAbstract.cpp File Reference	742
25.228ServiceAbstract.cpp	742
25.229airnv/service/ServiceAbstract.hpp File Reference	742
25.229.1Function Documentation	743
25.230ServiceAbstract.hpp	743
25.231airnv/ui/cmdline/airnv.cpp File Reference	744
25.232airnv.cpp	744
25.233airnv/ui/cmdline/readline_autocomp.hpp File Reference	758
25.233.1Typedef Documentation	759

25.233.2	Function Documentation	759
25.233.3	variable Documentation	762
25.234	Readline_autocomp.hpp	762
25.235	airinv/ui/cmdline/SReadline.hpp File Reference	767
25.235.1	Detailed Description	767
25.236	Readline.hpp	768
25.237	doc/local/authors.doc File Reference	774
25.238	doc/local/codingrules.doc File Reference	774
25.239	doc/local/copyright.doc File Reference	774
25.240	doc/local/documentation.doc File Reference	774
25.241	doc/local/features.doc File Reference	774
25.242	doc/local/help_wanted.doc File Reference	774
25.243	doc/local/howto_release.doc File Reference	774
25.244	doc/local/index.doc File Reference	774
25.245	doc/local/installation.doc File Reference	774
25.246	doc/local/linking.doc File Reference	774
25.247	doc/local/test.doc File Reference	774
25.248	doc/local/users_guide.doc File Reference	774
25.249	doc/local/verification.doc File Reference	774
25.250	doc/tutorial/tutorial.doc File Reference	774
25.251	test/airinv/InventoryTestSuite.cpp File Reference	775
25.252	InventoryTestSuite.cpp	775
25.253	test/airinv/InventoryTestSuite.hpp File Reference	779
25.253.1	Function Documentation	779
25.254	InventoryTestSuite.hpp	780

1 AirInv Documentation

1.1 Getting Started

- [Main features](#)
- [Installation](#)
- [Linking with Airinv](#)
- [Users Guide](#)

- [Tutorials](#)
- [Copyright and License](#)
- [Make a Difference](#)
- [Make a new release](#)
- [People](#)

1.2 AirInv at SourceForge

- [Project page](#)
- [Download AirInv](#)
- [Open a ticket for a bug or feature](#)
- [Mailing lists](#)
- [Forums](#)
 - [Discuss about Development issues](#)
 - [Ask for Help](#)
 - [Discuss AirInv](#)

1.3 AirInv Development

- [Git Repository](#) (Subversion is deprecated)
- [Coding Rules](#)
- [Documentation Rules](#)
- [Test Rules](#)

1.4 External Libraries

- [Boost](#) (C++ STL extensions)
- [Python](#)
- [MySQL client](#)
- [SOI](#) (C++ DB API)

1.5 Support Airlnv

1.6 About Airlnv

Airlnv is a C++ library of airline inventory management classes and functions, mainly targeting simulation purposes. [N](#)

Airlnv makes an extensive use of existing open-source libraries for increased functionality, speed and accuracy. In particular the [Boost](#) (*C++ Standard Extensions*) library is used.

The Airlnv library originates from the department of Operational Research and - Innovation at [Amadeus](#), Sophia Antipolis, France. Airlnv is released under the terms of the [GNU Lesser General Public License](#) (LGPLv2.1) for you to enjoy.

Airlnv should work on [GNU/Linux](#), [Sun Solaris](#), Microsoft Windows (with - [Cygwin](#), [MinGW/MSYS](#), or [Microsoft Visual C++ .NET](#)) and [Mac OS X](#) operating systems.

Note

(N) - The Airlnv library is **NOT** intended, in any way, to be used by airlines for production systems. If you want to report issue, bug or feature request, or if you just want to give feedback, have a look on the right-hand side of this page for the preferred reporting methods. In any case, please do not contact Amadeus directly for any matter related to Airlnv.

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Note

(N) - [Amadeus](#) employees.

3 Coding Rules

In the following sections we describe the naming conventions which are used for files, classes, structures, local variables, and global variables.

3.1 Default Naming Rules for Variables

Variables names follow Java naming conventions. Examples:

- `lNumberOfPassengers`
- `lSeatAvailability`

3.2 Default Naming Rules for Functions

Function names follow Java naming conventions. Example:

- `int myFunctionName (const int& a, int b)`

3.3 Default Naming Rules for Classes and Structures

Each new word in a class or structure name should always start with a capital letter and the words should be separated with an under-score. Abbreviations are written with capital letters. Examples:

- `MyClassName`
- `MyStructName`

3.4 Default Naming Rules for Files

Files are named after the C++ class names.

Source files are named using `.cpp` suffix, whereas header files end with `.hpp` extension. Examples:

- `FlightDate.hpp`
- `SegmentDate.cpp`

3.5 Default Functionality of Classes

All classes that are configured by input parameters should include:

- default empty constructor
- one or more additional constructor(s) that takes input parameters and initializes the class instance
- setup function, preferably named `'setup'` or `'set_parameters'`

Explicit destructor functions are not required, unless they are needed. It shall not be possible to use any of the other member functions unless the class has been properly initiated with the input parameters.

4 Copyright and License

4.1 GNU LESSER GENERAL PUBLIC LICENSE

4.1.1 Version 2.1, February 1999

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library,

and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

- a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)
- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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- a) Accompany the combined library with a copy of the same work based on the Library,

uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

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patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

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4.3.2 END OF TERMS AND CONDITIONS

4.4 How to Apply These Terms to Your New Programs

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>
```

```
This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.
```

```
This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.
```

```
You should have received a copy of the GNU Lesser General Public
License along with this library; if not, write to the Free Software
Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
```

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
library 'Frob' (a library for tweaking knobs) written by James Random Hacker.
```

```
<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice
```

That's all there is to it!

Source

5 Documentation Rules

5.1 General Rules

All classes in Airlnv should be properly documented with Doxygen comments in include (.hpp) files. Source (.cpp) files should be documented according to a normal standard for well documented C++ code.

An example of how the interface of a class shall be documented in Airlnv is shown here:

```

/*!
 * \brief Brief description of MyClass here
 *
 * Detailed description of MyClass here. With example code if needed.
 */
class MyClass {
public:
    //! Default constructor
    MyClass(void) { setup_done = false; }

    /*!
     * \brief Constructor that initializes the class with parameters
     *
     * Detailed description of the constructor here if needed
     *
     * \param[in] param1 Description of \a param1 here
     * \param[in] param2 Description of \a param2 here
     */
    MyClass(TYPE1 param1, TYPE2 param2) { setup(param1, param2); }

    /*!
     * \brief Setup function for MyClass
     *
     * Detailed description of the setup function here if needed
     *
     * \param[in] param1 Description of \a param1 here
     * \param[in] param2 Description of \a param2 here
     */
    void setup(TYPE1 param1, TYPE2 param2);

    /*!
     * \brief Brief description of memberFunction1
     *
     * Detailed description of memberFunction1 here if needed
     *
     * \param[in] param1 Description of \a param1 here
     * \param[in] param2 Description of \a param2 here
     * \param[in,out] param3 Description of \a param3 here
     * \return Description of the return value here
     */
    TYPE4 memberFunction1(TYPE1 param1, TYPE2 param2, TYPE3 &param3);

private:
    bool _setupDone;          /*!< Variable that checks if the class is properly
                               initialized with parameters */
    TYPE1 _privateVariable1; /*!< Short description of _privateVariable1 here
    TYPE2 _privateVariable2; /*!< Short description of _privateVariable2 here
};

```

5.2 File Header

All files should start with the following header, which include Doxygen's `\file`, `\brief` and `\author` tags, `$Date$` and `$Revisions$` CVS tags, and a common copyright note:

```

/*!
 * \file
 * \brief Brief description of the file here

```

```

* \author Names of the authors who contributed to this code
* \date Date
*
* Detailed description of the file here if needed.
*
* -----
*
* AirInv - C++ Airline Inventory Management Library
*
* Copyright (C) 2009-2010 (\see authors file for a list of contributors)
*
* \see copyright file for license information
*
* -----
*/

```

5.3 Grouping Various Parts

All functions must be added to a Doxygen group in order to appear in the documentation. The following code example defines the group 'my_group':

```

/*!
* \defgroup my_group Brief description of the group here
*
* Detailed description of the group here
*/

```

The following example shows how to document the function myFunction and how to add it to the group my_group:

```

/*!
* \brief Brief description of myFunction here
* \ingroup my_group
*
* Detailed description of myFunction here
*
* \param[in] param1 Description of \a param1 here
* \param[in] param2 Description of \a param2 here
* \return Description of the return value here
*/
TYPE3 myFunction(TYPE1 param1, TYPE2 &param2);

```

6 Main features

A short list of the main features of AirInv is given below sorted in different categories. Many more features and functions exist and for these we refer to the reference documentation.

6.1 Network generation

- Network/graph generation

6.2 Inventory generation

- Inventory generation

6.3 Finding travel solutions

- Matching of travel solutions with user requests

6.4 Distributed inventories

- Inventory independent partitions
- MPI-based distribution

6.5 Other features

- CSV input file parsing
- Memory handling

7 Make a Difference

Do not ask what AirSched can do for you. Ask what you can do for AirSched.

You can help us to develop the AirSched library. There are always a lot of things you can do:

- Start using AirSched
- Tell your friends about AirSched and help them to get started using it
- If you find a bug, report it to us. Without your help we can never hope to produce a bug free code.
- Help us to improve the documentation by providing information about documentation bugs
- Answer support requests in the AirSched discussion forums on SourceForge. - If you know the answer to a question, help others to overcome their AirSched problems.
- Help us to improve our algorithms. If you know of a better way (e.g. that is faster or requires less memory) to implement some of our algorithms, then let us know.
- Help us to port AirSched to new platforms. If you manage to compile AirSched on a new platform, then tell us how you did it.

- Send us your code. If you have a good AirSched compatible code, which you can release under the LGPLv2.1, and you think it should be included in AirSched, then send it to us.
- Become an AirSched developer. Send us an e-mail and tell what you can do for AirSched.

8 Make a new release

8.1 Introduction

This document describes briefly the recommended procedure of releasing a new version of AirInv using a Linux development machine and the SourceForge project site.

The following steps are required to make a release of the distribution package.

8.2 Initialisation

Clone locally the full [Git project](#):

```
cd ~
mkdir -p dev/sim
cd ~/dev/sim
git clone git://airinv.git.sourceforge.net/gitroot/airinv/airinv airinvgit
cd airinvgit
git checkout trunk
```

8.3 Branch creation

Create the branch, on your local clone, corresponding to the new release (say, 0.5.0):

```
cd ~/dev/sim/airinvgit
git checkout trunk
git checkout -b 0.5.0
```

Update the version in the various build system files, replacing 99.99.99 by the correct version number:

```
vi CMakeLists.txt
vi autogen.sh
```

Update the version and add a change-log in the ChangeLog and in the RPM specification files:

```
vi ChangeLog
vi airinv.spec
```

8.4 Commit and publish the release branch

Commit the new release:

```
cd ~/dev/sim/airinvgit
git add -A
git commit -m "[Release 0.5.0] Release of version 0.5.0."
git push
```

8.5 Update the change-log in the trunk as well

Update the change-log in the ChangeLog and RPM specification files:

```
cd ~/dev/sim/airinvgit
git checkout trunk
vi ChangeLog
vi airinv.spec
```

Commit the change-logs and publish the trunk (main development branch):

```
git commit -m "[Doc] Integrated the change-log of the release 0.5.0."
git push
```

8.6 Create distribution packages

Create the distribution packages using the following command:

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/airinv-0.5.0 \
-DWITH_STDAIR_PREFIX=/home/user/dev/deliveries/stdair-stable \
-DCMAKE_BUILD_TYPE:String=Debug -DINSTALL_DOC:BOOL=ON ..
make check && make dist
```

This will configure, compile and check the package. The output packages will be named, for instance, `airinv-0.5.0.tar.gz` and `airinv-0.5.0.tar.bz2`.

8.7 Generation the RPM packages

Optionally, generate the RPM package (for instance, for [Fedora](#)/[RedHat](#)):

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/airinv-0.5.0 \
-DWITH_STDAIR_PREFIX=/home/user/dev/deliveries/stdair-stable \
-DCMAKE_BUILD_TYPE:String=Debug -DINSTALL_DOC:BOOL=ON ..
make dist
```

To perform this step, `rpm-build`, `rpmlint` and `rpmdevtools` have to be available on the system.

```
cp airinv.spec ~/dev/packages/SPECS \  
  && cp airinv-0.5.0.tar.bz2 ~/dev/packages/SOURCES  
cd ~/dev/packages/SPECS  
rpmbuild -ba airinv.spec  
rpmlint -i ../SPECS/airinv.spec ../SRPMS/airinv-0.5.0-1.fc15.src.rpm \  
  ../RPMS/noarch/airinv-* ../RPMS/i686/airinv-*
```

8.8 Update distributed change log

Update the NEWS and ChangeLog files with appropriate information, including what has changed since the previous release. Then commit and push the changes into the [AirInv's Git repository](#).

8.9 Create the binary package, including the documentation

Create the binary package, which includes HTML and PDF documentation, using the following command:

```
make package
```

The output binary package will be named, for instance, `airinv-0.5.0-Linux.-tar.bz2`. That package contains both the HTML and PDF documentation. The binary package contains also the executables and shared libraries, as well as C++ header files, but all of those do not interest us for now.

8.10 Upload the files to SourceForge

Upload the distribution and documentation packages to the SourceForge server. Check [SourceForge help page on uploading software](#).

8.11 Upload the documentation to SourceForge

In order to update the Web site files, either:

- [synchronise them with rsync and SSH](#):

```
cd ~/dev/sim/airinvgit  
git checkout 0.5.0  
rsync -aiv doc/html/ doc/latex/refman.pdf joe,airinv@web.sourceforge.net:htdocs/
```

where `-aiv` options mean:

- `-a`: archive/mirror mode; equals `-rlptgoD` (no `-H`, `-A`, `-X`)
- `-v`: increase verbosity
- `-i`: output a change-summary for all updates
- Note the trailing slashes (/) at the end of both the source and target directories. It means that the content of the source directory (`doc/html`), rather than the directory itself, has to be copied into the content of the target directory.

- or use the [SourceForge Shell service](#).

8.12 Make a new post

- submit a new entry in the [SourceForge project-related news feed](#)
- make a new post on the [SourceForge hosted WordPress blog](#)
- and update, if necessary, [Trac tickets](#).

8.13 Send an email on the announcement mailing-list

Finally, you should send an announcement to airinv-announce@lists.sourceforge.net (see <https://lists.sourceforge.net/lists/listinfo/airinv-announce> for the archives)

9 Installation

9.1 Table of Contents

- [Fedora/RedHat Linux distributions](#)
- [Airinv Requirements](#)
- [Basic Installation](#)
- [Compilers and Options](#)
- [Compiling For Multiple Architectures](#)
- [Installation Names](#)
- [Optional Features](#)
- [Particular systems](#)
- [Specifying the System Type](#)
- [Sharing Defaults](#)
- [Defining Variables](#)
- ['cmake' Invocation](#)

9.2 Fedora/RedHat Linux distributions

Note that on [Fedora/RedHat](#) Linux distributions, RPM packages are available and can be installed with your usual package manager. For instance:

```
yum -y install airinv-devel airinv-doc
```

RPM packages can also be available on the [SourceForge download site](#).

9.3 Airinv Requirements

Airinv should compile without errors or warnings on most GNU/Linux systems, on UNIX systems like Solaris SunOS, and on POSIX based environments for Microsoft Windows like Cygwin or MinGW with MSYS. It can be also built on Microsoft Windows NT/2000/X-P/Vista/7 using Microsoft's Visual C++ .NET, but our support for this compiler is limited. For GNU/Linux, SunOS, Cygwin and MinGW we assume that you have at least the following GNU software installed on your computer:

- GNU Autotools:
 - [autoconf](#),
 - [automake](#),
 - [libtool](#),
 - [make](#), version 3.72.1 or later (check version with ``make --version``)
- [GCC](#) - GNU C++ Compiler (g++), version 4.3.x or later (check version with ``gcc --version``)
- [Boost](#) - C++ STL extensions, version 1.35 or later (check version with ``grep "define BOOST_LIB_VERSION" /usr/include/boost/version.hpp``)
- [MySQL](#) - Database client libraries, version 5.0 or later (check version with ``mysql --version``)
- [SOCl](#) - C++ database client library wrapper, version 3.0.0 or later (check version with ``soci-config --version``)

Optionally, you might need a few additional programs: [Doxygen](#), [LaTeX](#), [Dvips](#) and [Ghostscript](#), to generate the HTML and PDF documentation.

We strongly recommend that you use recent stable releases of the GCC, if possible. We do not actively work on supporting older versions of the GCC, and they may therefore (without prior notice) become unsupported in future releases of Airinv.

9.4 Basic Installation

Briefly, the shell commands ``./cmake .. && make install`` should configure, build, and install this package. The following more-detailed instructions are generic; see the ``README`` file for instructions specific to this package. Some packages provide this ``INSTALL`` file but do not implement all of the features documented below.

The lack of an optional feature in a given package is not necessarily a bug. More recommendations for GNU packages can be found in the info page corresponding to "Makefile Conventions: (standards)Makefile Conventions".

The `'cmake'` shell script attempts to guess correct values for various system-dependent variables used during compilation. It uses those values to create a `'Makefile'` in each directory of the package. It may also create one or more `'.h'` files containing system-dependent definitions. Finally, it creates a `'CMakeCache.txt'` cache file that you can refer to in the future to recreate the current configuration, and a file `'CMakeFiles'` containing compiler output (useful mainly for debugging `'cmake'`).

It can also use an optional file (typically called `'config.cache'` and enabled with `'--cache-file=config.cache'` or simply `'-C'`) that saves the results of its tests to speed up reconfiguring. Caching is disabled by default to prevent problems with accidental use of stale cache files.

If you need to do unusual things to compile the package, please try to figure out how `'configure'` could check whether to do them, and mail diffs or instructions to the address given in the `'README'` so they can be considered for the next release. If you are using the cache, and at some point `'config.cache'` contains results you don't want to keep, you may remove or edit it.

The file `'CMakeLists.txt'` is used to create the `'Makefile'` files.

The simplest way to compile this package is:

1. `'cd'` to the directory containing the package's source code and type `'./cmake ..'` to configure the package for your system. Running `'cmake'` is generally fast. While running, it prints some messages telling which features it is checking for.
2. Type `'make'` to compile the package.
3. Optionally, type `'make check'` to run any self-tests that come with the package, generally using the just-built uninstalled binaries.
4. Type `'make install'` to install the programs and any data files and documentation. When installing into a prefix owned by root, it is recommended that the package be configured and built as a regular user, and only the `'make install'` phase executed with root privileges.
5. You can remove the program binaries and object files from the source code directory by typing `'make clean'`. To also remove the files that `'configure'` created (so you can compile the package for a different kind of computer), type `'make distclean'`. There is also a `'make maintainer-clean'` target, but that is intended mainly for the package's developers. If you use it, you may have to get all sorts of other programs in order to regenerate files that came with the distribution.

6. Often, you can also type 'make uninstall' to remove the installed files again. In practice, not all packages have tested that uninstallation works correctly, even though it is required by the GNU Coding Standards.

9.5 Compilers and Options

Some systems require unusual options for compilation or linking that the 'cmake' script does not know about. - Run './cmake --help' for details on some of the pertinent environment variables.

You can give 'cmake' initial values for configuration parameters by setting variables in the command line or in the environment. Here is an example:

```
./cmake CC=c99 CFLAGS=-g LIBS=-lposix
```

See also

[Defining Variables](#) for more details.

9.6 Compiling For Multiple Architectures

You can compile the package for more than one kind of computer at the same time, by placing the object files for each architecture in their own directory. To do this, you can use GNU 'make'. 'cd' to the directory where you want the object files and executables to go and run the 'configure' script. 'configure' automatically checks for the source code in the directory that 'configure' is in and in '..'. This is known as a "VPATH" build.

With a non-GNU 'make', it is safer to compile the package for one architecture at a time in the source code directory. After you have installed the package for one architecture, use 'make distclean' before reconfiguring for another architecture.

On MacOS X 10.5 and later systems, you can create libraries and executables that work on multiple system types--known as "fat" or "universal" binaries--by specifying multiple '-arch' options to the compiler but only a single '-arch' option to the preprocessor. Like this:

```
./configure CC="gcc -arch i386 -arch x86_64 -arch ppc -arch ppc64" \  
           CXX="g++ -arch i386 -arch x86_64 -arch ppc -arch ppc64" \  
           CPP="gcc -E" CXXCPP="g++ -E"
```


This is not guaranteed to produce working output in all cases, you may have to build one architecture at a time and combine the results using the 'lipo' tool if you have problems.

9.7 Installation Names

By default, 'make install' installs the package's commands under '/usr/local/bin', include files under '/usr/local/include', etc. You can specify an installation prefix other than '/usr/local' by giving 'configure' the option '--prefix=PREFIX', where PREFIX must be an absolute file name.

You can specify separate installation prefixes for architecture-specific files and architecture-independent files. If you pass the option '--exec-prefix=PREFIX' to 'configure', the package uses PREFIX as the prefix for installing programs and libraries. Documentation and other data files still use the regular prefix.

In addition, if you use an unusual directory layout you can give options like '--bindir=DIR' to specify different values for particular kinds of files. Run 'configure --help' for a list of the directories you can set and what kinds of files go in them. In general, the default for these options is expressed in terms of '\${prefix}', so that specifying just '--prefix' will affect all of the other directory specifications that were not explicitly provided.

The most portable way to affect installation locations is to pass the correct locations to 'configure'; however, many packages provide one or both of the following shortcuts of passing variable assignments to the 'make install' command line to change installation locations without having to reconfigure or recompile.

The first method involves providing an override variable for each affected directory. For example, 'make install prefix=/alternate/directory' will choose an alternate location for all directory configuration variables that were expressed in terms of '\${prefix}'. Any directories that were specified during 'configure', but not in terms of '\${prefix}', must each be overridden at install time for the entire installation to be relocated. The approach of makefile variable overrides for each directory variable is required by the GNU Coding Standards, and ideally causes no recompilation. However, some platforms have known limitations with the semantics of shared libraries that end up requiring recompilation when using this method, particularly noticeable in packages that use GNU Libtool.

The second method involves providing the 'DESTDIR' variable. For example, 'make install DESTDIR=/alternate/directory' will prepend '/alternate/directory' before all installation names. The approach of 'DESTDIR' overrides is not required by the GNU Coding Standards, and does not work on platforms that have drive letters. On the other hand, it does better at avoiding recompilation issues, and works well even when some directory options were not specified in terms of '\${prefix}' at 'configure' time.

9.8 Optional Features

If the package supports it, you can cause programs to be installed with an extra prefix or suffix on their names by giving 'cmake' the option '--program-prefix=PREFIX' or '--program-suffix=SUFFIX'.

Some packages pay attention to '--enable-FEATURE' options to 'configure', where FEATURE indicates an optional part of the package. They may also pay attention to '--with--PACKAGE' options, where PACKAGE is something like 'gnu-as' or 'x' (for the X Window System). The 'README' should mention any '--enable-' and '--with-' options that the package recognizes.

For packages that use the X Window System, 'configure' can usually find the X include and library files automatically, but if it doesn't, you can use the 'configure' options '--x-includes=DIR' and '--x-libraries=DIR' to specify their locations.

Some packages offer the ability to configure how verbose the execution of 'make' will be. For these packages, running './configure --enable-silent-rules' sets the default to minimal output, which can be overridden with 'make -V=1'; while running './configure --disable-silent-rules' sets the default to verbose, which can be overridden with 'make V=0'.

9.9 Particular systems

On HP-UX, the default C compiler is not ANSI C compatible. If GNU CC is not installed, it is recommended to use the following options in order to use an ANSI C compiler:

```
./configure CC="cc -Ae -D_XOPEN_SOURCE=500"
```

and if that doesn't work, install pre-built binaries of - GCC for HP-UX.

On OSF/1 a.k.a. Tru64, some versions of the default - C compiler cannot parse its '<wchar.h>' header file. - The option '-nodtk' can be used as a workaround. If GNU CC is not installed, it is therefore recommended to try

```
./configure CC="cc"
```

and if that doesn't work, try

```
./configure CC="cc -nodtk"
```

On Solaris, don't put '/usr/ucb' early in your 'PATH'. - This directory contains several dysfunctional programs; working variants of these programs are available in '/usr/bin'. So, if you need '/usr/ucb' in your 'PATH', put it after - '/usr/bin'.

On Haiku, software installed for all users goes in '/boot/common', not '/usr/local'. It is recommended to use the following options:

```
./cmake -DCMAKE_INSTALL_PREFIX=/boot/common
```

9.10 Specifying the System Type

There may be some features 'configure' cannot figure out automatically, but needs to determine by the type of machine the package will run on. Usually, assuming the package is built to be run on the same architectures, 'configure' can figure that out, but if it prints a message saying it cannot guess the machine type, give it the '--build=TYPE' option. TYPE can either be a short name for the system type, such as 'sun4', or a canonical name which has the form CPU-COMPANY-SYSTEM

where SYSTEM can have one of these forms:

- OS
- KERNEL-OS

See the file 'config.sub' for the possible values of each field. If 'config.sub' isn't included in this package, then this package doesn't need to know the machine type.

If you are building compiler tools for cross-compiling, you should use the option '--target=TYPE' to select the type of system they will produce code for.

If you want to use a cross compiler, that generates code for a platform different from the build platform,

you should specify the "host" platform (i.e., that on which the generated programs will eventually be run) with `--host=TYPE`.

9.11 Sharing Defaults

If you want to set default values for `'configure'` scripts to share, you can create a site shell script called `'config.site'` that gives default values for variables like `'CC'`, `'cache_file'`, and `'prefix'`. `'configure'` looks for `'PREFIX/share/config.site'` if it exists, then `'PREFIX/etc/config.site'` if it exists. Or, you can set the `'CONFIG_SITE'` environment variable to the location of the site script. A warning: not all `'configure'` scripts look for a site script.

9.12 Defining Variables

Variables not defined in a site shell script can be set in the environment passed to `'configure'`. However, some packages may run `configure` again during the build, and the customized values of these variables may be lost. - In order to avoid this problem, you should set them in the `'configure'` command line, using `'VAR=value'`. For example:

```
./configure CC=/usr/local2/bin/gcc
```

causes the specified `'gcc'` to be used as the C compiler (unless it is overridden in the site shell script).

Unfortunately, this technique does not work for `'CONFIG_SHELL'` due to an Autoconf bug. Until the bug is fixed you can use this workaround:

```
CONFIG_SHELL=/bin/bash /bin/bash ./configure CONFIG_SHELL=/bin/bash
```

9.13 'cmake' Invocation

`'cmake'` recognizes the following options to control how it operates.

- `'--help'`, `'-h'` print a summary of all of the options to `'cmake'`, and exit.
- `'--help=short'`, `'--help=recursive'` print a summary of the options unique to this package's `'configure'`, and exit. The `'short'` variant lists options used only in the top level, while the `'recursive'` variant lists options also present in any nested packages.

- '--version', '-V' print the version of Autoconf used to generate the 'configure' script, and exit.
- '--cache-file=FILE' enable the cache: use and save the results of the tests in FILE, traditionally 'config.cache'. FILE defaults to '/dev/null' to disable caching.
- '--config-cache', '-C' alias for '--cache-file=config.cache'.
- '--quiet', '--silent', '-q' do not print messages saying which checks are being made. To suppress all normal output, redirect it to '/dev/null' (any error messages will still be shown).
- '--srcdir=DIR' look for the package's source code in directory DIR. Usually 'configure' can determine that directory automatically.
- '--prefix=DIR' use DIR as the installation prefix.

See also

[Installation Names](#) for more details, including other options available for fine-tuning the installation locations.

- '--no-create', '-n' run the configure checks, but stop before creating any output files.

'cmake' also accepts some other, not widely useful, options. Run 'cmake' --help' for more details.

The 'cmake' script produces an output like this:

```
export LIBSUFFIX_4_CMAKE="-DLIB_SUFFIX=64"
export INSTALL_BASEDIR=/home/user/dev/deliveries
cmake -DCMAKE_INSTALL_PREFIX=${INSTALL_BASEDIR}/airinv-0.5.0 \
  -DWITH_STDAIR_PREFIX=${INSTALL_BASEDIR}/stdair-stable \
  -DWITH_AIRAC_PREFIX=${INSTALL_BASEDIR}/airrac-stable \
  -DWITH_RMOL_PREFIX=${INSTALL_BASEDIR}/rmol-stable \
  -DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ${LIBSUFFIX_4_CMAKE} ..
-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /usr/lib64/ccache/gcc
-- Check for working C compiler: /usr/lib64/ccache/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /usr/lib64/ccache/c++
-- Check for working CXX compiler: /usr/lib64/ccache/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Requires Git without specifying any version
-- Current Git revision name: 0ee8dcc3e3ddldld442c4054fbfa4cacc1182e6a trunk
-- Requires Boost-1.41
-- Boost version: 1.46.0
-- Found the following Boost libraries:
```

```

-- regex
-- program_options
-- date_time
-- iostreams
-- serialization
-- filesystem
-- unit_test_framework
-- python
-- Found Boost version: 1.46.0
-- Found BoostWrapper: /usr/include (Required is at least version "1.41")
-- Requires Readline without specifying any version
-- Found Readline: /usr/include
-- Found Readline version: 6.2
-- Requires MySQL without specifying any version
-- Using mysql-config: /usr/bin/mysql_config
-- Found MySQL: /usr/lib64/mysql/libmysqlclient.so
-- Found MySQL version: 5.5.14
-- Requires SOCI-3.0
-- Using soci-config: /usr/bin/soci-config
-- SOCI headers are buried
-- Found SOCI: /usr/lib64/libsoci_core.so (Required is at least version "3.0")
-- Found SOCIMySQL: /usr/lib64/libsoci_mysql.so (Required is at least version "3.0")
-- Found SOCI with MySQL back-end support version: 3.0.0
-- Requires StdAir-0.37
-- Found StdAir version: 0.38.0
-- Requires Doxygen without specifying any version
-- Found Doxygen: /usr/bin/doxygen
-- Found DoxygenWrapper: /usr/bin/doxygen
-- Found Doxygen version: 1.7.4
-- Had to set the linker language for 'airraclib' to CXX
-- Had to set the linker language for 'rmollib' to CXX
-- Had to set the linker language for 'airinvlib' to CXX
-- Test 'InventoryTestSuite' to be built with 'InventoryTestSuite.cpp'
--
-- =====
--
-- ---      Project Information      ---
-- -----
-- PROJECT_NAME ..... : airinv
-- PACKAGE_PRETTY_NAME ..... : AirInv
-- PACKAGE ..... : airinv
-- PACKAGE_NAME ..... : AIRINV
-- PACKAGE_BRIEF ..... : C++ Simulated Airline Inventory Management System library
-- PACKAGE_VERSION ..... : 0.5.0
-- GENERIC_LIB_VERSION ..... : 0.5.0
-- GENERIC_LIB_SOVERSION ..... : 0.5
--
-- -----
--
-- ---      Build Configuration      ---
-- -----
-- Modules to build ..... : airrac;rmol;airinv
-- Libraries to build/install ..... : airraclib;rmollib;airinvlib
-- Binaries to build/install ..... : airrac;rmol;airinv_parseInventory;airinv
-- Modules to test ..... : airinv
-- Binaries to test ..... : InventoryTestSuitetst
--
-- * Module ..... : airrac
-- + Layers to build ..... : .;basic;bom;factory;command;service
-- + Dependencies on other layers :
-- + Libraries to build/install . : airraclib
-- + Executables to build/install : airrac
-- + Tests to perform ..... :

```

```

-- * Module ..... : rmol
-- + Layers to build ..... : .;basic;bom;factory;command;service
-- + Dependencies on other layers : airaclib
-- + Libraries to build/install . : rmollib
-- + Executables to build/install : rmol
-- + Tests to perform ..... :
-- * Module ..... : airinv
-- + Layers to build ..... : .;basic;bom;factory;command;service
-- + Dependencies on other layers : airaclib;rmollib
-- + Libraries to build/install . : airinvlib
-- + Executables to build/install : airinv_parseInventory;airinv
-- + Tests to perform ..... : InventoryTestSuitetst
--
-- BUILD_SHARED_LIBS ..... : ON
-- CMAKE_BUILD_TYPE ..... : Debug
-- * CMAKE_C_FLAGS ..... :
-- * CMAKE_CXX_FLAGS ..... : -Wall -Werror
-- * BUILD_FLAGS ..... :
-- * COMPILE_FLAGS ..... :
-- CMAKE_MODULE_PATH ..... : /home/dan/dev/sim/airinv/airinvgithub/config/
-- CMAKE_INSTALL_PREFIX ..... : /home/dan/dev/deliveries/airinv-0.5.0
--
-- * Doxygen:
-- - DOXYGEN_VERSION ..... : 1.7.4
-- - DOXYGEN_EXECUTABLE ..... : /usr/bin/doxygen
-- - DOXYGEN_DOT_EXECUTABLE ..... : /usr/bin/dot
-- - DOXYGEN_DOT_PATH ..... : /usr/bin
--
-- -----
-- --- Installation Configuration ---
-- -----
-- INSTALL_LIB_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/lib64
-- INSTALL_BIN_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/bin
-- INSTALL_INCLUDE_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/include
-- INSTALL_DATA_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/share
-- INSTALL_SAMPLE_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/share/airinv/samples
-- INSTALL_DOC ..... : ON
--
-- -----
-- --- Packaging Configuration ---
-- -----
-- CPACK_PACKAGE_CONTACT ..... : Denis Arnaud <denis_arnaud - at - users dot sourceforge dot m
-- CPACK_PACKAGE_VENDOR ..... : Denis Arnaud
-- CPACK_PACKAGE_VERSION ..... : 0.5.0
-- CPACK_PACKAGE_DESCRIPTION_FILE . : /home/dan/dev/sim/airinv/airinvgithub/README
-- CPACK_RESOURCE_FILE_LICENSE .... : /home/dan/dev/sim/airinv/airinvgithub/COPYING
-- CPACK_GENERATOR ..... : TBZ2
-- CPACK_DEBIAN_PACKAGE_DEPENDS ... :
-- CPACK_SOURCE_GENERATOR ..... : TBZ2;TGZ
-- CPACK_SOURCE_PACKAGE_FILE_NAME . : airinv-0.5.0
--
-- -----
-- --- External libraries ---
-- -----
--
-- * Boost:
-- - Boost_VERSION ..... : 104600
-- - Boost_LIB_VERSION ..... : 1_46
-- - Boost_HUMAN_VERSION ..... : 1.46.0
-- - Boost_INCLUDE_DIRS ..... : /usr/include
-- - Boost required components .. : regex;program_options;date_time;iostreams;serialization;files
-- - Boost required libraries ... : optimized;/usr/lib64/libboost_regex-mt.so;debug;/usr/lib64/lib

```

```
--
-- * Readline:
--   - READLINE_VERSION ..... : 6.2
--   - READLINE_INCLUDE_DIR ..... : /usr/include
--   - READLINE_LIBRARY ..... : /usr/lib64/libreadline.so
--
-- * MySQL:
--   - MYSQL_VERSION ..... : 5.5.14
--   - MYSQL_INCLUDE_DIR ..... : /usr/include/mysql
--   - MYSQL_LIBRARIES ..... : /usr/lib64/mysql/libmysqlclient.so
--
-- * SOCI:
--   - SOCI_VERSION ..... : 3.0.0
--   - SOCI_INCLUDE_DIR ..... : /usr/include/soci
--   - SOCI_MYSQL_INCLUDE_DIR ..... : /usr/include/soci
--   - SOCI_LIBRARIES ..... : /usr/lib64/libsoci_core.so
--   - SOCI_MYSQL_LIBRARIES ..... : /usr/lib64/libsoci_mysql.so
--
-- * StdAir:
--   - STDAIR_VERSION ..... : 0.38.0
--   - STDAIR_BINARY_DIRS ..... : /home/dan/dev/deliveries/stdair-0.38.0/bin
--   - STDAIR_EXECUTABLES ..... : stdair
--   - STDAIR_LIBRARY_DIRS ..... : /home/dan/dev/deliveries/stdair-0.38.0/lib64
--   - STDAIR_LIBRARIES ..... : stdairlib;stdairuicllib
--   - STDAIR_INCLUDE_DIRS ..... : /home/dan/dev/deliveries/stdair-0.38.0/include
--   - STDAIR_SAMPLE_DIR ..... : /home/dan/dev/deliveries/stdair-0.38.0/share/stdair/samples
--
-- Change a value with: cmake -D<Variable>=<Value>
-- =====
--
-- Configuring done
-- Generating done
-- Build files have been written to: /home/dan/dev/sim/airinv/airinvgithub/build
```

It is recommended that you check if your library has been compiled and linked properly and works as expected. - To do so, you should execute the testing process 'make check'. As a result, you should obtain a similar report:

```
[ 0%] Built target hdr_cfg_airinv
[ 0%] Built target hdr_cfg_airrac
[ 13%] Built target airraclib
[ 13%] Built target hdr_cfg_rmol
[ 38%] Built target rmolllib
[ 98%] Built target airinvlib
[100%] Built target InventoryTestSuitetst
Scanning dependencies of target check_airinvtst
Test project /home/dan/dev/sim/airinv/airinvgithub/build/test/airinv
Start 1: InventoryTestSuitetst
1/1 Test #1: InventoryTestSuitetst ..... Passed    0.08 sec

100% tests passed, 0 tests failed out of 1

Total Test time (real) = 0.35 sec
[100%] Built target check_airinvtst
Scanning dependencies of target check
[100%] Built target check
```

Check if all the executed tests PASSED. If not, please contact us by filling a [bug-report](#).

Finally, you should install the compiled and linked library, include files and (optionally) HTML and PDF documentation by typing:

```
make install
```

Depending on the PREFIX settings during configuration, you might need the root (administrator) access to perform this step.

Eventually, you might invoke the following command

```
make clean
```

to remove all files created during compilation process, or even

```
cd ~/dev/sim/airinvgit
rm -rf build && mkdir build
cd build
```

to remove everything.

10 Linking with Airinv

10.1 Table of Contents

- [Introduction](#)
- [Dependencies](#)
- [Using the pkg-config command](#)
- [Using the airinv-config script](#)
- [M4 macro for the GNU Autotools](#)
- [Using Airinv with dynamic linking](#)

10.2 Introduction

There are two convenient methods of linking your programs with the Airinv library. - The first one employs the 'pkg-config' command (see <http://pkgconfig.freedesktop.org/>), whereas the second one uses 'airinv-config' script. These methods are shortly described below.

10.3 Dependencies

The Airinv library depends on several other C++ components.

10.3.1 StdAir

Among them, as for now, only StdAir has been packaged. The support for StdAir is taken in charge by a dedicated M4 macro file (namely, `'stdair.m4'`), from the configuration script (generated thanks to `'configure.ac'`).



Figure 1: Airinv Dependencies

10.4 Using the pkg-config command

`'pkg-config'` is a helper tool used when compiling applications and libraries. It helps you insert the correct compiler and linker options. The syntax of the `'pkg-config'` is as follows:

```
pkg-config <options> <library_name>
```

For instance, assuming that you need to compile an Airinv based program `'my_prog.cpp'`, you should use the following command:

```
g++ 'pkg-config --cflags airinv' -o my_prog my_prog.cpp 'pkg-config --libs airinv'
```

For more information see the `'pkg-config'` man pages.

10.5 Using the airinv-config script

Airinv provides a shell script called `'airinv-config'`, which is installed by default in `'$prefix/bin'` (`'/usr/local/bin'`) directory. It can be used to simplify compilation and linking of Airinv based programs. The usage of this script is quite similar to the usage of the `'pkg-config'` command.

Assuming that you need to compile the program `'my_prog.cpp'` you can now do that with the following command:

```
g++ 'airinv-config --cflags' -o my_prog_opt my_prog.cpp 'airinv-config --libs'
```

A list of `'airinv-config'` options can be obtained by typing:

```
airinv-config --help
```

If the `'airinv-config'` command is not found by your shell, you should add its location `'$prefix/bin'` to the `PATH` environment variable, e.g.:

```
export PATH=/usr/local/bin:$PATH
```

10.6 M4 macro for the GNU Autotools

A M4 macro file is delivered with Airinv, namely `'airinv.m4'`, which can be found in, e.g., `'/usr/share/aclocal'`. When used by a `'configure'` script, thanks to the `'AM_PATH_Airinv'` macro (specified in the M4 macro file), the following Makefile variables are then defined:

- `'Airinv_VERSION'` (e.g., defined to 0.23.0)
- `'Airinv_CFLAGS'` (e.g., defined to `'-I${prefix}/include'`)
- `'Airinv_LIBS'` (e.g., defined to `'-L${prefix}/lib -lairinv'`)

10.7 Using Airinv with dynamic linking

When using static linking some of the library routines in Airinv are copied into your executable program. This can lead to unnecessary large executables. To avoid having too large executable files you may use dynamic linking instead. Dynamic linking means that the actual linking is performed when the program is executed. This requires that the system is able to locate the shared Airinv library file during your program execution. If you install the Airinv library using a non-standard prefix, the `'LD_LIBRARY_PATH'` environment variable might be used to inform the linker of the dynamic library location, e.g.:

```
export LD_LIBRARY_PATH=<Airinv installation prefix>/lib:$LD_LIBRARY_PATH
```

11 Test Rules

This section describes rules how the functionality of the IT++ library should be verified. In the `'tests'` subdirectory test files are provided. All functionality should be tested using these test files.

11.1 The Test File

Each new IT++ module/class should be accompanied with a test file. The test file is an implementation in C++ that tests the functionality of a function/class or a group of functions/classes called modules. The test file should test relevant parameter settings and input/output relations to guarantee correct functionality of the corresponding classes/functions. The test files should be maintained using version control and updated whenever new functionality is added to the IT++ library.

The test file should print relevant data to a standard output that can be used to verify the functionality. All relevant parameter settings should be tested.

The test file should be placed in the `'tests'` subdirectory and should have a name ending with `'_test.cpp'`.

11.2 The Reference File

Consider a test file named `'module_test.cpp'`. A reference file named `'module_test.ref'` should accompany the test file. The reference file contains a reference printout of the standard output generated when running the test program. The reference file should be maintained using version control and updated according to the test file.

11.3 Testing IT++ Library

One can compile and execute all test programs from `'tests'` subdirectory by typing

```
% make check
```

after successful compilation of the IT++ library.

12 Users Guide

12.1 Table of Contents

- [Introduction](#)
- [Get Started](#)
 - [Get the AirInv library](#)

- Build the AirInv project
 - Build and Run the Tests
 - Install the AirInv Project (Binaries, Documentation)
- Input file of AirInv Project
- The schedule BOM Tree
 - Build of the schedule BOM tree
 - Display of the schedule BOM tree
- Exploring the Predefined BOM Tree
 - Airline Network BOM Tree
 - Airline Schedule BOM Tree
- Extending the BOM Tree
- The travel solution calculation procedure

12.2 Introduction

The `AirInv` library contains classes for airline business management. This document does not cover all the aspects of the `AirInv` library. It does however explain the most important things you need to know in order to start using `AirInv`.

12.3 Get Started

12.3.1 Get the AirInv library

Clone locally the full `Git` project:

```
cd ~
mkdir -p dev/sim
cd ~/dev/sim
git clone git://airinv.git.sourceforge.net/gitroot/airinv/airinv airinvgit
cd airinvgit
git checkout trunk
```

12.3.2 Build the AirInv project

Link with `StdAir`, create the distribution package (say, 0.5.0) and compile using the following commands:

```
cd ~/dev/sim/airinvgit
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=~/dev/deliveries/airinv-0.5.0 \
-DWITH_STDAIR_PREFIX=~/dev/deliveries/stdair-stable \
-DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make
```

12.3.3 Build and Run the Tests

After building the AirInv project, the following commands run the tests:

```
cd ~/dev/sim/airinvgit
cd build
make check
```

As a result, you should obtain a similar report:

```
[ 0%] Built target hdr_cfg_airinv
[ 96%] Built target airinvlib
[100%] Built target AirlineScheduleTestSuitetst
Scanning dependencies of target check_airinvtst
Test project /home/dan/dev/sim/airinv/airinvgithub/build/test/airinv
  Start 1: AirlineScheduleTestSuitetst
1/1 Test #1: AirlineScheduleTestSuitetst ..... Passed    0.15 sec

100% tests passed, 0 tests failed out of 1

Total Test time (real) =  0.40 sec
[100%] Built target check_airinvtst
Scanning dependencies of target check
[100%] Built target check
```

12.3.4 Install the AirInv Project (Binaries, Documentation)

After the step [Build the AirInv project](#), to install the library and its header files, type:

```
cd ~/dev/sim/airinvgit
cd build
make install
```

You can check that the executables and other required files have been copied into the given final directory:

```
cd ~/dev/deliveries/airinv-0.5.0
```

To generate the AirInv project documentation, the commands are:

```
cd ~/dev/sim/airinvgit
cd build
make doc
```

The AirInv project documentation is available in the following formats: HTML, LaTeX. Those documents are available in a subdirectory:

```
cd ~/dev/sim/airinvgit
cd build
cd doc
```

12.4 Input file of AirInv Project

The schedule input file structure should look like the following sample:

Each line, beyond the header, represents a schedule entry, i.e., the specification of a given flight-period (see [AIRINV::FlightPeriodStruct](#)). The fields are as follows:

- Flights section
 - AirlineCode (e.g., BA)
 - FlightNumber (e.g., 9)
 - Start of the flight departure period (e.g., 2007-04-20)
 - End of the flight departure period (e.g., 2007-06-30)
 - Day-Of-the-Week for the flight departure period (DOW) (e.g., 0000011)
 - Leg section
 - Segment section
- Leg section
 - BoardPoint (e.g., LHR)
 - OffPoint (e.g., BKK)
 - BoardTime (e.g., 22:00)
 - ArrivalTime (e.g., 15:15)
 - ArrivalDateOffSet (e.g., +1)
 - ElapsedTime (e.g., 11:15)
 - Leg-cabin section
- Leg-cabin section
 - Cabin code (e.g., F, J, W or Y)
 - Capacity (e.g., respectively 5, 12, 20 or 300)
- Segment section
 - Specificity flag:
 - * 0 means that all the segments behave the same way, i.e., have got the same dressing (distribution and order of the booking classes per cabin)
 - * 1 means that each segment behave differently. The full specification of each of those segments must therefore be given.
 - Segment-cabin section
 - Fare family section
- Segment-cabin section

- Cabin code (e.g., F, J, W or Y)
- List of (one-letter-code) booking classes for the cabin (e.g, respectively FA, JCDI, WT or YBHKMLSQ)
- Fare family section
 - Fare family code (e.g., 1)
 - List of (one-letter-code) booking classes for the fare family (e.g, respectively FA, JCDI, WT or YBHKMLSQ)

Some fare input examples (including the example above named `schedule03.csv`) are given in the `StdAir project`.

12.5 The schedule BOM Tree

The schedule-related Business Object Model (BOM) tree is a structure allowing to store all the `AIRINV::FlightPeriodStruct` objects of the simulation. That is why parsing an input file, containing the specification for all the flight-periods, is more convenient (

See also

the previous section [Input file of AirInv Project](#)).

As it may be time consuming, and it for sure requires some know-how, to first build such a schedule input file, a small sample BOM tree is provided by default when needed.

12.5.1 Build of the schedule BOM tree

First, a BOM root object (i.e., a root for all the classes in the project) is instantiated by the `stdair::STDAIR_ServiceContext` context object, when the `stdair::STDAIR_Service` is itself instantiated (during the instantiation of the `AIRINV::AIRINV_Service` object).

The corresponding type (class) `stdair::BomRoot` is defined in the `StdAir` library.

Then, the BOM root can be either constructed thanks to the `AIRINV::AIRINV_Service::buildSampleBom()` method:

```
void buildSampleBom();
```

or can be constructed using the schedule input file described above thanks to the `AIRINV::AIRINV_Service::parseAndLoad (const stdair::Filename_T&) method`:

```
void parseAndLoad (const stdair::Filename_T& iInventoryFilename);
```


12.5.2 Display of the schedule BOM tree

Note

That feature (of BOM tree display) has not been implemented yet. Do not hesitate to [open a ticket](#) if you would like to have it implemented more quickly.

The schedule BOM tree can be displayed as done in the `batches::airinv.cpp` program:

When the default BOM tree is used (`-b/--builtin` option of the main program `airinv.cpp`), the schedule BOM tree display (for now, corresponding to `schedule01.csv` parsed by `AIRINV::parseInventory`) should look like:

```
=====
BomRoot:  -- ROOT  --
=====
+++++
Inventory: SQ
+++++
*****
FlightDate: SQ11, 2010-Jan-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Jan-15, SIN-BKK, 2010-Jan-15, 08:20:00, 2010-Jan-15, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 2, 298
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 1, 0, 0, 0, 2, 298, 0,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 2, 0, 0, 0, 2, 298, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 1, Y, 300 (0), 0, 0, 0, 2, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-16
*****
*****
```

```

Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ11 2010-Jan-16, SIN-BKK, 2010-Jan-16, 08:20:00, 2010-Jan-16, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 1.83244e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ11 2010-Jan-17, SIN-BKK, 2010-Jan-17, 08:20:00, 2010-Jan-17, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 1.58896e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,

```

```
0, 0, 0, 0, 0,
SQL1 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Jan-18, SIN-BKK, 2010-Jan-18, 08:20:00, 2010-Jan-18, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-19
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Jan-19, SIN-BKK, 2010-Jan-19, 08:20:00, 2010-Jan-19, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 1, 0, 0, 0, 0, 300, 0,
```

```
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 1, Y, 300 (0), 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-20
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQL1 2010-Jan-20, SIN-BKK, 2010-Jan-20, 08:20:00, 2010-Jan-20, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 300, 300, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQL1 2010-Jan-21, SIN-BKK, 2010-Jan-21, 08:20:00, 2010-Jan-21, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 300, 300, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
```

```
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, 08:20:00, 2010-Jan-22, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-23
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, 08:20:00, 2010-Jan-23, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
```

```
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 6.64029e-
319, 0, 300, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Jan-24, SIN-BKK 2010-Jan-24, 08:20:00, 2010-Jan-24, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-25
*****
*****
Leg-Dates:
```

```

-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL1 2010-Jan-25, SIN-BKK, 2010-Jan-25, 08:20:00, 2010-Jan-25, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL1 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL1 2010-Jan-26, SIN-BKK, 2010-Jan-26, 08:20:00, 2010-Jan-26, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,

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```
SQL1 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-27
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Jan-27, SIN-BKK, 2010-Jan-27, 08:20:00, 2010-Jan-27, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Jan-28, SIN-BKK, 2010-Jan-28, 08:20:00, 2010-Jan-28, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-29
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ11 2010-Jan-29, SIN-BKK, 2010-Jan-29, 08:20:00, 2010-Jan-29, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-30
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ11 2010-Jan-30, SIN-BKK, 2010-Jan-30, 08:20:00, 2010-Jan-30, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQL1 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-31
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQL1 2010-Jan-31, SIN-BKK, 2010-Jan-31, 08:20:00, 2010-Jan-31, 11:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQL1 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-01
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQL1 2010-Feb-01, SIN-BKK, 2010-Feb-01, 08:20:00, 2010-Feb-01, 11:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-02
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-02, SIN-BKK, 2010-Feb-02, 08:20:00, 2010-Feb-02, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 300, 300, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-03
*****
*****
Leg-Dates:
-----

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```
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-03, SIN-BKK, 2010-Feb-03, 08:20:00, 2010-Feb-03, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-04
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-04, SIN-BKK, 2010-Feb-04, 08:20:00, 2010-Feb-04, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
```

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0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-05
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-05, SIN-BKK, 2010-Feb-05, 08:20:00, 2010-Feb-05, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-06
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-06, SIN-BKK, 2010-Feb-06, 08:20:00, 2010-Feb-06, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 2, 0, 0, 0, 0, 300, 0,
*****

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*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-07
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ11 2010-Feb-07, SIN-BKK, 2010-Feb-07, 08:20:00, 2010-Feb-07, 11:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-08
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ11 2010-Feb-08, SIN-BKK, 2010-Feb-08, 08:20:00, 2010-Feb-08, 11:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-09
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-09, SIN-BKK, 2010-Feb-09, 08:20:00, 2010-Feb-09, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 300, 300, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-10
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-10, SIN-BKK, 2010-Feb-10, 08:20:00, 2010-Feb-10, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,

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```
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 300, 300, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-11
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-11, SIN-BKK, 2010-Feb-11, 08:20:00, 2010-Feb-11, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-12
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
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Elapsed, Distance, Capacity,
SQ11 2010-Feb-12, SIN-BKK, 2010-Feb-12, 08:20:00, 2010-Feb-12, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-13
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-13, SIN-BKK, 2010-Feb-13, 08:20:00, 2010-Feb-13, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
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*****
*****
FlightDate: SQ11, 2010-Feb-14
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-14, SIN-BKK, 2010-Feb-14, 08:20:00, 2010-Feb-14, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-15, SIN-BKK, 2010-Feb-15, 08:20:00, 2010-Feb-15, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****

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Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 1, Y, 300 (0), 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-16
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-16, SIN-BKK, 2010-Feb-16, 08:20:00, 2010-Feb-16, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-17, SIN-BKK, 2010-Feb-17, 08:20:00, 2010-Feb-17, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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*****
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*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 2, 0, 0, 0, 0, 300, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
FlightDate: SQ11, 2010-Feb-18
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-18, SIN-BKK, 2010-Feb-18, 08:20:00, 2010-Feb-18, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 2, 0, 0, 0, 0, 300, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
FlightDate: SQ11, 2010-Feb-19
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ11 2010-Feb-19, SIN-BKK, 2010-Feb-19, 08:20:00, 2010-Feb-19, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

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SQL1 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-20
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-20, SIN-BKK 2010-Feb-20, 08:20:00, 2010-Feb-20, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,

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SQL1 2010-Feb-21, SIN-BKK, 2010-Feb-21, 08:20:00, 2010-Feb-21, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL1 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL1 2010-Feb-22, SIN-BKK, 2010-Feb-22, 08:20:00, 2010-Feb-22, 11:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL1 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
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*****
FlightDate: SQL1, 2010-Feb-23
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-23, SIN-BKK, 2010-Feb-23, 08:20:00, 2010-Feb-23, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL1 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Feb-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL1 2010-Feb-24, SIN-BKK, 2010-Feb-24, 08:20:00, 2010-Feb-24, 11:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
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-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-25
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-25, SIN-BKK, 2010-Feb-25, 08:20:00, 2010-Feb-25, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ11 2010-Feb-26, SIN-BKK, 2010-Feb-26, 08:20:00, 2010-Feb-26, 11:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
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SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-27
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, 08:20:00, 2010-Feb-27, 11:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, 08:20:00, 2010-Feb-28, 11:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300

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, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-15, SIN-HND, 2010-Jan-15, 09:20:00, 2010-Jan-15, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 200, 200, 2.082e+121, 5.53287e-48, 5.
      20268e-90, 0, 1.31346e-47, 1.05119e-153, 2.78986e+179, 0, 200, 9, 3.66962e-62, 1
      .0854e-71, 6.74783e-67, 6.9835e-77, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 1, Y13856, 200 (0), 0, 0, 0, 0, 0 (0)
      , 0, 0, 0, 0, 0, 0,
SQ12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-16
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,

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SQL12 2010-Jan-16, SIN-HND, 2010-Jan-16, 09:20:00, 2010-Jan-16, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
    , 9, 2.63638e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 1, 0, 0, 0, 0, 200, 0,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL12, 2010-Jan-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL12 2010-Jan-17, SIN-HND, 2010-Jan-17, 09:20:00, 2010-Jan-17, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
    , 9, 2.39291e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 1, 0, 0, 0, 0, 200, 0,
SQL12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****

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*****
FlightDate: SQL2, 2010-Jan-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Jan-18, SIN-HND, 2010-Jan-18, 09:20:00, 2010-Jan-18, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 2.14469e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL2 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Jan-19
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Jan-19, SIN-HND, 2010-Jan-19, 09:20:00, 2010-Jan-19, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
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-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-20
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-20, SIN-HND, 2010-Jan-20, 09:20:00, 2010-Jan-20, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Jan-21, SIN-HND, 2010-Jan-21, 09:20:00, 2010-Jan-21, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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*****
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SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQL2 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Jan-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQL2 2010-Jan-22, SIN-HND, 2010-Jan-22, 09:20:00, 2010-Jan-22, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQL2 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Jan-23
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQL2 2010-Jan-23, SIN-HND, 2010-Jan-23, 09:20:00, 2010-Jan-23, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200

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, 9, 0, 0, 0, 0, 0,
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*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL2 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Jan-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL2 2010-Jan-24, SIN-HND, 2010-Jan-24, 09:20:00, 2010-Jan-24, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL2 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Jan-25
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL2 2010-Jan-25, SIN-HND, 2010-Jan-25, 09:20:00, 2010-Jan-25, 12:00:00, 07:40:

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00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Jan-26, SIN-HND, 2010-Jan-26, 09:20:00, 2010-Jan-26, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
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FlightDate: SQ12, 2010-Jan-27
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Jan-27, SIN-HND, 2010-Jan-27, 09:20:00, 2010-Jan-27, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Jan-28, SIN-HND, 2010-Jan-28, 09:20:00, 2010-Jan-28, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-29
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ12 2010-Jan-29, SIN-HND, 2010-Jan-29, 09:20:00, 2010-Jan-29, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-30
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ12 2010-Jan-30, SIN-HND, 2010-Jan-30, 09:20:00, 2010-Jan-30, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
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-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0, 0,
    0, 0, 0, 0, 0,
SQL2 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 2, M, 200 (0), 0, 0, 0, 0, 0, 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Jan-31
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL2 2010-Jan-31, SIN-HND, 2010-Jan-31, 09:20:00, 2010-Jan-31, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQL2 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-01
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQL2 2010-Feb-01, SIN-HND, 2010-Feb-01, 09:20:00, 2010-Feb-01, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0, 0,
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*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-02
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-02, SIN-HND, 2010-Feb-02, 09:20:00, 2010-Feb-02, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-03
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-03, SIN-HND, 2010-Feb-03, 09:20:00, 2010-Feb-03, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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*****
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LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-04
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-04, SIN-HND, 2010-Feb-04, 09:20:00, 2010-Feb-04, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-05
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Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-05, SIN-HND, 2010-Feb-05, 09:20:00, 2010-Feb-05, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 1, Y, 200 (0), 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-06
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-06, SIN-HND, 2010-Feb-06, 09:20:00, 2010-Feb-06, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
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GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-07
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-07, SIN-HND, 2010-Feb-07, 09:20:00, 2010-Feb-07, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-08
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-08, SIN-HND, 2010-Feb-08, 09:20:00, 2010-Feb-08, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-09
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ12 2010-Feb-09, SIN-HND, 2010-Feb-09, 09:20:00, 2010-Feb-09, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-10
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQ12 2010-Feb-10, SIN-HND, 2010-Feb-10, 09:20:00, 2010-Feb-10, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
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Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
FlightDate: SQ12, 2010-Feb-11
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-11, SIN-HND, 2010-Feb-11, 09:20:00, 2010-Feb-11, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQ12 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
FlightDate: SQ12, 2010-Feb-12
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQ12 2010-Feb-12, SIN-HND, 2010-Feb-12, 09:20:00, 2010-Feb-12, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
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*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL2 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-13
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Feb-13, SIN-HND, 2010-Feb-13, 09:20:00, 2010-Feb-13, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL2 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-14
*****

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*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-14, SIN-HND, 2010-Feb-14, 09:20:00, 2010-Feb-14, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQ12 2010-Feb-15, SIN-HND, 2010-Feb-15, 09:20:00, 2010-Feb-15, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

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SQL2 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL2 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-16
*****
*****
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Feb-16, SIN-HND, 2010-Feb-16, 09:20:00, 2010-Feb-16, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL2 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Feb-17, SIN-HND, 2010-Feb-17, 09:20:00, 2010-Feb-17, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
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SQL2 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQL2 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQL2 2010-Feb-18, SIN-HND, 2010-Feb-18, 09:20:00, 2010-Feb-18, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
  GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
SQL2 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
  0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-19
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
  Elapsed, Distance, Capacity,
SQL2 2010-Feb-19, SIN-HND, 2010-Feb-19, 09:20:00, 2010-Feb-19, 12:00:00, 07:40:
  00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
  CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
  , 9, 0, 0, 0, 0, 0,
*****
*****
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Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQL2 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-20
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQL2 2010-Feb-20, SIN-HND, 2010-Feb-20, 09:20:00, 2010-Feb-20, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQL2 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQL2 2010-Feb-21, SIN-HND, 2010-Feb-21, 09:20:00, 2010-Feb-21, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
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LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ12 2010-Feb-22, SIN-HND, 2010-Feb-22, 09:20:00, 2010-Feb-22, 12:00:00, 07:40:
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*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-23
*****
*****
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Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ12 2010-Feb-23, SIN-HND, 2010-Feb-23, 09:20:00, 2010-Feb-23, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
    0, 0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
    Elapsed, Distance, Capacity,
SQ12 2010-Feb-24, SIN-HND, 2010-Feb-24, 09:20:00, 2010-Feb-24, 12:00:00, 07:40:
    00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
    CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200
    , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
    GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
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0, 0, 0, 0, 0,
SQL2 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-25
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Feb-25, SIN-HND, 2010-Feb-25, 09:20:00, 2010-Feb-25, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQL2 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
Elapsed, Distance, Capacity,
SQL2 2010-Feb-26, SIN-HND, 2010-Feb-26, 09:20:00, 2010-Feb-26, 12:00:00, 07:40:
00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200
, 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 1, 0, 0, 0, 0, 200, 0,
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SQL2 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 1, Y, 200 (0), 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQL2 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-27
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQL2 2010-Feb-27, SIN-HND, 2010-Feb-27, 09:20:00, 2010-Feb-27, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
      GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
SQL2 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
      0, 0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset,
      Elapsed, Distance, Capacity,
SQL2 2010-Feb-28, SIN-HND, 2010-Feb-28, 09:20:00, 2010-Feb-28, 12:00:00, 07:40:
      00, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhycAP, RgdADJ, AU, UPR, SS, Staff, WL, Group,
      CommSpace, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 200, 200, 0, 0, 0, 0, 0, 0, 200
      , 9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
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-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs,
GrpBks (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0,
0, 0, 0, 0, 0,
*****

```

12.6 Exploring the Predefined BOM Tree

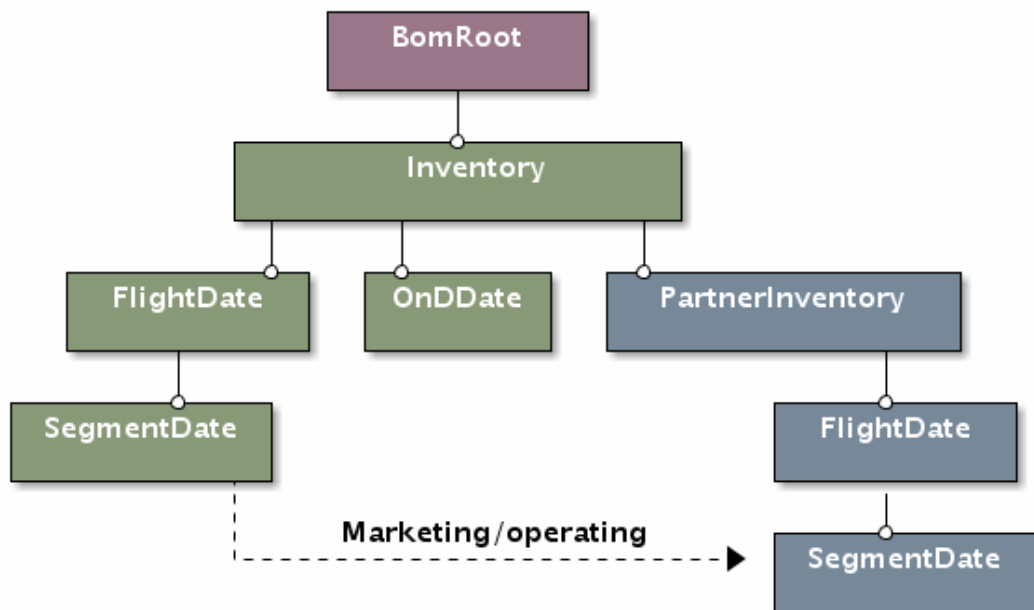


Figure 2: AirInv BOM tree

AirInv predefines a BOM (Business Object Model) tree specific to the airline IT arena.

12.6.1 Airline Network BOM Tree

- AIRINV::ReachableUniverse
- AIRINV::OriginDestinationSet
- AIRINV::SegmentPathPeriod

12.6.2 Airline Schedule BOM Tree

- stdair::Inventory
- stdair::FlightPeriod
- stdair::SegmentPeriod
- stdair::OnDPeriod

12.7 Extending the BOM Tree

12.8 The travel solution calculation procedure

The project AirInv aims at calculating a list of **travel solutions** for every incoming **booking request**.

13 Supported Systems

13.1 Table of Contents

- [Introduction](#)
- [.1 AirInv 0.1.x.1](#)
 - [Linux Systems](#)
 - * [Fedora Core 4 with ATLAS](#)
 - * [Gentoo Linux with ACML](#)
 - * [Gentoo Linux with ATLAS](#)
 - * [Gentoo Linux with MKL](#)
 - * [Gentoo Linux with NetLib's BLAS and LAPACK](#)
 - * [Red Hat Enterprise Linux with AirInv External](#)
 - * [SUSE Linux 10.0 with NetLib's BLAS and LAPACK](#)
 - * [SUSE Linux 10.0 with MKL](#)
 - [Windows Systems](#)
 - * [Microsoft Windows XP with Cygwin](#)
 - * [Microsoft Windows XP with Cygwin and ATLAS](#)
 - * [Microsoft Windows XP with Cygwin and ACML](#)

- * [Microsoft Windows XP with MinGW, MSYS and ACML](#)
 - * [Microsoft Windows XP with MinGW, MSYS and Airlnv External](#)
 - * [Microsoft Windows XP with MS Visual C++ and Intel MKL](#)
- [Unix Systems](#)
 - * [SunOS 5.9 with Airlnv External](#)
- [Airlnv 3.9.1](#)
- [Airlnv 3.9.0](#)
- [Airlnv 3.8.1](#)

13.2 Introduction

This page is intended to provide a list of Airlnv supported systems, i.e. the systems on which configuration, installation and testing process of the Airlnv library has been successful. Results are grouped based on minor release number. Therefore, only the latest tests for bug-fix releases are included. Besides, the information on this page is divided into sections dependent on the operating system.

Where necessary, some extra information is given for each tested configuration, e.g. external libraries installed, configuration commands used, etc.

If you manage to compile, install and test the Airlnv library on a system not mentioned below, please let us know, so we could update this database.

14 Airlnv Supported Systems (Previous Releases)

14.1 Airlnv 3.9.1

14.2 Airlnv 3.9.0

14.3 Airlnv 3.8.1

15 Tutorials

15.1 Table of Contents

- [Preparing the AirSched Project for Development](#)
- [Your first networkBuilde](#)
 - [Summary of the different steps](#)
 - [Result of the Batch Program](#)
- [Network building with an input file](#)
 - [How to build a network input file?](#)

- [Building the BOM tree with an input file](#)
- [Result of the Batch Program](#)

15.2 Preparing the AirSched Project for Development

The source code for these examples can be found in the `batches` and `test/airsched` directories. They are compiled along with the rest of the `AirSched` project. See the [Users Guide](#) for more details on how to build the `AirSched` project.

15.3 Your first networkBuild

15.3.1 Summary of the different steps

All the steps below can be found in the same order in the batch `AirSched.cpp` program.

First, we instantiate the `AIRSCHEDED_Service` object:

Then, we construct a default sample list of travel solutions and a default booking request (as mentionned in `ug_procedure_bookingrequest` and `ug_procedure_travelsolution` parts):

For basic use, the default BOM tree can be built using:

The main step is the network building (see [The travel solution calculation procedure](#)):

15.3.2 Result of the Batch Program

When the `AirSched.cpp` program is run (with the `-b` option), the log output file should look like:

What is interesting is to compare the travel solution list (here reduced to a single travel solution) displayed before:

and after the network building:

Between the two groups of dashes, we can see that a network option structure has been added by the network builder: the price is 450 EUR for the Y class, the ticket is refundable but there are exchange fees and the customer must stay over on Saturday night.

Let's return to our default BOM tree display: the only network rule stored was a match for the travel solution into consideration (same origin airport, same destination airport, flight date included in the network rule date range, same airline "BA", ...).

By looking at the network rule trip type "RT", we can guess we face a round trip network: that means the price given in the default bom tree construction in `stdair : :CmdBomManager.hpp` has been divided by 2 because we are considering either an inbound trip or an outbound one.

15.4 Network building with an input file

15.4.1 How to build a network input file?

The objective here is to build a network input file to network build the default travel solution list built using:

This travel solution list, reduced to a singleton, can be displayed as done before:

We deduce:

- we need a network rule whose origin-destination couple is "LHR, SYD".
- the date range must include the date "2011-06-10".
- the time range must include the time "21:45".
- the airline operating is "BA", so it must be the airline pricing.

We can deduce a part of our network rule file :

We have no information about stay duration and advance purchase (such information are contained into the booking request): so let us put "0" to embrace all the requests possible.

No information for the point-of-sale and the channel too: let us consider all the channels ("IN", "DN", "IF" and "DF") and all the points of sale (the origin "LHR", the destination

"SYD" and the rest-of-the-world "ROW") existing. To access this information, we could look into the default booking request.

The input file is now:

Let us say we have just the Economy cabin "Y" and British Airways prices ticket for class "Y".

No information about the trip type, so we duplicate all the network rules for both type: one-way "OW" and round-trip "RT" (to access this information, we could look to the default booking request).

The network options are all set to a default value "T" (meaning true) and the network values are chosen to be all distinct.

We obtain:

15.4.2 Building the BOM tree with an input file

The steps are the same as before [Summary of the different steps](#) except the bom tree must be built using the network input file :

15.4.3 Result of the Batch Program

When the `AirSched.cpp` program is run with the `-f` option linking with the file built just above:

```
~/AirSched -f ~/<YourFileName>.csv
```

the last lines of the log output should look like:

```
[D]~/AirSchedgit/AirSched/batches/AirSched.cpp:223: Travel solutions:
[0] [0] BA, 9, 2011-06-10, LHR, SYD, 21:45 --- Y, 145, 1 1 1 ---
```

We have just one network option added to the travel solution. We can deduce from the price value 145 that the network builder used the network rule number 15 to price the travel solution. We have an inbound or outbound trip of a round trip: the total price 290 has been divided by 2.

16 Command-Line Test to Demonstrate How To Test the AirInv - Project

* /


```

// ////////////////////////////////////////
// Import section
// ////////////////////////////////////////
// STL
#include <sstream>
#include <fstream>
#include <string>
// Boost Unit Test Framework (UTF)
#define BOOST_TEST_DYN_LINK
#define BOOST_TEST_MAIN
#define BOOST_TEST_MODULE InventoryTestSuite
#include <boost/test/unit_test.hpp>
// StdAir
#include <stdair/basic/BasLogParams.hpp>
#include <stdair/basic/BasDBParams.hpp>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/bom/BookingRequestStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/stdair_exceptions.hpp>
// Airinv
#include <airinv/AIRINV_Types.hpp>
#include <airinv/AIRINV_Master_Service.hpp>
#include <airinv/config/airinv-paths.hpp>

namespace boost_utf = boost::unit_test;

// (Boost) Unit Test XML Report
std::ofstream utfReportStream ("InventoryTestSuite_utfresults.xml");

struct UnitTestConfig {
    UnitTestConfig() {
        boost_utf::unit_test_log.set_stream (utfReportStream);
        boost_utf::unit_test_log.set_format (boost_utf::XML);
        boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
        //boost_utf::unit_test_log.set_threshold_level
        (boost_utf::log_successful_tests);
    }

    ~UnitTestConfig() {
    }
};

// ////////////////////////////////////////
bool testInventoryHelper (const unsigned short iTestFlag,
                        const stdair::Filename_T& iInventoryInputFilename,
                        const stdair::Filename_T& iScheduleInputFilename,
                        const stdair::Filename_T& iODInputFilename,
                        const stdair::Filename_T& iYieldInputFilename,
                        const bool isBuiltin,
                        const bool isForSchedule) {

    // Output log File
    std::ostringstream oStr;
    oStr << "InventoryTestSuite_" << iTestFlag << ".log";
    const stdair::Filename_T lLogFilename (oStr.str());

    // Set the log parameters
    std::ofstream logOutputFile;
    // Open and clean the log outputfile
    logOutputFile.open (lLogFilename.c_str());
    logOutputFile.clear();

    // Initialise the AirInv service object
    const bool lForceMultipleInit = true;
    stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
                                    logOutputFile,
                                    lForceMultipleInit);

    // Initialise the inventory service
    AIRINV::AIRINV_Master_Service airinvService (lLogParams);

    // Parameters for the sale
    std::string lSegmentDateKey;

```

```

stdair::ClassCode_T lClassCode;
const stdair::PartySize_T lPartySize (2);

// Check wether or not a (CSV) input file should be read
if (isBuiltin == true) {

    // Build the default sample BOM tree (filled with inventories) for AirInv
    airinvService.buildSampleBom();

    // Define a specific segment-date key for the sample BOM tree
    lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
    lClassCode = "Q";

} else {

    if (isForSchedule == true) {
        // Build the BOM tree from parsing a schedule file (and O&D list)
        AIRRAC::YieldFilePath lYieldFilePath (iYieldInputFilename);
        airinvService.parseAndLoad (iScheduleInputFilename, iODInputFilename,
                                   lYieldFilePath);

        // Define a specific segment-date key for the schedule-based inventory
        lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
        lClassCode = "Y";

    } else {

        // Build the BOM tree from parsing an inventory dump file
        airinvService.parseAndLoad (iInventoryInputFilename);

        // Define a specific segment-date key for the inventory parsed file
        //const std::string lSegmentDateKey ("SV, 5, 2010-03-11, KBP, JFK,
        //                                08:00:00");
        lSegmentDateKey = "SV, 5, 2010-03-11, KBP, JFK, 08:00:00";
        lClassCode = "J";

    }

}

// Make a booking
const bool hasSaleBeenSuccessful =
    airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);

// DEBUG: Display the list of travel solutions
const std::string& lCSVDump = airinvService.csvDisplay();
STDAIR_LOG_DEBUG (lCSVDump);

// Close the log file
logOutputFile.close();

if (hasSaleBeenSuccessful == false) {
    STDAIR_LOG_DEBUG ("No sale can be made for '" << lSegmentDateKey
                     << "'");
}

return hasSaleBeenSuccessful;
}

// ////////////////////////////////// Main: Unit Test Suite //////////////////////////////////

// Set the UTF configuration (re-direct the output to a specific file)
BOOST_GLOBAL_FIXTURE (UnitTestFixture);

// Start the test suite
BOOST_AUTO_TEST_SUITE (master_test_suite)

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell) {

    // Input file name
    const stdair::Filename_T lInventoryInputFilename (STDAIR_SAMPLE_DIR
                                                       "/invdump01.csv");

```

```

// State whether the BOM tree should be built-in or parsed from an input file
const bool isBuiltin = false;
// State whether the BOM tree should be built from a schedule file (instead
  of from an inventory dump)
const bool isForSchedule = false;

// Try sell a default segment.
bool hasTestBeenSuccessful = false;
BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
    testInventoryHelper (0, lInventoryInputFilename,
        " ", " ", " ", isBuiltin,
        isForSchedule));
BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
}

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_built_in) {

// State whether the BOM tree should be built-in or parsed from an input file
const bool isBuiltin = true;
// State whether the BOM tree should be built from a schedule file (instead
  of from an inventory dump)
const bool isForSchedule = false;

// Try sell a default segment.
bool hasTestBeenSuccessful = false;
BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
    testInventoryHelper (1, " ", " ", " ", " ", " ",
        isBuiltin, isForSchedule));
BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
}

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_schedule) {

// Input file names
const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
    "/schedule01.csv");
const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
    "/ond01.csv");
const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
    "/yieldstore01.csv");

// State whether the BOM tree should be built-in or parsed from an input file
const bool isBuiltin = false;
// State whether the BOM tree should be built from a schedule file (instead
  of from an inventory dump)
const bool isForSchedule = true;

// Try sell a default segment.
bool hasTestBeenSuccessful = false;
BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
    testInventoryHelper (2, " ",
        lScheduleInputFilename,
        lODInputFilename,
        lYieldInputFilename,
        isBuiltin, isForSchedule));
BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
}

BOOST_AUTO_TEST_CASE (airinv_error_inventory_input_file) {

// Inventory input file name
const stdair::Filename_T lMissingInventoryFilename (STDAIR_SAMPLE_DIR
    "/missingFile.csv");

// State whether the BOM tree should be built-in or parsed from an input file
const bool isBuiltin = false;
// State whether the BOM tree should be built from a schedule file (instead
  of from an inventory dump)
const bool isForSchedule = false;

// Try sell a default segment.

```

```

BOOST_CHECK_THROW (testInventoryHelper (3, lMissingInventoryFilename,
                                         " ", " ", " ", isBuiltin,
                                         isForSchedule),
                   AIRINV::InventoryInputFileNotFoundException);
}

BOOST_AUTO_TEST_CASE (airinv_error_schedule_input_file) {
    // Schedule input file name
    const stdair::Filename_T lMissingScheduleFilename (STDAIR_SAMPLE_DIR
                                                         "/missingFile.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead
    // of from an inventory dump)
    const bool isForSchedule = true;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (4, " ", lMissingScheduleFilename,
                                             " ", " ", isBuiltin, isForSchedule),
                       AIRINV::ScheduleInputFileNotFoundException);
}

BOOST_AUTO_TEST_CASE (airinv_error_yield_input_file) {
    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                         "/schedule01.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                                  "/ond01.csv");
    const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                    "/missingFile.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead
    // of from an inventory dump)
    const bool isForSchedule = true;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (5, " ",
                                             lScheduleInputFilename,
                                             lODInputFilename,
                                             lYieldInputFilename,
                                             isBuiltin, isForSchedule),
                       AIRRAC::YieldInputFileNotFoundException);
}

BOOST_AUTO_TEST_CASE (airinv_error_flight_date_duplication) {
    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                         "/scheduleError01.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                                  "/ond01.csv");
    const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                    "/missingFile.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead
    // of from an inventory dump)
    const bool isForSchedule = true;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (6, " ",
                                             lScheduleInputFilename,
                                             lODInputFilename,
                                             lYieldInputFilename,
                                             isBuiltin, isForSchedule),

```

```

        AIRINV::FlightDateDuplicationException);
    }

BOOST_AUTO_TEST_CASE (airinv_error_schedule_parsing_failed) {
    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                       "/scheduleError02.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                                 "/ond01.csv");
    const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                  "/yieldstore01.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead
    // of from an inventory dump)
    const bool isForSchedule = true;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (7, " ",
                                           lScheduleInputFilename,
                                           lODInputFilename,
                                           lYieldInputFilename,
                                           isBuiltin, isForSchedule),
                      AIRINV::ScheduleFileParsingFailedException);
}

// End the test suite
BOOST_AUTO_TEST_SUITE_END()

/*!

```

17 Directory Hierarchy

17.1 Directories

This directory hierarchy is sorted roughly, but not completely, alphabetically:

airinv	130
basic	131
batches	131
bom	131
command	132
vault	134
config	133
factory	133
server	133
service	134

18 Namespace Index 101

ui	134
cmdline	132
test	134
airinv	130

18 Namespace Index

18.1 Namespace List

Here is a list of all namespaces with brief descriptions:

AIRINV	135
AIRINV::DCPParserHelper	142
AIRINV::InventoryParserHelper	144
AIRINV::ScheduleParserHelper	148
stdair	
Forward declarations	151
swift	
The wrapper namespace	152

19 Class Index

19.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

AIRINV::AIRINV_Master_Service	152
AIRINV::AIRINV_Service	160
std::allocator	168
std::auto_ptr	169
std::basic_fstream< char >	170
std::fstream	265
std::basic_fstream< wchar_t >	170
std::wfstream	494

<code>std::basic_ifstream< char ></code>	171
<code>std::ifstream</code>	267
<code>std::basic_ifstream< wchar_t ></code>	171
<code>std::wifstream</code>	494
<code>std::basic_ios< char ></code>	171
<code>std::ios</code>	279
<code>std::basic_ios< Char ></code>	171
<code>std::basic_istream</code>	172
<code>std::basic_ostream</code>	173
<code>std::basic_ios< wchar_t ></code>	171
<code>std::wios</code>	494
<code>std::basic_iostream< Char ></code>	171
<code>std::basic_fstream</code>	170
<code>std::basic_stringstream</code>	174
<code>std::basic_istream< Char ></code>	172
<code>std::basic_ifstream</code>	171
<code>std::basic_iostream</code>	171
<code>std::basic_istringstream</code>	172
<code>std::basic_istream< char ></code>	172
<code>std::istream</code>	280
<code>std::basic_istream< wchar_t ></code>	172
<code>std::wistream</code>	495
<code>std::basic_istringstream< char ></code>	172
<code>std::istringstream</code>	281
<code>std::basic_istringstream< wchar_t ></code>	172
<code>std::wistringstream</code>	495
<code>std::basic_ofstream< char ></code>	173

<code>std::ofstream</code>	294
<code>std::basic_ofstream< wchar_t ></code>	173
<code>std::wofstream</code>	496
<code>std::basic_ostream< Char ></code>	173
<code>std::basic_iostream</code>	171
<code>std::basic_ofstream</code>	173
<code>std::basic_ostringstream</code>	173
<code>std::basic_ostream< char ></code>	173
<code>std::ostream</code>	294
<code>std::basic_ostream< wchar_t ></code>	173
<code>std::wostream</code>	496
<code>std::basic_ostringstream< char ></code>	173
<code>std::ostringstream</code>	294
<code>std::basic_ostringstream< wchar_t ></code>	173
<code>std::wostringstream</code>	496
<code>std::basic_string</code>	174
<code>std::basic_string< char ></code>	174
<code>std::string</code>	490
<code>std::basic_string< wchar_t ></code>	174
<code>std::wstring</code>	497
<code>std::basic_stringstream< char ></code>	174
<code>std::stringstream</code>	491
<code>std::basic_stringstream< wchar_t ></code>	174
<code>std::wstringstream</code>	497
<code>std::bitset</code>	175
<code>AIRINV::BomAbstract</code>	175
<code>stdair::BomPropertyTree</code>	177

AIRINV::BomRootHelper	178
AIRINV::BookingClassHelper	179
CmdAbstract	186
AIRINV::DCPEventGenerator	193
AIRINV::DCPParser	202
AIRINV::DCPRuleFileParser	202
AIRINV::FlightPeriodFileParser	249
AIRINV::InventoryBuilder	268
AIRINV::InventoryFileParser	269
AIRINV::InventoryGenerator	271
AIRINV::InventoryParser	276
AIRINV::ScheduleParser	312
COMMAND	187
std::complex	187
std::basic_string::const_iterator	189
std::string::const_iterator	189
std::wstring::const_iterator	189
std::deque::const_iterator	189
std::list::const_iterator	190
std::map::const_iterator	190
std::multimap::const_iterator	190
std::set::const_iterator	190
std::multiset::const_iterator	190
std::vector::const_iterator	191
std::basic_string::const_reverse_iterator	191
std::string::const_reverse_iterator	191
std::wstring::const_reverse_iterator	191

<code>std::deque::const_reverse_iterator</code>	192
<code>std::list::const_reverse_iterator</code>	192
<code>std::map::const_reverse_iterator</code>	192
<code>std::multimap::const_reverse_iterator</code>	192
<code>std::set::const_reverse_iterator</code>	192
<code>std::multiset::const_reverse_iterator</code>	193
<code>std::vector::const_reverse_iterator</code>	193
<code>AIRINV::DefaultMap</code>	209
<code>AIRINV::InventoryParserHelper::InventoryParser::definition</code>	210
<code>AIRINV::ScheduleParserHelper::FlightPeriodParser::definition</code>	215
<code>std::deque</code>	219
<code>enable_shared_from_this</code>	226
<code>AIRINV::Connection</code>	188
<code>std::exception</code>	226
<code>std::bad_alloc</code>	169
<code>std::bad_cast</code>	169
<code>std::bad_exception</code>	170
<code>std::bad_typeid</code>	170
<code>std::ios_base::failure</code>	237
<code>std::logic_error</code>	291
<code>std::domain_error</code>	225
<code>std::invalid_argument</code>	268
<code>std::length_error</code>	290
<code>std::out_of_range</code>	295
<code>std::runtime_error</code>	311
<code>std::overflow_error</code>	295
<code>std::range_error</code>	303

std::underflow_error	493
AIRINV::FacBomAbstract	230
AIRINV::FacServiceAbstract	232
FacServiceAbstract	234
AIRINV::FacAirinvMasterServiceContext	227
AIRINV::FacAirinvServiceContext	228
AIRINV::FacSupervisor	234
FileNotFoundException	240
AIRINV::InventoryInputFileNotFoundException	273
AIRINV::ScheduleInputFileNotFoundException	312
AIRINV::FlightDateHelper	241
grammar	265
AIRINV::DCPParserHelper::DCPRuleParser	203
grammar	266
AIRINV::InventoryParserHelper::InventoryParser	277
AIRINV::ScheduleParserHelper::FlightPeriodParser	250
AIRINV::GuillotineBlockHelper	266
AIRINV::header	267
AIRINV::InventoryHelper	272
AIRINV::InventoryManager	274
std::ios_base	280
std::basic_ios	171
std::basic_string::iterator	281
std::string::iterator	281
std::wstring::iterator	282
std::deque::iterator	282
std::list::iterator	282

std::map::iterator	282
std::multimap::iterator	283
std::set::iterator	283
std::multiset::iterator	283
std::vector::iterator	283
AIRINV::LegCabinHelper	283
std::list	290
std::map	291
std::multimap	292
std::multiset	292
noncopyable	293
AIRINV::AirInvServer	167
AIRINV::Connection	188
AIRINV::RequestHandler	306
ObjectCreationgDuplicationException	293
AIRINV::FlightDateDuplicationException	240
ParserException	296
AIRINV::SegmentDateNotFoundException	318
AIRINV::InventoryParserHelper::ParserSemanticAction	296
AIRINV::InventoryParserHelper::doEndFlightDate	223
AIRINV::InventoryParserHelper::storeACP	332
AIRINV::InventoryParserHelper::storeAirlineCode	337
AIRINV::InventoryParserHelper::storeAU	341
AIRINV::InventoryParserHelper::storeBoardingDate	343
AIRINV::InventoryParserHelper::storeBoardingTime	345
AIRINV::InventoryParserHelper::storeBookingCounter	348
AIRINV::InventoryParserHelper::storeBucketAvaibility	351

AIRINV::InventoryParserHelper::storeClassAvailability	360
AIRINV::InventoryParserHelper::storeClassCode	362
AIRINV::InventoryParserHelper::storeClassETB	366
AIRINV::InventoryParserHelper::storeCumulatedProtection	368
AIRINV::InventoryParserHelper::storeETB	386
AIRINV::InventoryParserHelper::storeFamilyCode	390
AIRINV::InventoryParserHelper::storeFClasses	393
AIRINV::InventoryParserHelper::storeFlightDate	395
AIRINV::InventoryParserHelper::storeFlightNumber	399
AIRINV::InventoryParserHelper::storeFlightTypeCode	401
AIRINV::InventoryParserHelper::storeFlightVisibilityCode	403
AIRINV::InventoryParserHelper::storeGAV	405
AIRINV::InventoryParserHelper::storeLegBoardingPoint	409
AIRINV::InventoryParserHelper::storeLegCabinCode	411
AIRINV::InventoryParserHelper::storeLegOffPoint	415
AIRINV::InventoryParserHelper::storeNAV	420
AIRINV::InventoryParserHelper::storeNbOfBkgs	422
AIRINV::InventoryParserHelper::storeNbOfGroupBkgs	424
AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs	426
AIRINV::InventoryParserHelper::storeNbOfStaffBkgs	428
AIRINV::InventoryParserHelper::storeNbOfWLBkgs	430
AIRINV::InventoryParserHelper::storeNego	432
AIRINV::InventoryParserHelper::storeNoShow	436
AIRINV::InventoryParserHelper::storeOffDate	438
AIRINV::InventoryParserHelper::storeOffTime	440
AIRINV::InventoryParserHelper::storeOverbooking	445
AIRINV::InventoryParserHelper::storeParentClassCode	447

AIRINV::InventoryParserHelper::storeParentSubclassCode	450
AIRINV::InventoryParserHelper::storeProtection	453
AIRINV::InventoryParserHelper::storeRevenueAvailability	455
AIRINV::InventoryParserHelper::storeSaleableCapacity	457
AIRINV::InventoryParserHelper::storeSeatIndex	461
AIRINV::InventoryParserHelper::storeSegmentAvailability	463
AIRINV::InventoryParserHelper::storeSegmentBoardingPoint	467
AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter	469
AIRINV::InventoryParserHelper::storeSegmentCabinCode	471
AIRINV::InventoryParserHelper::storeSegmentOffPoint	475
AIRINV::InventoryParserHelper::storeSnapshotDate	480
AIRINV::InventoryParserHelper::storeSubclassCode	484
AIRINV::InventoryParserHelper::storeUPR	486
AIRINV::InventoryParserHelper::storeYieldUpperRange	488
AIRINV::ScheduleParserHelper::ParserSemanticAction	299
AIRINV::ScheduleParserHelper::doEndFlight	221
AIRINV::ScheduleParserHelper::storeAirlineCode	339
AIRINV::ScheduleParserHelper::storeBoardingTime	347
AIRINV::ScheduleParserHelper::storeCapacity	354
AIRINV::ScheduleParserHelper::storeClasses	364
AIRINV::ScheduleParserHelper::storeDateRangeEnd	370
AIRINV::ScheduleParserHelper::storeDateRangeStart	374
AIRINV::ScheduleParserHelper::storeDow	381
AIRINV::ScheduleParserHelper::storeElapsedTime	383
AIRINV::ScheduleParserHelper::storeFamilyCode	388
AIRINV::ScheduleParserHelper::storeFCClasses	392
AIRINV::ScheduleParserHelper::storeFlightNumber	397

AIRINV::ScheduleParserHelper::storeLegBoardingPoint	407
AIRINV::ScheduleParserHelper::storeLegCabinCode	413
AIRINV::ScheduleParserHelper::storeLegOffPoint	417
AIRINV::ScheduleParserHelper::storeOffTime	442
AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint	465
AIRINV::ScheduleParserHelper::storeSegmentCabinCode	473
AIRINV::ScheduleParserHelper::storeSegmentOffPoint	477
AIRINV::ScheduleParserHelper::storeSegmentSpecificity	478
AIRINV::DCPParserHelper::ParserSemanticAction	301
AIRINV::DCPParserHelper::doEndDCP	219
AIRINV::DCPParserHelper::storeAdvancePurchase	334
AIRINV::DCPParserHelper::storeAirlineCode	335
AIRINV::DCPParserHelper::storeCabinCode	353
AIRINV::DCPParserHelper::storeChangeFees	356
AIRINV::DCPParserHelper::storeChannel	357
AIRINV::DCPParserHelper::storeClass	359
AIRINV::DCPParserHelper::storeDateRangeEnd	372
AIRINV::DCPParserHelper::storeDateRangeStart	375
AIRINV::DCPParserHelper::storeDCP	377
AIRINV::DCPParserHelper::storeDCPIId	378
AIRINV::DCPParserHelper::storeDestination	380
AIRINV::DCPParserHelper::storeEndRangeTime	384
AIRINV::DCPParserHelper::storeMinimumStay	418
AIRINV::DCPParserHelper::storeNonRefundable	434
AIRINV::DCPParserHelper::storeOrigin	444
AIRINV::DCPParserHelper::storePOS	452
AIRINV::DCPParserHelper::storeSaturdayStay	459

AIRINV::DCPParserHelper::storeStartRangeTime	482
ParsingFileFailedException	302
AIRINV::InventoryFileParsingFailedException	270
AIRINV::ScheduleFileParsingFailedException	311
std::priority_queue	303
std::queue	303
AIRINV::Reply	303
AIRINV::Request	305
AIRINV::RequestParser	307
std::map::reverse_iterator	308
std::basic_string::reverse_iterator	308
std::string::reverse_iterator	308
std::wstring::reverse_iterator	309
std::deque::reverse_iterator	309
std::list::reverse_iterator	309
std::vector::reverse_iterator	309
std::multimap::reverse_iterator	310
std::set::reverse_iterator	310
std::multiset::reverse_iterator	310
RootException	310
AIRINV::BookingException	184
AIRINV::SegmentCabinHelper	313
AIRINV::SegmentDateHelper	317
ServiceAbstract	321
AIRINV::AIRINV_Master_ServiceContext	159
AIRINV::AIRINV_ServiceContext	166
AIRINV::ServiceAbstract	322

std::set	323
swift::SKeymap	323
swift::SReadline	326
std::stack	331
StructAbstract	491
AIRINV::BookingClassStruct	179
AIRINV::BucketStruct	184
AIRINV::DCPEventStruct	194
AIRINV::FareFamilyStruct	238
AIRINV::FlightDateStruct	242
AIRINV::FlightPeriodStruct	252
AIRINV::FlightRequestStatus	258
AIRINV::FlightTypeCode	261
AIRINV::FlightVisibilityCode	263
AIRINV::LegCabinStruct	284
AIRINV::LegStruct	287
AIRINV::SegmentCabinStruct	315
AIRINV::SegmentStruct	319
TestFixture	492
InventoryTestSuite	278
std::valarray	493
std::vector	493

20 Class Index

20.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

AIRINV::AIRINV_Master_Service	
Interface for the AIRINV Services	152
AIRINV::AIRINV_Master_ServiceContext	159
AIRINV::AIRINV_Service	
Interface for the AIRINV Services	160
AIRINV::AIRINV_ServiceContext	
Class holding the context of the Airlnv services	166
AIRINV::AirlnvServer	167
std::allocator	
STL class	168
std::auto_ptr	
STL class	169
std::bad_alloc	
STL class	169
std::bad_cast	
STL class	169
std::bad_exception	
STL class	170
std::bad_typeid	
STL class	170
std::basic_fstream	
STL class	170
std::basic_ifstream	
STL class	171
std::basic_ios	
STL class	171
std::basic_iostream	
STL class	171
std::basic_istream	
STL class	172
std::basic_istreamstream	
STL class	172
std::basic_ofstream	
STL class	173

std::basic_ostream STL class	173
std::basic_ostringstream STL class	173
std::basic_string STL class	174
std::basic_stringstream STL class	174
std::bitset STL class	175
AIRINV::BomAbstract	175
stdair::BomPropertyTree	177
AIRINV::BomRootHelper	178
AIRINV::BookingClassHelper	179
AIRINV::BookingClassStruct	179
AIRINV::BookingException	184
AIRINV::BucketStruct Utility Structure for the parsing of Bucket structures	184
CmdAbstract	186
COMMAND	187
std::complex STL class	187
AIRINV::Connection	188
std::basic_string::const_iterator STL iterator class	189
std::string::const_iterator STL iterator class	189
std::wstring::const_iterator STL iterator class	189
std::deque::const_iterator STL iterator class	189
std::list::const_iterator STL iterator class	190

std::map::const_iterator	
STL iterator class	190
std::multimap::const_iterator	
STL iterator class	190
std::set::const_iterator	
STL iterator class	190
std::multiset::const_iterator	
STL iterator class	190
std::vector::const_iterator	
STL iterator class	191
std::basic_string::const_reverse_iterator	
STL iterator class	191
std::string::const_reverse_iterator	
STL iterator class	191
std::wstring::const_reverse_iterator	
STL iterator class	191
std::deque::const_reverse_iterator	
STL iterator class	192
std::list::const_reverse_iterator	
STL iterator class	192
std::map::const_reverse_iterator	
STL iterator class	192
std::multimap::const_reverse_iterator	
STL iterator class	192
std::set::const_reverse_iterator	
STL iterator class	192
std::multiset::const_reverse_iterator	
STL iterator class	193
std::vector::const_reverse_iterator	
STL iterator class	193
AIRINV::DCPEventGenerator	193
AIRINV::DCPEventStruct	194
AIRINV::DCPParser	202
AIRINV::DCPRuleFileParser	202

AIRINV::DCPParserHelper::DCPRuleParser	203
AIRINV::DefaultMap	209
AIRINV::InventoryParserHelper::InventoryParser::definition	210
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition	215
std::deque	
STL class	219
AIRINV::DCPParserHelper::doEndDCP	219
AIRINV::ScheduleParserHelper::doEndFlight	221
AIRINV::InventoryParserHelper::doEndFlightDate	223
std::domain_error	
STL class	225
enable_shared_from_this	226
std::exception	
STL class	226
AIRINV::FacAirinvMasterServiceContext	
Factory for Bucket	227
AIRINV::FacAirinvServiceContext	228
AIRINV::FacBomAbstract	230
AIRINV::FacServiceAbstract	232
FacServiceAbstract	234
AIRINV::FacSupervisor	234
std::ios_base::failure	
STL class	237
AIRINV::FareFamilyStruct	
Utility Structure for the parsing of fare family details	238
FileNotFoundException	240
AIRINV::FlightDateDuplicationException	240
AIRINV::FlightDateHelper	241
AIRINV::FlightDateStruct	242
AIRINV::FlightPeriodFileParser	249

AIRINV::ScheduleParserHelper::FlightPeriodParser	250
AIRINV::FlightPeriodStruct	252
AIRINV::FlightRequestStatus	258
AIRINV::FlightTypeCode	261
AIRINV::FlightVisibilityCode	263
std::fstream STL class	265
grammar	265
grammar	266
AIRINV::GuillotineBlockHelper	266
AIRINV::header	267
std::ifstream STL class	267
std::invalid_argument STL class	268
AIRINV::InventoryBuilder Class handling the generation / instantiation of the Inventory BOM	268
AIRINV::InventoryFileParser	269
AIRINV::InventoryFileParsingFailedException	270
AIRINV::InventoryGenerator Class handling the generation / instantiation of the Inventory BOM	271
AIRINV::InventoryHelper	272
AIRINV::InventoryInputFileNotFoundException	273
AIRINV::InventoryManager	274
AIRINV::InventoryParser Class wrapping the parser entry point	276
AIRINV::InventoryParserHelper::InventoryParser	277
InventoryTestSuite	278
std::ios STL class	279

std::ios_base	
STL class	280
std::istream	
STL class	280
std::istreamstream	
STL class	281
std::basic_string::iterator	
STL iterator class	281
std::string::iterator	
STL iterator class	281
std::wstring::iterator	
STL iterator class	282
std::deque::iterator	
STL iterator class	282
std::list::iterator	
STL iterator class	282
std::map::iterator	
STL iterator class	282
std::multimap::iterator	
STL iterator class	283
std::set::iterator	
STL iterator class	283
std::multiset::iterator	
STL iterator class	283
std::vector::iterator	
STL iterator class	283
AIRINV::LegCabinHelper	283
AIRINV::LegCabinStruct	284
AIRINV::LegStruct	287
std::length_error	
STL class	290
std::list	
STL class	290

std::logic_error STL class	291
std::map STL class	291
std::multimap STL class	292
std::multiset STL class	292
noncopyable	293
ObjectCreationgDuplicationException	293
std::ofstream STL class	294
std::ostream STL class	294
std::ostringstream STL class	294
std::out_of_range STL class	295
std::overflow_error STL class	295
ParserException	296
AIRINV::InventoryParserHelper::ParserSemanticAction	296
AIRINV::ScheduleParserHelper::ParserSemanticAction	299
AIRINV::DCPPParserHelper::ParserSemanticAction	301
ParsingFileFailedException	302
std::priority_queue STL class	303
std::queue STL class	303
std::range_error STL class	303
AIRINV::Reply	303
AIRINV::Request	305

AIRINV::RequestHandler	306
The common handler for all incoming requests	
AIRINV::RequestParser	307
Parser for incoming requests	
std::map::reverse_iterator	308
STL iterator class	
std::basic_string::reverse_iterator	308
STL iterator class	
std::string::reverse_iterator	308
STL iterator class	
std::wstring::reverse_iterator	309
STL iterator class	
std::deque::reverse_iterator	309
STL iterator class	
std::list::reverse_iterator	309
STL iterator class	
std::vector::reverse_iterator	309
STL iterator class	
std::multimap::reverse_iterator	310
STL iterator class	
std::set::reverse_iterator	310
STL iterator class	
std::multiset::reverse_iterator	310
STL iterator class	
RootException	310
std::runtime_error	311
STL class	
AIRINV::ScheduleFileParsingFailedException	311
AIRINV::ScheduleInputFileNotFoundException	312
AIRINV::ScheduleParser	312
Class wrapping the parser entry point	
AIRINV::SegmentCabinHelper	313
Class representing the actual business functions for an airline segment-cabin	

AIRINV::SegmentCabinStruct	
Utility Structure for the parsing of SegmentCabin details	315
AIRINV::SegmentDateHelper	317
AIRINV::SegmentDateNotFoundException	318
AIRINV::SegmentStruct	319
ServiceAbstract	321
AIRINV::ServiceAbstract	322
std::set	
STL class	323
swift::SKeymap	
The readline keymap wrapper	323
swift::SReadline	
The readline library wrapper	326
std::stack	
STL class	331
AIRINV::InventoryParserHelper::storeACP	332
AIRINV::DCPPParserHelper::storeAdvancePurchase	334
AIRINV::DCPPParserHelper::storeAirlineCode	335
AIRINV::InventoryParserHelper::storeAirlineCode	337
AIRINV::ScheduleParserHelper::storeAirlineCode	339
AIRINV::InventoryParserHelper::storeAU	341
AIRINV::InventoryParserHelper::storeBoardingDate	343
AIRINV::InventoryParserHelper::storeBoardingTime	345
AIRINV::ScheduleParserHelper::storeBoardingTime	347
AIRINV::InventoryParserHelper::storeBookingCounter	348
AIRINV::InventoryParserHelper::storeBucketAvaibility	351
AIRINV::DCPPParserHelper::storeCabinCode	353
AIRINV::ScheduleParserHelper::storeCapacity	354
AIRINV::DCPPParserHelper::storeChangeFees	356

AIRINV::DCPParserHelper::storeChannel	357
AIRINV::DCPParserHelper::storeClass	359
AIRINV::InventoryParserHelper::storeClassAvailability	360
AIRINV::InventoryParserHelper::storeClassCode	362
AIRINV::ScheduleParserHelper::storeClasses	364
AIRINV::InventoryParserHelper::storeClassETB	366
AIRINV::InventoryParserHelper::storeCumulatedProtection	368
AIRINV::ScheduleParserHelper::storeDateRangeEnd	370
AIRINV::DCPParserHelper::storeDateRangeEnd	372
AIRINV::ScheduleParserHelper::storeDateRangeStart	374
AIRINV::DCPParserHelper::storeDateRangeStart	375
AIRINV::DCPParserHelper::storeDCP	377
AIRINV::DCPParserHelper::storeDCPIId	378
AIRINV::DCPParserHelper::storeDestination	380
AIRINV::ScheduleParserHelper::storeDow	381
AIRINV::ScheduleParserHelper::storeElapsedTime	383
AIRINV::DCPParserHelper::storeEndRangeTime	384
AIRINV::InventoryParserHelper::storeETB	386
AIRINV::ScheduleParserHelper::storeFamilyCode	388
AIRINV::InventoryParserHelper::storeFamilyCode	390
AIRINV::ScheduleParserHelper::storeFCClasses	392
AIRINV::InventoryParserHelper::storeFCClasses	393
AIRINV::InventoryParserHelper::storeFlightDate	395
AIRINV::ScheduleParserHelper::storeFlightNumber	397
AIRINV::InventoryParserHelper::storeFlightNumber	399
AIRINV::InventoryParserHelper::storeFlightTypeCode	401
AIRINV::InventoryParserHelper::storeFlightVisibilityCode	403

AIRINV::InventoryParserHelper::storeGAV	405
AIRINV::ScheduleParserHelper::storeLegBoardingPoint	407
AIRINV::InventoryParserHelper::storeLegBoardingPoint	409
AIRINV::InventoryParserHelper::storeLegCabinCode	411
AIRINV::ScheduleParserHelper::storeLegCabinCode	413
AIRINV::InventoryParserHelper::storeLegOffPoint	415
AIRINV::ScheduleParserHelper::storeLegOffPoint	417
AIRINV::DCPParserHelper::storeMinimumStay	418
AIRINV::InventoryParserHelper::storeNAV	420
AIRINV::InventoryParserHelper::storeNbOfBkgs	422
AIRINV::InventoryParserHelper::storeNbOfGroupBkgs	424
AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs	426
AIRINV::InventoryParserHelper::storeNbOfStaffBkgs	428
AIRINV::InventoryParserHelper::storeNbOfWLBkgs	430
AIRINV::InventoryParserHelper::storeNego	432
AIRINV::DCPParserHelper::storeNonRefundable	434
AIRINV::InventoryParserHelper::storeNoShow	436
AIRINV::InventoryParserHelper::storeOffDate	438
AIRINV::InventoryParserHelper::storeOffTime	440
AIRINV::ScheduleParserHelper::storeOffTime	442
AIRINV::DCPParserHelper::storeOrigin	444
AIRINV::InventoryParserHelper::storeOverbooking	445
AIRINV::InventoryParserHelper::storeParentClassCode	447
AIRINV::InventoryParserHelper::storeParentSubclassCode	450
AIRINV::DCPParserHelper::storePOS	452
AIRINV::InventoryParserHelper::storeProtection	453
AIRINV::InventoryParserHelper::storeRevenueAvailability	455

AIRINV::InventoryParserHelper::storeSaleableCapacity	457
AIRINV::DCPParserHelper::storeSaturdayStay	459
AIRINV::InventoryParserHelper::storeSeatIndex	461
AIRINV::InventoryParserHelper::storeSegmentAvailability	463
AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint	465
AIRINV::InventoryParserHelper::storeSegmentBoardingPoint	467
AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter	469
AIRINV::InventoryParserHelper::storeSegmentCabinCode	471
AIRINV::ScheduleParserHelper::storeSegmentCabinCode	473
AIRINV::InventoryParserHelper::storeSegmentOffPoint	475
AIRINV::ScheduleParserHelper::storeSegmentOffPoint	477
AIRINV::ScheduleParserHelper::storeSegmentSpecificity	478
AIRINV::InventoryParserHelper::storeSnapshotDate	480
AIRINV::DCPParserHelper::storeStartRangeTime	482
AIRINV::InventoryParserHelper::storeSubclassCode	484
AIRINV::InventoryParserHelper::storeUPR	486
AIRINV::InventoryParserHelper::storeYieldUpperRange	488
std::string STL class	490
std::stringstream STL class	491
StructAbstract	491
TestFixture	492
std::underflow_error STL class	493
std::valarray STL class	493
std::vector STL class	493

std::wfstream	
STL class	494
std::wifstream	
STL class	494
std::wios	
STL class	494
std::wistream	
STL class	495
std::wistringstream	
STL class	495
std::wofstream	
STL class	496
std::wostream	
STL class	496
std::wostringstream	
STL class	496
std::wstring	
STL class	497
std::wstringstream	
STL class	497

21 File Index

21.1 File List

Here is a list of all files with brief descriptions:

airinv/AIRINV_Master_Service.hpp	498
airinv/AIRINV_Service.hpp	501
airinv/AIRINV_Types.hpp	503
airinv/FlightRequestStatus.hpp	687
airinv/basic/BasConst.cpp	505
airinv/basic/BasConst_AIRINV_Service.hpp	506
airinv/basic/BasConst_Curves.hpp	507

airinv/basic/BasConst_General.hpp	507
airinv/basic/BasParserTypes.hpp	508
airinv/basic/FlightRequestStatus.cpp	510
airinv/basic/FlightTypeCode.cpp	511
airinv/basic/FlightTypeCode.hpp	513
airinv/basic/FlightVisibilityCode.cpp	514
airinv/basic/FlightVisibilityCode.hpp	516
airinv/batches/airinv_parseInventory.cpp	516
airinv/batches/parseInventory.cpp	521
airinv/bom/AirportList.hpp	526
airinv/bom/BomAbstract.cpp	526
airinv/bom/BomAbstract.hpp	527
airinv/bom/BomRootHelper.cpp	529
airinv/bom/BomRootHelper.hpp	529
airinv/bom/BookingClassHelper.cpp	530
airinv/bom/BookingClassHelper.hpp	531
airinv/bom/BookingClassStruct.cpp	531
airinv/bom/BookingClassStruct.hpp	532
airinv/bom/BucketStruct.cpp	534
airinv/bom/BucketStruct.hpp	535
airinv/bom/DCPEventStruct.cpp	535
airinv/bom/DCPEventStruct.hpp	538
airinv/bom/FareFamilyStruct.cpp	540
airinv/bom/FareFamilyStruct.hpp	541
airinv/bom/FlightDateHelper.cpp	542
airinv/bom/FlightDateHelper.hpp	544
airinv/bom/FlightDateStruct.cpp	545

airinv/bom/FlightDateStruct.hpp	549
airinv/bom/FlightPeriodStruct.cpp	550
airinv/bom/FlightPeriodStruct.hpp	554
airinv/bom/GuillotineBlockHelper.cpp	556
airinv/bom/GuillotineBlockHelper.hpp	560
airinv/bom/InventoryHelper.cpp	561
airinv/bom/InventoryHelper.hpp	566
airinv/bom/LegCabinHelper.cpp	567
airinv/bom/LegCabinHelper.hpp	568
airinv/bom/LegCabinStruct.cpp	568
airinv/bom/LegCabinStruct.hpp	569
airinv/bom/LegStruct.cpp	570
airinv/bom/LegStruct.hpp	572
airinv/bom/SegmentCabinHelper.cpp	573
airinv/bom/SegmentCabinHelper.hpp	576
airinv/bom/SegmentCabinStruct.cpp	577
airinv/bom/SegmentCabinStruct.hpp	578
airinv/bom/SegmentDateHelper.cpp	579
airinv/bom/SegmentDateHelper.hpp	581
airinv/bom/SegmentStruct.cpp	582
airinv/bom/SegmentStruct.hpp	583
airinv/command/InventoryBuilder.cpp	584
airinv/command/InventoryBuilder.hpp	589
airinv/command/InventoryGenerator.cpp	591
airinv/command/InventoryGenerator.hpp	596
airinv/command/InventoryManager.cpp	597
airinv/command/InventoryManager.hpp	613

airinv/command/InventoryParser.cpp	615
airinv/command/InventoryParser.hpp	616
airinv/command/InventoryParserHelper.cpp	617
airinv/command/InventoryParserHelper.hpp	635
airinv/command/ScheduleParser.cpp	640
airinv/command/ScheduleParser.hpp	641
airinv/command/ScheduleParserHelper.cpp	642
airinv/command/ScheduleParserHelper.hpp	652
airinv/command/vault/DCPEventGenerator.cpp	655
airinv/command/vault/DCPEventGenerator.hpp	657
airinv/command/vault/DCPParser.cpp	658
airinv/command/vault/DCPParser.hpp	658
airinv/command/vault/DCPParserHelper.cpp	659
airinv/command/vault/DCPParserHelper.hpp	669
airinv/config/airinv-paths.hpp	674
airinv/config/airinv-paths.hpp.in	677
airinv/factory/FacAirinvMasterServiceContext.cpp	677
airinv/factory/FacAirinvMasterServiceContext.hpp	678
airinv/factory/FacAirinvServiceContext.cpp	679
airinv/factory/FacAirinvServiceContext.hpp	680
airinv/factory/FacBomAbstract.cpp	681
airinv/factory/FacBomAbstract.hpp	682
airinv/factory/FacServiceAbstract.cpp	683
airinv/factory/FacServiceAbstract.hpp	684
airinv/factory/FacSupervisor.cpp	685
airinv/factory/FacSupervisor.hpp	686
airinv/server/AirInvClient.cpp	688

airinv/server/ AirInvClient_ASIO.cpp	689
airinv/server/ AirInvServer.cpp	690
airinv/server/ AirInvServer.hpp	696
airinv/server/ AirInvServer_ASIO.cpp	698
airinv/server/ BomPropertyTree.cpp	699
airinv/server/ BomPropertyTree.hpp	701
airinv/server/ Connection.cpp	702
airinv/server/ Connection.hpp	704
airinv/server/ header.hpp	705
airinv/server/ posix_main.cpp	705
airinv/server/ Reply.cpp	707
airinv/server/ Reply.hpp	707
airinv/server/ Request.cpp	708
airinv/server/ Request.hpp	709
airinv/server/ RequestHandler.cpp	710
airinv/server/ RequestHandler.hpp	711
airinv/server/ RequestParser.cpp	712
airinv/server/ RequestParser.hpp	716
airinv/server/ win_main.cpp	717
airinv/service/ AIRINV_Master_Service.cpp	718
airinv/service/ AIRINV_Master_ServiceContext.cpp	727
airinv/service/ AIRINV_Master_ServiceContext.hpp	728
airinv/service/ AIRINV_Service.cpp	730
airinv/service/ AIRINV_ServiceContext.cpp	739
airinv/service/ AIRINV_ServiceContext.hpp	740
airinv/service/ ServiceAbstract.cpp	742
airinv/service/ ServiceAbstract.hpp	743

airinv/ui/cmdline/airinv.cpp	744
airinv/ui/cmdline/readline_autocomp.hpp	762
airinv/ui/cmdline/SReadline.hpp C++ wrapper around libreadline	768
test/airinv/InventoryTestSuite.cpp	775
test/airinv/InventoryTestSuite.hpp	780

22 Directory Documentation

22.1 test/airinv/ Directory Reference

Files

- file [InventoryTestSuite.cpp](#)
- file [InventoryTestSuite.hpp](#)

22.2 airinv/ Directory Reference

Directories

- directory [basic](#)
- directory [batches](#)
- directory [bom](#)
- directory [command](#)
- directory [config](#)
- directory [factory](#)
- directory [server](#)
- directory [service](#)
- directory [ui](#)

Files

- file [AIRINV_Master_Service.hpp](#)
- file [AIRINV_Service.hpp](#)
- file [AIRINV_Types.hpp](#)
- file [FlightRequestStatus.hpp](#)

22.3 airinv/basic/ Directory Reference

Files

- file [BasConst.cpp](#)
- file [BasConst_AIRINV_Service.hpp](#)
- file [BasConst_Curves.hpp](#)
- file [BasConst_General.hpp](#)
- file [BasParserTypes.hpp](#)
- file [FlightRequestStatus.cpp](#)
- file [FlightTypeCode.cpp](#)
- file [FlightTypeCode.hpp](#)
- file [FlightVisibilityCode.cpp](#)
- file [FlightVisibilityCode.hpp](#)

22.4 airinv/batches/ Directory Reference

Files

- file [airinv_parseInventory.cpp](#)
- file [parseInventory.cpp](#)

22.5 airinv/bom/ Directory Reference

Files

- file [AirportList.hpp](#)
- file [BomAbstract.cpp](#)
- file [BomAbstract.hpp](#)
- file [BomRootHelper.cpp](#)
- file [BomRootHelper.hpp](#)
- file [BookingClassHelper.cpp](#)
- file [BookingClassHelper.hpp](#)
- file [BookingClassStruct.cpp](#)
- file [BookingClassStruct.hpp](#)
- file [BucketStruct.cpp](#)
- file [BucketStruct.hpp](#)
- file [DCPEventStruct.cpp](#)
- file [DCPEventStruct.hpp](#)
- file [FareFamilyStruct.cpp](#)
- file [FareFamilyStruct.hpp](#)
- file [FlightDateHelper.cpp](#)
- file [FlightDateHelper.hpp](#)
- file [FlightDateStruct.cpp](#)
- file [FlightDateStruct.hpp](#)
- file [FlightPeriodStruct.cpp](#)

- file [FlightPeriodStruct.hpp](#)
- file [GuillotineBlockHelper.cpp](#)
- file [GuillotineBlockHelper.hpp](#)
- file [InventoryHelper.cpp](#)
- file [InventoryHelper.hpp](#)
- file [LegCabinHelper.cpp](#)
- file [LegCabinHelper.hpp](#)
- file [LegCabinStruct.cpp](#)
- file [LegCabinStruct.hpp](#)
- file [LegStruct.cpp](#)
- file [LegStruct.hpp](#)
- file [SegmentCabinHelper.cpp](#)
- file [SegmentCabinHelper.hpp](#)
- file [SegmentCabinStruct.cpp](#)
- file [SegmentCabinStruct.hpp](#)
- file [SegmentDateHelper.cpp](#)
- file [SegmentDateHelper.hpp](#)
- file [SegmentStruct.cpp](#)
- file [SegmentStruct.hpp](#)

22.6 `airinv/ui/cmdline/` Directory Reference

Files

- file [airinv.cpp](#)
 - file [readline_autocomp.hpp](#)
 - file [SReadline.hpp](#)
- C++ wrapper around libreadline.*

22.7 `airinv/command/` Directory Reference

Directories

- directory [vault](#)

Files

- file [InventoryBuilder.cpp](#)
- file [InventoryBuilder.hpp](#)
- file [InventoryGenerator.cpp](#)
- file [InventoryGenerator.hpp](#)
- file [InventoryManager.cpp](#)
- file [InventoryManager.hpp](#)
- file [InventoryParser.cpp](#)
- file [InventoryParser.hpp](#)

- file [InventoryParserHelper.cpp](#)
- file [InventoryParserHelper.hpp](#)
- file [ScheduleParser.cpp](#)
- file [ScheduleParser.hpp](#)
- file [ScheduleParserHelper.cpp](#)
- file [ScheduleParserHelper.hpp](#)

22.8 airinv/config/ Directory Reference

Files

- file [airinv-paths.hpp](#)
- file [airinv-paths.hpp.in](#)

22.9 airinv/factory/ Directory Reference

Files

- file [FacAirinvMasterServiceContext.cpp](#)
- file [FacAirinvMasterServiceContext.hpp](#)
- file [FacAirinvServiceContext.cpp](#)
- file [FacAirinvServiceContext.hpp](#)
- file [FacBomAbstract.cpp](#)
- file [FacBomAbstract.hpp](#)
- file [FacServiceAbstract.cpp](#)
- file [FacServiceAbstract.hpp](#)
- file [FacSupervisor.cpp](#)
- file [FacSupervisor.hpp](#)

22.10 airinv/server/ Directory Reference

Files

- file [AirInvClient.cpp](#)
- file [AirInvClient_ASIO.cpp](#)
- file [AirInvServer.cpp](#)
- file [AirInvServer.hpp](#)
- file [AirInvServer_ASIO.cpp](#)
- file [BomPropertyTree.cpp](#)
- file [BomPropertyTree.hpp](#)
- file [Connection.cpp](#)
- file [Connection.hpp](#)
- file [header.hpp](#)
- file [posix_main.cpp](#)
- file [Reply.cpp](#)

- file [Reply.hpp](#)
- file [Request.cpp](#)
- file [Request.hpp](#)
- file [RequestHandler.cpp](#)
- file [RequestHandler.hpp](#)
- file [RequestParser.cpp](#)
- file [RequestParser.hpp](#)
- file [win_main.cpp](#)

22.11 airinv/service/ Directory Reference

Files

- file [AIRINV_Master_Service.cpp](#)
- file [AIRINV_Master_ServiceContext.cpp](#)
- file [AIRINV_Master_ServiceContext.hpp](#)
- file [AIRINV_Service.cpp](#)
- file [AIRINV_ServiceContext.cpp](#)
- file [AIRINV_ServiceContext.hpp](#)
- file [ServiceAbstract.cpp](#)
- file [ServiceAbstract.hpp](#)

22.12 test/ Directory Reference

Directories

- directory [airinv](#)

22.13 airinv/ui/ Directory Reference

Directories

- directory [cmdline](#)

22.14 airinv/command/vault/ Directory Reference

Files

- file [DCPEventGenerator.cpp](#)
- file [DCPEventGenerator.hpp](#)
- file [DCPParser.cpp](#)
- file [DCPParser.hpp](#)
- file [DCPParserHelper.cpp](#)
- file [DCPParserHelper.hpp](#)

23 Namespace Documentation

23.1 AIRINV Namespace Reference

Namespaces

- namespace [InventoryParserHelper](#)
- namespace [ScheduleParserHelper](#)
- namespace [DCPParserHelper](#)

Classes

- class [AIRINV_Master_Service](#)
Interface for the [AIRINV](#) Services.
- class [AIRINV_Service](#)
Interface for the [AIRINV](#) Services.
- class [InventoryFileParsingFailedException](#)
- class [ScheduleFileParsingFailedException](#)
- class [SegmentDateNotFoundException](#)
- class [InventoryInputFileNotFoundException](#)
- class [ScheduleInputFileNotFoundException](#)
- class [FlightDateDuplicationException](#)
- class [BookingException](#)
- struct [DefaultMap](#)
- struct [FlightTypeCode](#)
- struct [FlightVisibilityCode](#)
- class [BomAbstract](#)
- class [BomRootHelper](#)
- class [BookingClassHelper](#)
- struct [BookingClassStruct](#)
- struct [BucketStruct](#)
Utility Structure for the parsing of Bucket structures.
- struct [DCPEventStruct](#)
- struct [FareFamilyStruct](#)
Utility Structure for the parsing of fare family details.
- class [FlightDateHelper](#)
- struct [FlightDateStruct](#)
- struct [FlightPeriodStruct](#)
- class [GuillotineBlockHelper](#)
- class [InventoryHelper](#)
- class [LegCabinHelper](#)
- struct [LegCabinStruct](#)
- struct [LegStruct](#)
- class [SegmentCabinHelper](#)
Class representing the actual business functions for an airline segment-cabin.

- struct [SegmentCabinStruct](#)
Utility Structure for the parsing of SegmentCabin details.
- class [SegmentDateHelper](#)
- struct [SegmentStruct](#)
- class [InventoryBuilder](#)
Class handling the generation / instantiation of the Inventory BOM.
- class [InventoryGenerator](#)
Class handling the generation / instantiation of the Inventory BOM.
- class [InventoryManager](#)
- class [InventoryParser](#)
Class wrapping the parser entry point.
- class [InventoryFileParser](#)
- class [ScheduleParser](#)
Class wrapping the parser entry point.
- class [FlightPeriodFileParser](#)
- class [DCPEventGenerator](#)
- class [DCPParser](#)
- class [DCPRuleFileParser](#)
- class [FacAirinvMasterServiceContext](#)
Factory for Bucket.
- class [FacAirinvServiceContext](#)
- class [FacBomAbstract](#)
- class [FacServiceAbstract](#)
- class [FacSupervisor](#)
- struct [FlightRequestStatus](#)
- class [AirInvServer](#)
- class [Connection](#)
- struct [header](#)
- struct [Reply](#)
- struct [Request](#)
- class [RequestHandler](#)
The common handler for all incoming requests.
- class [RequestParser](#)
Parser for incoming requests.
- class [AIRINV_Master_ServiceContext](#)
- class [AIRINV_ServiceContext](#)
Class holding the context of the AirInv services.
- class [ServiceAbstract](#)

Typedefs

- typedef boost::shared_ptr < [AIRINV_Service](#) > [AIRINV_ServicePtr_T](#)
- typedef boost::shared_ptr < [AIRINV_Master_Service](#) > [AIRINV_Master_ServicePtr_T](#)
- typedef std::map< const stdair::AirlineCode_T, [AIRINV_ServicePtr_T](#) > [AIRINV_ServicePtr_Map_T](#)
- typedef std::map< const stdair::DTD_T, double > [FRAT5Curve_T](#)
- typedef char [char_t](#)
- typedef boost::spirit::classic::file_iterator < [char_t](#) > [iterator_t](#)
- typedef boost::spirit::classic::scanner < [iterator_t](#) > [scanner_t](#)
- typedef boost::spirit::classic::rule < [scanner_t](#) > [rule_t](#)
- typedef boost::spirit::classic::int_parser < unsigned int, 10, 1, 1 > [int1_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 2, 2 > [uint2_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 2 > [uint1_2_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 3 > [uint1_3_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 4, 4 > [uint4_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 4 > [uint1_4_p_t](#)
- typedef boost::spirit::classic::chset < [char_t](#) > [chset_t](#)
- typedef boost::spirit::classic::impl::loop_traits < [chset_t](#), unsigned int, unsigned int >::type [repeat_p_t](#)
- typedef boost::spirit::classic::bounded < [uint2_p_t](#), unsigned int > [bounded2_p_t](#)
- typedef boost::spirit::classic::bounded < [uint1_2_p_t](#), unsigned int > [bounded1_2_p_t](#)
- typedef boost::spirit::classic::bounded < [uint1_3_p_t](#), unsigned int > [bounded1_3_p_t](#)
- typedef boost::spirit::classic::bounded < [uint4_p_t](#), unsigned int > [bounded4_p_t](#)
- typedef boost::spirit::classic::bounded < [uint1_4_p_t](#), unsigned int > [bounded1_4_p_t](#)
- typedef std::set < stdair::AirportCode_T > [AirportList_T](#)
- typedef std::vector < stdair::AirportCode_T > [AirportOrderedList_T](#)
- typedef std::vector < [BookingClassStruct](#) > [BookingClassStructList_T](#)
- typedef std::vector< [BucketStruct](#) > [BucketStructList_T](#)
- typedef std::vector < [FareFamilyStruct](#) > [FareFamilyStructList_T](#)
- typedef std::vector < [LegCabinStruct](#) > [LegCabinStructList_T](#)
- typedef std::vector< [LegStruct](#) > [LegStructList_T](#)
- typedef std::vector < [SegmentCabinStruct](#) > [SegmentCabinStructList_T](#)
- typedef std::vector < [SegmentStruct](#) > [SegmentStructList_T](#)
- typedef std::map< const stdair::Date_T, stdair::SegmentCabin * > [DepartureDateSegmentCabinMap_T](#)
- typedef std::map< const std::string, [DepartureDateSegmentCabinMap_T](#) > [SimilarSegmentCabinSetMap_T](#)
- typedef boost::shared_ptr < boost::thread > [ThreadShrPtr_T](#)
- typedef std::vector < [ThreadShrPtr_T](#) > [ThreadShrPtrList_T](#)
- typedef boost::shared_ptr < [Connection](#) > [ConnectionShrPtr_T](#)

Variables

- const `std::string` `DEFAULT_AIRLINE_CODE` = "BA"
- const `FRAT5Curve_T` `DEFAULT_PICKUP_FRAT5_CURVE`

23.1.1 Typedef Documentation

23.1.1.1 `typedef boost::shared_ptr<AIRINV_Service> AIRINV::AIRINV_ServicePtr_T`

(Smart) Pointer on the AirInv (slave) service handler.

Definition at line 110 of file [AIRINV_Types.hpp](#).

23.1.1.2 `typedef boost::shared_ptr<AIRINV_Master_Service>
AIRINV::AIRINV_Master_ServicePtr_T`

(Smart) Pointer on the AirInv master service handler.

Definition at line 115 of file [AIRINV_Types.hpp](#).

23.1.1.3 `typedef std::map<const stdair::AirlineCode_T, AIRINV_ServicePtr_T>
AIRINV::AIRINV_ServicePtr_Map_T`

Type defining a map of airline codes and the corresponding airline inventories.

Definition at line 122 of file [AIRINV_Types.hpp](#).

23.1.1.4 `typedef std::map<const stdair::DTD_T, double> AIRINV::FRAT5Curve_T`

Define the FRAT5 curve.

Definition at line 127 of file [AIRINV_Types.hpp](#).

23.1.1.5 `typedef char AIRINV::char_t`

Definition at line 31 of file [BasParserTypes.hpp](#).

23.1.1.6 `typedef boost::spirit::classic::file_iterator<char_t> AIRINV::iterator_t`

Definition at line 35 of file [BasParserTypes.hpp](#).

23.1.1.7 `typedef boost::spirit::classic::scanner<iterator_t> AIRINV::scanner_t`

Definition at line 36 of file [BasParserTypes.hpp](#).

23.1.1.8 `typedef boost::spirit::classic::rule<scanner_t> AIRINV::rule_t`

Definition at line 37 of file [BasParserTypes.hpp](#).

23.1.1.9 `typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> AIRINV::int1_ptr_t`

1-digit-integer parser

Definition at line 45 of file [BasParserTypes.hpp](#).

23.1.1.10 `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2>
AIRINV::uint2_p_t`

2-digit-integer parser

Definition at line 48 of file [BasParserTypes.hpp](#).

23.1.1.11 `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2>
AIRINV::uint1_2_p_t`

Up-to-2-digit-integer parser

Definition at line 51 of file [BasParserTypes.hpp](#).

23.1.1.12 `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3>
AIRINV::uint1_3_p_t`

Up-to-3-digit-integer parser

Definition at line 54 of file [BasParserTypes.hpp](#).

23.1.1.13 `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4>
AIRINV::uint4_p_t`

4-digit-integer parser

Definition at line 57 of file [BasParserTypes.hpp](#).

23.1.1.14 `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 4>
AIRINV::uint1_4_p_t`

Up-to-4-digit-integer parser

Definition at line 60 of file [BasParserTypes.hpp](#).

23.1.1.15 `typedef boost::spirit::classic::chset<char_t> AIRINV::chset_t`

character set

Definition at line 63 of file [BasParserTypes.hpp](#).

23.1.1.16 `typedef boost::spirit::classic::impl::loop_traits<chset_t, unsigned int, unsigned
int>::type AIRINV::repeat_p_t`

(Repeating) sequence of a given number of characters: `repeat_p(min, max)`

Definition at line 69 of file [BasParserTypes.hpp](#).

23.1.1.17 `typedef boost::spirit::classic::bounded<uint2_p_t, unsigned int>
AIRINV::bounded2_p_t`

Bounded-number-of-integers parser

Definition at line 72 of file [BasParserTypes.hpp](#).

23.1.1.18 `typedef boost::spirit::classic::bounded<uint1_2_p_t, unsigned int>
AIRINV::bounded1_2_p_t`

Definition at line 73 of file [BasParserTypes.hpp](#).

23.1.1.19 `typedef boost::spirit::classic::bounded<uint1_3_p_t, unsigned int>
AIRINV::bounded1_3_p_t`

Definition at line 74 of file [BasParserTypes.hpp](#).

23.1.1.20 `typedef boost::spirit::classic::bounded<uint4_p_t, unsigned int>
AIRINV::bounded4_p_t`

Definition at line 75 of file [BasParserTypes.hpp](#).

23.1.1.21 `typedef boost::spirit::classic::bounded<uint1_4_p_t, unsigned int>
AIRINV::bounded1_4_p_t`

Definition at line 76 of file [BasParserTypes.hpp](#).

23.1.1.22 `typedef std::set<stdair::AirportCode_T> AIRINV::AirportList_T`

Define lists of Airport Codes.

Definition at line 16 of file [AirportList.hpp](#).

23.1.1.23 `typedef std::vector<stdair::AirportCode_T> AIRINV::AirportOrderedList_T`

Definition at line 17 of file [AirportList.hpp](#).

23.1.1.24 `typedef std::vector<BookingClassStruct>
AIRINV::BookingClassStructList_T`

List of BookingClass structures.

Definition at line 60 of file [BookingClassStruct.hpp](#).

23.1.1.25 `typedef std::vector<BucketStruct> AIRINV::BucketStructList_T`

List of Bucket structures.

Definition at line 44 of file [BucketStruct.hpp](#).

23.1.1.26 `typedef std::vector<FareFamilyStruct> AIRINV::FareFamilyStructList_T`

List of FareFamily-Detail structures.

Definition at line 56 of file [FareFamilyStruct.hpp](#).

23.1.1.27 `typedef std::vector<LegCabinStruct> AIRINV::LegCabinStructList_T`

List of LegCabin-Detail structures.

Definition at line 52 of file [LegCabinStruct.hpp](#).

23.1.1.28 `typedef std::vector<LegStruct> AIRINV::LegStructList_T`

List of Leg structures.

Definition at line 55 of file [LegStruct.hpp](#).

23.1.1.29 `typedef std::vector<SegmentCabinStruct>
AIRINV::SegmentCabinStructList_T`

List of SegmentCabin-Detail strucutres.

Definition at line 48 of file [SegmentCabinStruct.hpp](#).

23.1.1.30 `typedef std::vector<SegmentStruct> AIRINV::SegmentStructList_T`

List of Segment strucutres.

Definition at line 43 of file [SegmentStruct.hpp](#).

23.1.1.31 `typedef std::map<const stdair::Date_T, stdair::SegmentCabin*>
AIRINV::DepartureDateSegmentCabinMap_T`

Definition at line 29 of file [InventoryManager.hpp](#).

23.1.1.32 `typedef std::map<const std::string, DepartureDateSegmentCabinMap_T>
AIRINV::SimilarSegmentCabinSetMap_T`

Definition at line 31 of file [InventoryManager.hpp](#).

23.1.1.33 `typedef boost::shared_ptr<boost::thread> AIRINV::ThreadShrPtr_T`

Definition at line 15 of file [AirInvServer_ASIO.cpp](#).

23.1.1.34 `typedef std::vector<ThreadShrPtr_T> AIRINV::ThreadShrPtrList_T`

Definition at line 16 of file [AirInvServer_ASIO.cpp](#).

23.1.1.35 `typedef boost::shared_ptr<Connection> AIRINV::ConnectionShrPtr_T`

Shared pointer on a [Connection](#) object.

Definition at line 71 of file [Connection.hpp](#).

23.1.2 Variable Documentation

23.1.2.1 `const std::string AIRINV::DEFAULT_AIRLINE_CODE = "BA"`

Default airline name for the [AIRINV_Service](#).

Definition at line 11 of file [BasConst.cpp](#).

23.1.2.2 `const FRAT5Curve_T AIRINV::DEFAULT_PICKUP_FRAT5_CURVE`

Initial value:

```
DefaultMap::createPickupFRAT5Curve()
```

Default pick-up FRAT5 curve for Q-equivalent booking conversion.

Definition at line 14 of file [BasConst.cpp](#).

23.2 AIRINV::DCPParserHelper Namespace Reference

Classes

- struct [ParserSemanticAction](#)
- struct [storeDCPIId](#)
- struct [storeOrigin](#)
- struct [storeDestination](#)
- struct [storeDateRangeStart](#)
- struct [storeDateRangeEnd](#)
- struct [storeStartRangeTime](#)
- struct [storeEndRangeTime](#)
- struct [storePOS](#)
- struct [storeCabinCode](#)
- struct [storeChannel](#)
- struct [storeAdvancePurchase](#)
- struct [storeSaturdayStay](#)
- struct [storeChangeFees](#)
- struct [storeNonRefundable](#)
- struct [storeMinimumStay](#)
- struct [storeDCP](#)
- struct [storeAirlineCode](#)
- struct [storeClass](#)
- struct [doEndDCP](#)
- struct [DCPRuleParser](#)

Variables

- [stdair::int1_p_t int1_p](#)
- [stdair::uint2_p_t uint2_p](#)
- [stdair::uint4_p_t uint4_p](#)
- [stdair::uint1_4_p_t uint1_4_p](#)
- [stdair::hour_p_t hour_p](#)
- [stdair::minute_p_t minute_p](#)
- [stdair::second_p_t second_p](#)
- [stdair::year_p_t year_p](#)
- [stdair::month_p_t month_p](#)
- [stdair::day_p_t day_p](#)

23.2.1 Variable Documentation

23.2.1.1 `stdair::int1_p_t` AIRINV::DCPParserHelper::int1_p

Namespaces. 1-digit-integer parser

Definition at line 427 of file [DCPParserHelper.cpp](#).

23.2.1.2 `stdair::uint2_p_t` AIRINV::DCPParserHelper::uint2_p

2-digit-integer parser

Definition at line 430 of file [DCPParserHelper.cpp](#).

23.2.1.3 `stdair::uint4_p_t` AIRINV::DCPParserHelper::uint4_p

4-digit-integer parser

Definition at line 433 of file [DCPParserHelper.cpp](#).

23.2.1.4 `stdair::uint1_4_p_t` AIRINV::DCPParserHelper::uint1_4_p

Up-to-4-digit-integer parser

Definition at line 436 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.2.1.5 `stdair::hour_p_t` AIRINV::DCPParserHelper::hour_p

Time element parsers.

Definition at line 439 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.2.1.6 `stdair::minute_p_t` AIRINV::DCPParserHelper::minute_p

Definition at line 440 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.2.1.7 `stdair::second_p_t` AIRINV::DCPParserHelper::second_p

Definition at line 441 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.2.1.8 `stdair::year_p_t` AIRINV::DCPParserHelper::year_p

Date element parsers.

Definition at line 444 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.2.1.9 stdair::month_p_t AIRINV::DCPParserHelper::month_p

Definition at line 445 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.2.1.10 stdair::day_p_t AIRINV::DCPParserHelper::day_p

Definition at line 446 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

23.3 AIRINV::InventoryParserHelper Namespace Reference

Classes

- struct [ParserSemanticAction](#)
- struct [storeSnapshotDate](#)
- struct [storeAirlineCode](#)
- struct [storeFlightNumber](#)
- struct [storeFlightDate](#)
- struct [storeFlightTypeCode](#)
- struct [storeFlightVisibilityCode](#)
- struct [storeLegBoardingPoint](#)
- struct [storeLegOffPoint](#)
- struct [storeBoardingDate](#)
- struct [storeBoardingTime](#)
- struct [storeOffDate](#)
- struct [storeOffTime](#)
- struct [storeLegCabinCode](#)
- struct [storeSaleableCapacity](#)
- struct [storeAU](#)
- struct [storeUPR](#)
- struct [storeBookingCounter](#)
- struct [storeNAV](#)
- struct [storeGAV](#)
- struct [storeACP](#)
- struct [storeETB](#)
- struct [storeYieldUpperRange](#)
- struct [storeBucketAvaibility](#)
- struct [storeSeatIndex](#)
- struct [storeSegmentBoardingPoint](#)
- struct [storeSegmentOffPoint](#)
- struct [storeSegmentCabinCode](#)
- struct [storeSegmentCabinBookingCounter](#)
- struct [storeClassCode](#)
- struct [storeSubclassCode](#)
- struct [storeParentClassCode](#)

- struct [storeParentSubclassCode](#)
- struct [storeCumulatedProtection](#)
- struct [storeProtection](#)
- struct [storeNego](#)
- struct [storeNoShow](#)
- struct [storeOverbooking](#)
- struct [storeNbOfBkgs](#)
- struct [storeNbOfGroupBkgs](#)
- struct [storeNbOfPendingGroupBkgs](#)
- struct [storeNbOfStaffBkgs](#)
- struct [storeNbOfWLBkgs](#)
- struct [storeClassETB](#)
- struct [storeClassAvailability](#)
- struct [storeSegmentAvailability](#)
- struct [storeRevenueAvailability](#)
- struct [storeFamilyCode](#)
- struct [storeFClasses](#)
- struct [doEndFlightDate](#)
- struct [InventoryParser](#)

Functions

- [repeat_p_t airline_code_p](#) ([chset_t](#)("0-9A-Z").derived(), 2, 3)
- [bounded1_4_p_t flight_number_p](#) ([uint1_4_p](#).derived(), 0u, 9999u)
- [bounded2_p_t year_p](#) ([uint2_p](#).derived(), 0u, 99u)
- [bounded2_p_t month_p](#) ([uint2_p](#).derived(), 1u, 12u)
- [bounded2_p_t day_p](#) ([uint2_p](#).derived(), 1u, 31u)
- [repeat_p_t dow_p](#) ([chset_t](#)("0-1").derived().derived(), 7, 7)
- [repeat_p_t airport_p](#) ([chset_t](#)("0-9A-Z").derived(), 3, 3)
- [bounded1_2_p_t hours_p](#) ([uint1_2_p](#).derived(), 0u, 24u)
- [bounded2_p_t minutes_p](#) ([uint2_p](#).derived(), 0u, 59u)
- [bounded2_p_t seconds_p](#) ([uint2_p](#).derived(), 0u, 59u)
- [chset_t cabin_code_p](#) ("A-Z")
- [chset_t class_code_p](#) ("A-Z")
- [chset_t passenger_type_p](#) ("A-Z")
- [repeat_p_t class_code_list_p](#) ([chset_t](#)("A-Z").derived(), 1, 26)
- [bounded1_3_p_t stay_duration_p](#) ([uint1_3_p](#).derived(), 0u, 999u)

Variables

- [int1_p_t int1_p](#)
- [uint2_p_t uint2_p](#)
- [uint1_2_p_t uint1_2_p](#)
- [uint1_3_p_t uint1_3_p](#)
- [uint4_p_t uint4_p](#)
- [uint1_4_p_t uint1_4_p](#)
- [int1_p_t family_code_p](#)

23.3.1 Function Documentation

23.3.1.1 **repeat_p_t** AIRINV::InventoryParserHelper::airline_code_p (
 chset_t("0-9A-Z").derived(), 2, 3)

Airline Code Parser: repeat_p(2,3)[chset_p("0-9A-Z")]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.2 **bounded1_4_p_t** AIRINV::InventoryParserHelper::flight_number_p (uint1_4_p.
 derived(), 0u, 9999u)

Flight Number Parser: limit_d(0u, 9999u)[uint1_4_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.3 **bounded2_p_t** AIRINV::InventoryParserHelper::year_p (uint2_p.
 derived(), 0u, 99u)

Year Parser: limit_d(00u, 99u)[uint4_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.4 **bounded2_p_t** AIRINV::InventoryParserHelper::month_p (uint2_p.
 derived(), 1u, 12u)

Month Parser: limit_d(1u, 12u)[uint2_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.5 **bounded2_p_t** AIRINV::InventoryParserHelper::day_p (uint2_p.
 derived(), 1u, 31u)

Day Parser: limit_d(1u, 31u)[uint2_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.6 **repeat_p_t** AIRINV::InventoryParserHelper::dow_p (chset_t("0-1").derived().derived()
 , 7, 7)

DOW (Day-Of-the-Week) Parser: repeat_p(7)[chset_p("0-1")]

23.3.1.7 **repeat_p_t** AIRINV::InventoryParserHelper::airport_p (chset_t("0-9A-Z").derived(), 3
 , 3)

Airport Parser: repeat_p(3)[chset_p("0-9A-Z")]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.8 **bounded1_2_p_t** AIRINV::InventoryParserHelper::hours_p (uint1_2_p.
 derived(), 0u, 24u)

Hour Parser: limit_d(0u, 24u)[uint2_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.9 **bounded2_p_t** AIRINV::InventoryParserHelper::minutes_p (uint2_p. *derived()*, 0u , 59u)

Minute Parser: limit_d(0u, 59u)[uint2_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.10 **bounded2_p_t** AIRINV::InventoryParserHelper::seconds_p (uint2_p. *derived()*, 0u , 59u)

Second Parser: limit_d(0u, 59u)[uint2_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.11 **chset_t** AIRINV::InventoryParserHelper::cabin_code_p ("A-Z")

Cabin code parser: chset_p("A-Z")

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.12 **chset_t** AIRINV::InventoryParserHelper::class_code_p ("A-Z")

Booking class code parser: chset_p("A-Z")

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.13 **chset_t** AIRINV::InventoryParserHelper::passenger_type_p ("A-Z")

Passenger type parser: chset_p("A-Z")

23.3.1.14 **repeat_p_t** AIRINV::InventoryParserHelper::class_code_list_p (chset_t("A-Z").*derived()*, 1 , 26)

Class Code List Parser: repeat_p(1,26)[chset_p("A-Z")]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.1.15 **bounded1_3_p_t** AIRINV::InventoryParserHelper::stay_duration_p (uint1_3_p. *derived()*, 0u , 999u)

Stay duration Parser: limit_d(0u, 999u)[uint3_p]

23.3.2 Variable Documentation

23.3.2.1 **int1_p_t** AIRINV::InventoryParserHelper::int1_p

1-digit-integer parser

Definition at line 791 of file [InventoryParserHelper.cpp](#).

23.3.2.2 **uint2_p_t** AIRINV::InventoryParserHelper::uint2_p

2-digit-integer parser

Definition at line 794 of file [InventoryParserHelper.cpp](#).

23.3.2.3 uint1_2_p_t AIRINV::InventoryParserHelper::uint1_2_p

Up-to-2-digit-integer parser

Definition at line 797 of file [InventoryParserHelper.cpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.2.4 uint1_3_p_t AIRINV::InventoryParserHelper::uint1_3_p

Up-to-3-digit-integer parser

Definition at line 800 of file [InventoryParserHelper.cpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.3.2.5 uint4_p_t AIRINV::InventoryParserHelper::uint4_p

4-digit-integer parser

Definition at line 803 of file [InventoryParserHelper.cpp](#).

23.3.2.6 uint1_4_p_t AIRINV::InventoryParserHelper::uint1_4_p

Up-to-4-digit-integer parser

Definition at line 806 of file [InventoryParserHelper.cpp](#).

23.3.2.7 int1_p_t AIRINV::InventoryParserHelper::family_code_p

Family code parser

Definition at line 848 of file [InventoryParserHelper.cpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition::definition\(\)](#).

23.4 AIRINV::ScheduleParserHelper Namespace Reference

Classes

- struct [ParserSemanticAction](#)
- struct [storeAirlineCode](#)
- struct [storeFlightNumber](#)
- struct [storeDateRangeStart](#)
- struct [storeDateRangeEnd](#)
- struct [storeDow](#)
- struct [storeLegBoardingPoint](#)
- struct [storeLegOffPoint](#)
- struct [storeBoardingTime](#)
- struct [storeOffTime](#)
- struct [storeElapsedTime](#)
- struct [storeLegCabinCode](#)
- struct [storeCapacity](#)

- struct [storeSegmentSpecificity](#)
- struct [storeSegmentBoardingPoint](#)
- struct [storeSegmentOffPoint](#)
- struct [storeSegmentCabinCode](#)
- struct [storeClasses](#)
- struct [storeFamilyCode](#)
- struct [storeFClasses](#)
- struct [doEndFlight](#)
- struct [FlightPeriodParser](#)

Functions

- [repeat_p_t airline_code_p](#) ([chset_t](#)("0-9A-Z").[derived\(\)](#), 2, 3)
- [bounded1_4_p_t flight_number_p](#) ([uint1_4_p](#).[derived\(\)](#), 0u, 9999u)
- [bounded4_p_t year_p](#) ([uint4_p](#).[derived\(\)](#), 2000u, 2099u)
- [bounded2_p_t month_p](#) ([uint2_p](#).[derived\(\)](#), 1u, 12u)
- [bounded2_p_t day_p](#) ([uint2_p](#).[derived\(\)](#), 1u, 31u)
- [repeat_p_t dow_p](#) ([chset_t](#)("0-1").[derived\(\)](#).[derived\(\)](#), 7, 7)
- [repeat_p_t airport_p](#) ([chset_t](#)("0-9A-Z").[derived\(\)](#), 3, 3)
- [bounded2_p_t hours_p](#) ([uint2_p](#).[derived\(\)](#), 0u, 23u)
- [bounded2_p_t minutes_p](#) ([uint2_p](#).[derived\(\)](#), 0u, 59u)
- [bounded2_p_t seconds_p](#) ([uint2_p](#).[derived\(\)](#), 0u, 59u)
- [chset_t cabin_code_p](#) ("A-Z")
- [repeat_p_t class_code_list_p](#) ([chset_t](#)("A-Z").[derived\(\)](#), 1, 26)

Variables

- [int1_p_t int1_p](#)
- [uint2_p_t uint2_p](#)
- [uint4_p_t uint4_p](#)
- [uint1_4_p_t uint1_4_p](#)
- [int1_p_t family_code_p](#)

23.4.1 Function Documentation

23.4.1.1 **repeat_p_t** AIRINV::ScheduleParserHelper::airline_code_p ([chset_t](#)("0-9A-Z").[derived\(\)](#) , 2 , 3)

Airline Code Parser: [repeat_p](#)(2,3)[[chset_p](#)("0-9A-Z")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.2 **bounded1_4_p_t** AIRINV::ScheduleParserHelper::flight_number_p ([uint1_4_p](#).[derived\(\)](#), 0u , 9999u)

Flight Number Parser: [limit_d](#)(0u, 9999u)[[uint1_4_p](#)]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.3 **bounded4_p_t** AIRINV::ScheduleParserHelper::year_p (uint4_p. *derived()*, 2000u , 2099u)

Year Parser: limit_d(2000u, 2099u)[uint4_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.4 **bounded2_p_t** AIRINV::ScheduleParserHelper::month_p (uint2_p. *derived()*, 1u , 12u)

Month Parser: limit_d(1u, 12u)[uint2_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.5 **bounded2_p_t** AIRINV::ScheduleParserHelper::day_p (uint2_p. *derived()*, 1u , 31u)

Day Parser: limit_d(1u, 31u)[uint2_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.6 **repeat_p_t** AIRINV::ScheduleParserHelper::dow_p (chset_t("0-1").*derived()*.*derived()* , 7 , 7)

DOW (Day-Of-the-Week) Parser: repeat_p(7)[chset_p("0-1")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.7 **repeat_p_t** AIRINV::ScheduleParserHelper::airport_p (chset_t("0-9A-Z").*derived()* , 3 , 3)

Airport Parser: repeat_p(3)[chset_p("0-9A-Z")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.8 **bounded2_p_t** AIRINV::ScheduleParserHelper::hours_p (uint2_p. *derived()*, 0u , 23u)

Hour Parser: limit_d(0u, 23u)[uint2_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.9 **bounded2_p_t** AIRINV::ScheduleParserHelper::minutes_p (uint2_p. *derived()*, 0u , 59u)

Minute Parser: limit_d(0u, 59u)[uint2_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.10 **bounded2_p_t** AIRINV::ScheduleParserHelper::seconds_p (uint2_p. *derived()*, 0u , 59u)

Second Parser: limit_d(0u, 59u)[uint2_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition\(\)](#).

23.4.1.11 `chset_t` `AIRINV::ScheduleParserHelper::cabin_code_p ("A-Z")`

Cabin Code Parser: `chset_p("A-Z")`

Referenced by `AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition()`.

23.4.1.12 `repeat_p_t` `AIRINV::ScheduleParserHelper::class_code_list_p (chset_t("A-Z").derived(), 1, 26)`

Class Code List Parser: `repeat_p(1,26)[chset_p("A-Z")]`

Referenced by `AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition()`.

23.4.2 Variable Documentation

23.4.2.1 `int1_p_t` `AIRINV::ScheduleParserHelper::int1_p`

1-digit-integer parser

Definition at line 409 of file `ScheduleParserHelper.cpp`.

Referenced by `AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition()`.

23.4.2.2 `uint2_p_t` `AIRINV::ScheduleParserHelper::uint2_p`

2-digit-integer parser

Definition at line 412 of file `ScheduleParserHelper.cpp`.

23.4.2.3 `uint4_p_t` `AIRINV::ScheduleParserHelper::uint4_p`

4-digit-integer parser

Definition at line 415 of file `ScheduleParserHelper.cpp`.

23.4.2.4 `uint1_4_p_t` `AIRINV::ScheduleParserHelper::uint1_4_p`

Up-to-4-digit-integer parser

Definition at line 418 of file `ScheduleParserHelper.cpp`.

23.4.2.5 `int1_p_t` `AIRINV::ScheduleParserHelper::family_code_p`

Family code parser

Definition at line 454 of file `ScheduleParserHelper.cpp`.

Referenced by `AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition()`.

23.5 stdair Namespace Reference

Forward declarations.

Classes

- struct [BomPropertyTree](#)

23.5.1 Detailed Description

Forward declarations.

23.6 swift Namespace Reference

The wrapper namespace.

Classes

- class [SKeymap](#)
The readline keymap wrapper.
- class [SReadline](#)
The readline library wrapper.

23.6.1 Detailed Description

The wrapper namespace. The namespace is also used for other library elements.

24 Class Documentation

24.1 AIRINV::AIRINV_Master_Service Class Reference

Interface for the [AIRINV](#) Services.

```
#include <airinv/AIRINV_Master_Service.hpp>
```

Public Member Functions

- [AIRINV_Master_Service](#) (const stdair::BasLogParams &, const stdair::BasDBParams &)
- [AIRINV_Master_Service](#) (const stdair::BasLogParams &)
- [AIRINV_Master_Service](#) (stdair::STDAIR_ServicePtr_T)
- void [parseAndLoad](#) (const stdair::Filename_T &iInventoryFilename)
- void [parseAndLoad](#) (const stdair::Filename_T &iScheduleFilename, const stdair::Filename_T &iODInputFilename, const AIRRAC::YieldFilePath &iYieldFilename)
- [~AIRINV_Master_Service](#) ()
- void [initSnapshotAndRMEvents](#) (const stdair::Date_T &, const stdair::Date_T &)

- void [buildSampleBom](#) ()
- void [calculateAvailability](#) (stdair::TravelSolutionStruct &, const stdair::PartnershipTechnique &)
- bool [sell](#) (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- bool [cancel](#) (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- void [takeSnapshots](#) (const stdair::SnapshotStruct &)
- void [optimise](#) (const stdair::RMEventStruct &, const stdair::ForecastingMethod &, const stdair::PartnershipTechnique &)
- std::string [jsonExport](#) (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- std::string [list](#) (const stdair::AirlineCode_T &iAirlineCode="all", const stdair::FlightNumber_T &iFlightNumber=0) const
- bool [check](#) (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- std::string [csvDisplay](#) () const
- std::string [csvDisplay](#) (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const

24.1.1 Detailed Description

Interface for the [AIRINV](#) Services.

24.1.2 Constructor & Destructor Documentation

24.1.2.1 AIRINV::AIRINV_Master_Service::AIRINV_Master_Service (const stdair::BasLogParams & iLogParams, const stdair::BasDBParams & iDBParams)

Constructor.

The `initSlaveAirinvService()` method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Moreover, database connection parameters are given, so that a session can be created on the corresponding database.

Parameters

<i>const</i>	stdair::BasLogParams& Parameters for the output log stream.
<i>const</i>	stdair::BasDBParams& Parameters for the database access.

Definition at line 44 of file [AIRINV_Master_Service.cpp](#).

24.1.2.2 AIRINV::AIRINV_Master_Service::AIRINV_Master_Service (const stdair::BasLogParams & iLogParams)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Parameters

<i>const</i>	stdair::BasLogParams& Parameters for the output log stream.
--------------	---

Definition at line 66 of file [AIRINV_Master_Service.cpp](#).

24.1.2.3 AIRINV::AIRINV_Master_Service::AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the [AIRINV_Master_Service](#) is itself being initialised by another library service such as SIMCRS_Service).

Parameters

<i>stdair::STDAIR_ServicePtr_T</i>	Reference on the STDAIR service.
------------------------------------	----------------------------------

Definition at line 87 of file [AIRINV_Master_Service.cpp](#).

24.1.2.4 AIRINV::AIRINV_Master_Service::~~AIRINV_Master_Service ()

Destructor.

Definition at line 103 of file [AIRINV_Master_Service.cpp](#).

24.1.3 Member Function Documentation

24.1.3.1 void AIRINV::AIRINV_Master_Service::parseAndLoad (const stdair::Filename_T & iInventoryFilename)

Parse the inventory dump and load it into memory.

The CSV file, describing the airline inventory for the simulator, is parsed and instantiated in memory accordingly.

Parameters

<i>const</i>	stdair::Filename_T& Filename of the input demand file.
--------------	--

Definition at line 204 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::parseAndLoad\(\)](#).

24.1.3.2 void AIRINV::AIRINV_Master_Service::parseAndLoad (const stdair::Filename_T & *iScheduleFilename*, const stdair::Filename_T & *iODInputFilename*, const AIRRAC::YieldFilePath & *iYieldFilename*)

Parse the schedule and O&D input files, and load them into memory.

The CSV files, describing the airline schedule and the O&Ds for the simulator, are parsed and instantiated in memory accordingly.

Parameters

<i>const</i>	stdair::Filename_T& Filename of the input schedule file.
<i>const</i>	stdair::Filename_T& Filename of the input O&D file.
<i>const</i>	AIRRAC::YieldFilePath& Filename of the input yield file.

Definition at line 227 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::parseAndLoad\(\)](#).

24.1.3.3 void AIRINV::AIRINV_Master_Service::initSnapshotAndRMEvents (const stdair::Date_T & *iStartDate*, const stdair::Date_T & *iEndDate*)

Initialise the snapshot and RM events for the inventories.

Parameters

<i>const</i>	stdiar::Date_T& Parameters for the start date.
<i>const</i>	stdiar::Date_T& Parameters for the end date.

Definition at line 429 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::initRMEvents\(\)](#).

24.1.3.4 void AIRINV::AIRINV_Master_Service::buildSampleBom ()

Build a sample BOM tree, and attach it to the BomRoot instance.

The BOM tree is based on two actual inventories (one for BA, another for AF). Each inventory contains one flight. One of those flights has two legs (and therefore three segments).

Definition at line 252 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::buildSampleBom\(\)](#).

24.1.3.5 void AIRINV::AIRINV_Master_Service::calculateAvailability (stdair::TravelSolutionStruct & *ioTravelSolution*, const stdair::PartnershipTechnique & *iPartnershipTechnique*)

Compute the availability for the given travel solution.

Definition at line 468 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::calculateAvailability\(\)](#).

24.1.3.6 bool AIRINV::AIRINV_Master_Service::sell (const std::string & *iSegmentDateKey*, const stdair::ClassCode_T & *iClassCode*, const stdair::PartySize_T & *iPartySize*)

Register a booking.

Parameters

const	std::string & Key for the segment on which the sale is made.
const	stdair::ClassCode_T& Class code where the sale is made.
const	stdair::PartySize_T& Party size.

Returns

bool Whether or not the sale was successfull

Definition at line 499 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::sell\(\)](#).

24.1.3.7 bool AIRINV::AIRINV_Master_Service::cancel (const std::string & *iSegmentDateKey*, const stdair::ClassCode_T & *iClassCode*, const stdair::PartySize_T & *iPartySize*)

Register a cancellation.

Parameters

const	std::string & Key for the segment on which the cancellation is made.
const	stdair::ClassCode_T& Class code where the sale is made.
const	stdair::PartySize_T& Party size.

Returns

bool Whether or not the sale was successfull

Definition at line 541 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::cancel\(\)](#).

24.1.3.8 void AIRINV::AIRINV_Master_Service::takeSnapshots (const stdair::SnapshotStruct & *iSnapshot*)

Take inventory snapshots.

Definition at line 584 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::takeSnapshots\(\)](#).

24.1.3.9 `void AIRINV::AIRINV_Master_Service::optimise (const stdair::RMEventStruct & iRMEvent, const stdair::ForecastingMethod & iForecastingMethod, const stdair::PartnershipTechnique & iPartnershipTechnique)`

Optimise (revenue management) an flight-date/network-date

Definition at line 610 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::optimise\(\)](#).

24.1.3.10 `std::string AIRINV::AIRINV_Master_Service::jsonExport (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Recursively dump, in the returned string and in JSON format, the flight-date corresponding to the parameters given as input.

Parameters

<i>const</i>	stdair::AirlineCode_T& Airline code of the flight to dump.
<i>const</i>	stdair::FlightNumber_T& Flight number of the flight to dump.
<i>const</i>	stdair::Date_T& Departure date of the flight to dump.

Returns

[std::string](#) Output string in which the BOM tree is JSON-ified.

Definition at line 304 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::jsonExport\(\)](#).

24.1.3.11 `std::string AIRINV::AIRINV_Master_Service::list (const stdair::AirlineCode_T & iAirlineCode = "all", const stdair::FlightNumber_T & iFlightNumber = 0) const`

Display the list of flight-dates (contained within the BOM tree) corresponding to the parameters given as input.

Parameters

<i>const</i>	AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (the default), all the inventories will be displayed.
<i>const</i>	FlightNumber_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

Returns

[std::string](#) Output string in which the BOM tree is logged/dumped.

Definition at line 330 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::list\(\)](#).

24.1.3.12 `bool AIRINV::AIRINV_Master_Service::check (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Check whether the given flight-date is a valid one.

Parameters

<i>const</i>	stdair::AirlineCode_T& Airline code of the flight to check.
<i>const</i>	stdair::FlightNumber_T& Flight number of the flight to check.
<i>const</i>	stdair::Date_T& Departure date of the flight to check.

Returns

bool Whether or not the given flight date is valid.

Definition at line 355 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::check\(\)](#).

24.1.3.13 `std::string AIRINV::AIRINV_Master_Service::csvDisplay () const`

Recursively display (dump in the returned string) the objects of the BOM tree.

Returns

[std::string](#) Output string in which the BOM tree is logged/dumped.

Definition at line 380 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::csvDisplay\(\)](#).

24.1.3.14 `std::string AIRINV::AIRINV_Master_Service::csvDisplay (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Recursively display (dump in the returned string) the flight-date corresponding to the parameters given as input.

Parameters

<i>const</i>	stdair::AirlineCode_T& Airline code of the flight to display.
<i>const</i>	stdair::FlightNumber_T& Flight number of the flight to display.
<i>const</i>	stdair::Date_T& Departure date of the flight to display.

Returns

[std::string](#) Output string in which the BOM tree is logged/dumped.

Definition at line 403 of file [AIRINV_Master_Service.cpp](#).

References [AIRINV::AIRINV_Service::csvDisplay\(\)](#).

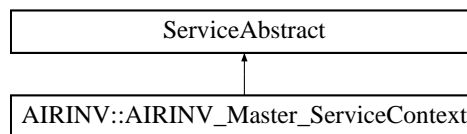
The documentation for this class was generated from the following files:

- [airinv/AIRINV_Master_Service.hpp](#)
- [airinv/service/AIRINV_Master_Service.cpp](#)

24.2 AIRINV::AIRINV_Master_ServiceContext Class Reference

```
#include <airinv/service/AIRINV_Master_ServiceContext.h>
```

Inheritance diagram for AIRINV::AIRINV_Master_ServiceContext:



Friends

- class [AIRINV_Master_Service](#)
- class [FacAirinvMasterServiceContext](#)

24.2.1 Detailed Description

Class holding the context of the Airinv services.

24.2.2 Friends And Related Function Documentation

24.2.2.1 friend class AIRINV_Master_Service [friend]

The [AIRINV_Master_Service](#) class should be the sole class to get access to Service-Context content: general users do not want to bother with a context interface.

Definition at line 32 of file [AIRINV_Master_ServiceContext.hpp](#).

24.2.2.2 friend class FacAirinvMasterServiceContext [friend]

Definition at line 33 of file [AIRINV_Master_ServiceContext.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/service/AIRINV_Master_ServiceContext.hpp](#)
- [airinv/service/AIRINV_Master_ServiceContext.cpp](#)

24.3 AIRINV::AIRINV_Service Class Reference

Interface for the [AIRINV](#) Services.

```
#include <airinv/AIRINV_Service.hpp>
```

Public Member Functions

- [AIRINV_Service](#) (const stdair::BasLogParams &, const stdair::BasDBParams &)
- [AIRINV_Service](#) (const stdair::BasLogParams &)
- [AIRINV_Service](#) (stdair::STDAIR_ServicePtr_T)
- void [parseAndLoad](#) (const stdair::Filename_T &iInventoryFilename)
- void [parseAndLoad](#) (const stdair::Filename_T &iScheduleFilename, const stdair::Filename_T &iODInputFilename, const AIRRAC::YieldFilePath &iYieldFilename)
- [~AIRINV_Service](#) ()
- void [buildSampleBom](#) ()
- stdair::RMEventList_T [initRMEvents](#) (const stdair::Date_T &iStartDate, const stdair::Date_T &iEndDate)
- void [calculateAvailability](#) (stdair::TravelSolutionStruct &, const stdair::PartnershipTechnique &)
- bool [sell](#) (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- bool [cancel](#) (const std::string &iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- void [takeSnapshots](#) (const stdair::AirlineCode_T &, const stdair::DateTime_T &)
- void [optimise](#) (const stdair::AirlineCode_T &, const stdair::KeyDescription_T &, const stdair::DateTime_T &, const stdair::ForecastingMethod &, const stdair::PartnershipTechnique &)
- [std::string jsonExport](#) (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- [std::string list](#) (const stdair::AirlineCode_T &iAirlineCode="all", const stdair::FlightNumber_T &iFlightNumber=0) const
- bool [check](#) (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const
- [std::string csvDisplay](#) () const
- [std::string csvDisplay](#) (const stdair::AirlineCode_T &, const stdair::FlightNumber_T &, const stdair::Date_T &iDepartureDate) const

24.3.1 Detailed Description

Interface for the [AIRINV](#) Services.

24.3.2 Constructor & Destructor Documentation

24.3.2.1 AIRINV::AIRINV_Service::AIRINV_Service (const stdair::BasLogParams & *iLogParams*, const stdair::BasDBParams & *iDBParams*)

Constructor.

The `initAirInvService()` method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Moreover, database connection parameters are given, so that a session can be created on the corresponding database.

Parameters

<i>const</i>	stdair::BasLogParams& Parameters for the output log stream.
<i>const</i>	stdair::BasDBParams& Parameters for the database access.

Definition at line 74 of file [AIRINV_Service.cpp](#).

24.3.2.2 AIRINV::AIRINV_Service::AIRINV_Service (const stdair::BasLogParams & *iLogParams*)

Constructor.

The `initAirInvService()` method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Parameters

<i>const</i>	stdair::BasLogParams& Parameters for the output log stream.
--------------	---

Definition at line 48 of file [AIRINV_Service.cpp](#).

24.3.2.3 AIRINV::AIRINV_Service::AIRINV_Service (stdair::STDAIR_ServicePtr_T *ioSTDAIR_Service_ptr*)

Constructor.

The `initAirInvService()` method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the [AIRINV_Master_Service](#) is itself being initialised by another library service such as `SIMCRS_Service`).

Parameters

<i>stdair::STD-AIR-ServicePtr_T</i>	Reference on the STDAIR service.
<i>const</i>	stdair::Filename_T& Filename of the input inventory file.

Definition at line 101 of file [AIRINV_Service.cpp](#).

24.3.2.4 AIRINV::AIRINV_Service::~~AIRINV_Service ()

Destructor.

Definition at line 124 of file [AIRINV_Service.cpp](#).

24.3.3 Member Function Documentation

24.3.3.1 void AIRINV::AIRINV_Service::parseAndLoad (const stdair::Filename_T & *iInventoryFilename*)

Parse the inventory dump and load it into memory.

The CSV file, describing the airline inventory for the simulator, is parsed and instantiated in memory accordingly.

Parameters

<i>const</i>	stdair::Filename_T& Filename of the input demand file.
--------------	--

Definition at line 251 of file [AIRINV_Service.cpp](#).

References [AIRINV::InventoryParser::buildInventory\(\)](#).

Referenced by [AIRINV::AIRINV_Master_Service::parseAndLoad\(\)](#).

24.3.3.2 void AIRINV::AIRINV_Service::parseAndLoad (const stdair::Filename_T & *iScheduleFilename*, const stdair::Filename_T & *iODInputFilename*, const AIRRAC::YieldFilePath & *iYieldFilename*)

Parse the schedule and O&D input files, and load them into memory.

The CSV files, describing the airline schedule and the O&Ds for the simulator, are parsed and instantiated in memory accordingly.

Parameters

<i>const</i>	stdair::Filename_T& Filename of the input schedule file.
<i>const</i>	stdair::Filename_T& Filename of the input O&D file.
<i>const</i>	AIRRAC::YieldFilePath& Filename of the input yield file.

Definition at line 266 of file [AIRINV_Service.cpp](#).

References [AIRINV::ScheduleParser::generateInventories\(\)](#).

24.3.3.3 void AIRINV::AIRINV_Service::buildSampleBom ()

Build a sample BOM tree, and attach it to the BomRoot instance.

The BOM tree is based on two actual inventories (one for BA, another for AF). Each inventory contains one flight. One of those flights has two legs (and therefore three segments).

Definition at line 290 of file [AIRINV_Service.cpp](#).

References [AIRINV::InventoryManager::buildSimilarSegmentCabinSets\(\)](#).

Referenced by [AIRINV::AIRINV_Master_Service::buildSampleBom\(\)](#).

24.3.3.4 stdair::RMEventList_T AIRINV::AIRINV_Service::initRMEvents (const stdair::Date_T & iStartDate, const stdair::Date_T & iEndDate)

Initialise the RM events for the inventory.

Parameters

<i>const</i>	stdair::Date_T& Parameters for the start date.
<i>const</i>	stdair::Date_T& Parameters for the end date.

Definition at line 493 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::initSnapshotAndRMEvents\(\)](#).

24.3.3.5 void AIRINV::AIRINV_Service::calculateAvailability (stdair::TravelSolutionStruct & ioTravelSolution, const stdair::PartnershipTechnique & iPartnershipTechnique)

Compute the availability for the given travel solution.

Definition at line 525 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::calculateAvailability\(\)](#).

24.3.3.6 bool AIRINV::AIRINV_Service::sell (const std::string & iSegmentDateKey, const stdair::ClassCode_T & iClassCode, const stdair::PartySize_T & iPartySize)

Register a booking.

Parameters

<i>const</i>	std::string& Key for the segment on which the sale is made
<i>const</i>	stdair::ClassCode_T& Class code where the sale is made
<i>const</i>	stdair::PartySize_T& Party size

Returns

bool Whether or not the sale was successful

Definition at line 552 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::sell\(\)](#).

24.3.3.7 `bool AIRINV::AIRINV_Service::cancel (const std::string & iSegmentDateKey, const stdair::ClassCode_T & iClassCode, const stdair::PartySize_T & iPartySize)`

Register a cancellation.

Parameters

<i>const</i>	<code>std::string</code> & Key for the segment on which the cancellation is made
<i>const</i>	<code>stdair::ClassCode_T</code> & Class code where the sale is made
<i>const</i>	<code>stdair::PartySize_T</code> & Party size

Returns

`bool` Whether or not the sale was successfull

Definition at line 593 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::cancel\(\)](#).

24.3.3.8 `void AIRINV::AIRINV_Service::takeSnapshots (const stdair::AirlineCode_T & iAirlineCode, const stdair::DateTime_T & iSnapshotTime)`

Take inventory snapshots.

Definition at line 637 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::takeSnapshots\(\)](#).

24.3.3.9 `void AIRINV::AIRINV_Service::optimise (const stdair::AirlineCode_T & iAirlineCode, const stdair::KeyDescription_T & iFDDDescription, const stdair::DateTime_T & iRMEEventTime, const stdair::ForecastingMethod & iForecastingMethod, const stdair::PartnershipTechnique & iPartnershipTechnique)`

Optimise (revenue management) an flight-date/network-date

Definition at line 664 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::optimise\(\)](#).

24.3.3.10 `std::string AIRINV::AIRINV_Service::jsonExport (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Recursively dump, in the returned string and in JSON format, the flight-date corresponding to the parameters given as input.

Parameters

<i>const</i>	<code>stdair::AirlineCode_T</code> & Airline code of the flight to dump.
<i>const</i>	<code>stdair::FlightNumber_T</code> & Flight number of the flight to dump.
<i>const</i>	<code>stdair::Date_T</code> & Departure date of the flight to dump.

Returns

[std::string](#) Output string in which the BOM tree is JSON-ified.

Definition at line 376 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::jsonExport\(\)](#).

24.3.3.11 `std::string AIRINV::AIRINV_Service::list (const stdair::AirlineCode_T & iAirlineCode = "all", const stdair::FlightNumber_T & iFlightNumber = 0) const`

Display the list of flight-dates (contained within the BOM tree) corresponding to the parameters given as input.

Parameters

<i>const</i>	AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (the default), all the inventories will be displayed.
<i>const</i>	FlightNumber_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

Returns

[std::string](#) Output string in which the BOM tree is logged/dumped.

Definition at line 400 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::list\(\)](#).

24.3.3.12 `bool AIRINV::AIRINV_Service::check (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Check whether the given flight-date is a valid one.

Parameters

<i>const</i>	stdair::AirlineCode_T& Airline code of the flight to check.
<i>const</i>	stdair::FlightNumber_T& Flight number of the flight to check.
<i>const</i>	stdair::Date_T& Departure date of the flight to check.

Returns

bool Whether or not the given flight date is valid.

Definition at line 424 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::check\(\)](#).

24.3.3.13 `std::string AIRINV::AIRINV_Service::csvDisplay () const`

Recursively display (dump in the returned string) the objects of the BOM tree.

Returns

[std::string](#) Output string in which the BOM tree is logged/dumped.

Definition at line 448 of file [AIRINV_Service.cpp](#).

Referenced by [AIRINV::AIRINV_Master_Service::csvDisplay\(\)](#).

24.3.3.14 `std::string AIRINV::AIRINV_Service::csvDisplay (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Recursively display (dump in the returned string) the flight-date corresponding to the parameters given as input.

Parameters

<i>const</i>	stdair::AirlineCode_T& Airline code of the flight to display
<i>const</i>	stdair::FlightNumber_T& Flight number of the flight to display.
<i>const</i>	stdair::Date_T& Departure date of the flight to display.

Returns

[std::string](#) Output string in which the BOM tree is logged/dumped.

Definition at line 469 of file [AIRINV_Service.cpp](#).

The documentation for this class was generated from the following files:

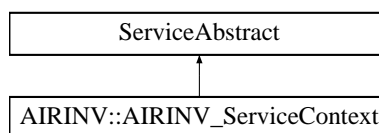
- [airinv/AIRINV_Service.hpp](#)
- [airinv/service/AIRINV_Service.cpp](#)

24.4 AIRINV::AIRINV_ServiceContext Class Reference

Class holding the context of the AirInv services.

```
#include <airinv/service/AIRINV_ServiceContext.hpp>
```

Inheritance diagram for AIRINV::AIRINV_ServiceContext:



Friends

- class [AIRINV_Service](#)
- class [FacAirinvServiceContext](#)

24.4.1 Detailed Description

Class holding the context of the AirInv services.

24.4.2 Friends And Related Function Documentation

24.4.2.1 friend class AIRINV_Service [friend]

The [AIRINV_Service](#) class should be the sole class to get access to ServiceContext content: general users do not want to bother with a context interface.

Definition at line 32 of file [AIRINV_ServiceContext.hpp](#).

24.4.2.2 friend class FacAirinvServiceContext [friend]

Definition at line 33 of file [AIRINV_ServiceContext.hpp](#).

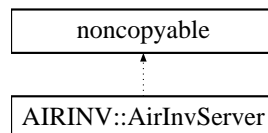
The documentation for this class was generated from the following files:

- [airinv/service/AIRINV_ServiceContext.hpp](#)
- [airinv/service/AIRINV_ServiceContext.cpp](#)

24.5 AIRINV::AirInvServer Class Reference

```
#include <airinv/server/AirInvServer.hpp>
```

Inheritance diagram for AIRINV::AirInvServer:



Public Member Functions

- [AirInvServer](#) (const [std::string](#) &address, const [std::string](#) &port, const stdair::AirlineCode_T &iAirlineCode, std::size_t thread_pool_size)
- [~AirInvServer](#) ()
- void [run](#) ()
- void [stop](#) ()

24.5.1 Detailed Description

The top-level class of the AirInv server.

24.5.2 Constructor & Destructor Documentation

24.5.2.1 `AIRINV::AirInvServer::AirInvServer (const std::string & address, const std::string & port, const std::air::AirlineCode_T & iAirlineCode, std::size_t thread_pool_size)`

Constructor.

Construct the server to listen on the specified TCP address and port, and serve up files from the given directory.

Definition at line 20 of file [AirInvServer_ASIO.cpp](#).

24.5.2.2 `AIRINV::AirInvServer::~~AirInvServer ()`

Destructor.

Definition at line 46 of file [AirInvServer_ASIO.cpp](#).

24.5.3 Member Function Documentation

24.5.3.1 `void AIRINV::AirInvServer::run ()`

Run the server's io_service loop.

Definition at line 50 of file [AirInvServer_ASIO.cpp](#).

Referenced by [main\(\)](#).

24.5.3.2 `void AIRINV::AirInvServer::stop ()`

Stop the server.

Definition at line 69 of file [AirInvServer_ASIO.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/server/AirInvServer.hpp](#)
- [airinv/server/AirInvServer_ASIO.cpp](#)

24.6 `std::allocator` Class Reference

STL class.

24.6.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.7 `std::auto_ptr` Class Reference

STL class.

24.7.1 Detailed Description

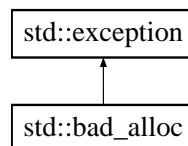
STL class.

The documentation for this class was generated from the following files:

24.8 `std::bad_alloc` Class Reference

STL class.

Inheritance diagram for `std::bad_alloc`:



24.8.1 Detailed Description

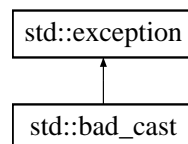
STL class.

The documentation for this class was generated from the following file:

24.9 `std::bad_cast` Class Reference

STL class.

Inheritance diagram for `std::bad_cast`:



24.9.1 Detailed Description

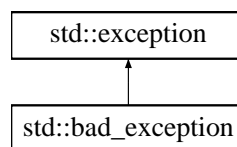
STL class.

The documentation for this class was generated from the following file:

24.10 **std::bad_exception Class Reference**

STL class.

Inheritance diagram for std::bad_exception:



24.10.1 Detailed Description

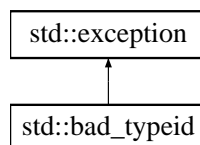
STL class.

The documentation for this class was generated from the following file:

24.11 **std::bad_typeid Class Reference**

STL class.

Inheritance diagram for std::bad_typeid:



24.11.1 Detailed Description

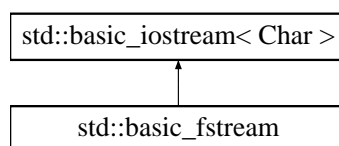
STL class.

The documentation for this class was generated from the following file:

24.12 **std::basic_fstream Class Reference**

STL class.

Inheritance diagram for std::basic_fstream:



24.12.1 Detailed Description

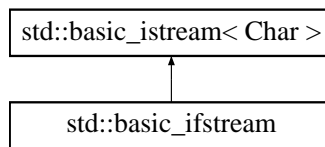
STL class.

The documentation for this class was generated from the following file:

24.13 **std::basic_ifstream Class Reference**

STL class.

Inheritance diagram for std::basic_ifstream:



24.13.1 Detailed Description

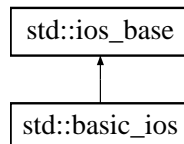
STL class.

The documentation for this class was generated from the following file:

24.14 **std::basic_ios Class Reference**

STL class.

Inheritance diagram for std::basic_ios:



24.14.1 Detailed Description

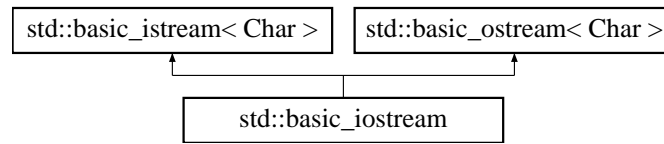
STL class.

The documentation for this class was generated from the following file:

24.15 **std::basic_iostream Class Reference**

STL class.

Inheritance diagram for std::basic_iostream:



24.15.1 Detailed Description

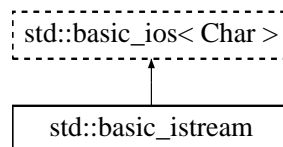
STL class.

The documentation for this class was generated from the following file:

24.16 std::basic_istream Class Reference

STL class.

Inheritance diagram for `std::basic_istream`:



24.16.1 Detailed Description

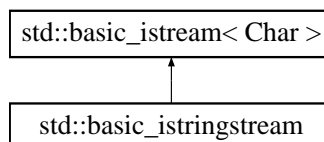
STL class.

The documentation for this class was generated from the following file:

24.17 std::basic_istringstream Class Reference

STL class.

Inheritance diagram for `std::basic_istringstream`:



24.17.1 Detailed Description

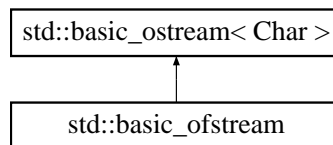
STL class.

The documentation for this class was generated from the following file:

24.18 std::basic_ofstream Class Reference

STL class.

Inheritance diagram for std::basic_ofstream:



24.18.1 Detailed Description

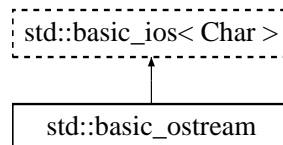
STL class.

The documentation for this class was generated from the following file:

24.19 std::basic_ostream Class Reference

STL class.

Inheritance diagram for std::basic_ostream:



24.19.1 Detailed Description

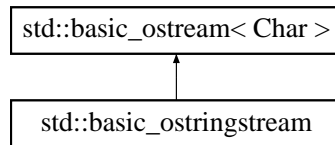
STL class.

The documentation for this class was generated from the following file:

24.20 std::basic_ostringstream Class Reference

STL class.

Inheritance diagram for std::basic_ostringstream:



24.20.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.21 `std::basic_string` Class Reference

STL class.

Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.21.1 Detailed Description

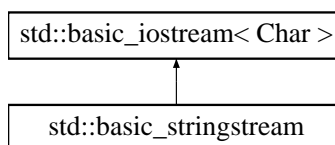
STL class.

The documentation for this class was generated from the following file:

24.22 `std::basic_stringstream` Class Reference

STL class.

Inheritance diagram for `std::basic_stringstream`:



24.22.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.23 `std::bitset` Class Reference

STL class.

24.23.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.24 `AIRINV::BomAbstract` Class Reference

```
#include <airinv/bom/BomAbstract.hpp>
```

Public Member Functions

- virtual void [toStream](#) ([std::ostream](#) &ioOut) const =0
- virtual void [fromStream](#) ([std::istream](#) &ioIn)=0
- virtual [std::string](#) [toString](#) () const =0
- virtual [std::string](#) [describeKey](#) () const =0
- virtual [std::string](#) [describeShortKey](#) () const =0

Protected Member Functions

- [BomAbstract](#) ()
- [BomAbstract](#) (const [BomAbstract](#) &)
- virtual [~BomAbstract](#) ()

Friends

- class [FacBomAbstract](#)

24.24.1 Detailed Description

Base class for the Business Object Model (BOM) layer.

24.24.2 Constructor & Destructor Documentation

24.24.2.1 AIRINV::BomAbstract::BomAbstract () [inline, protected]

Protected Default Constructor to ensure this class is abstract.

Definition at line 40 of file [BomAbstract.hpp](#).

24.24.2.2 AIRINV::BomAbstract::BomAbstract (const BomAbstract &) [inline, protected]

Definition at line 41 of file [BomAbstract.hpp](#).

24.24.2.3 virtual AIRINV::BomAbstract::~~BomAbstract () [inline, protected, virtual]

Destructor.

Definition at line 44 of file [BomAbstract.hpp](#).

24.24.3 Member Function Documentation

24.24.3.1 virtual void AIRINV::BomAbstract::toStream (std::ostream & ioOut) const [pure virtual]

Dump a Business Object into an output stream.

Parameters

<i>ostream&</i>	the output stream.
---------------------	--------------------

24.24.3.2 virtual void AIRINV::BomAbstract::fromStream (std::istream & ioin) [pure virtual]

Read a Business Object from an input stream.

Parameters

<i>istream&</i>	the input stream.
---------------------	-------------------

Referenced by [operator>>\(\)](#).

24.24.3.3 virtual std::string AIRINV::BomAbstract::toString () const [pure virtual]

Get the serialised version of the Business Object.

24.24.3.4 virtual std::string AIRINV::BomAbstract::describeKey () const [pure virtual]

Get a string describing the whole key (differentiating two objects at any level).

24.24.3.5 `virtual std::string AIRINV::BomAbstract::describeShortKey () const` `[pure virtual]`

Get a string describing the short key (differentiating two objects at the same level).

24.24.4 Friends And Related Function Documentation

24.24.4.1 `friend class FacBomAbstract` `[friend]`

Definition at line 15 of file [BomAbstract.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/bom/BomAbstract.hpp](#)

24.25 stdair::BomPropertyTree Struct Reference

```
#include <airinv/server/BomPropertyTree.hpp>
```

Public Member Functions

- `void load` (const `std::string` &`iBomTree`)
- `std::string save` () const

Public Attributes

- `stdair::AirlineCode_T` `_airlineCode`
- `stdair::FlightNumber_T` `_flightNumber`
- `stdair::Date_T` `_departureDate`
- `std::set< stdair::AirportCode_T >` `_airportCodeList`

24.25.1 Detailed Description

Structure representing a list of airports.

24.25.2 Member Function Documentation

24.25.2.1 `void stdair::BomPropertyTree::load (const std::string & iBomTree)`

Update the current BOM tree (*this) with the parsed stream, which is JSON formatted.

Definition at line 17 of file [BomPropertyTree.cpp](#).

References [_airlineCode](#), [_flightNumber](#), and [_departureDate](#).

24.25.2.2 `std::string stdair::BomPropertyTree::save () const`

Dump the BOM tree (*this) into the stream with a JSON format.

Definition at line 60 of file [BomPropertyTree.cpp](#).

References [_airlineCode](#), [_flightNumber](#), [_departureDate](#), and [_airportCodeList](#).

24.25.3 Member Data Documentation

24.25.3.1 `stdair::AirlineCode_T stdair::BomPropertyTree::_airlineCode`

Airline code.

Definition at line 33 of file [BomPropertyTree.hpp](#).

Referenced by [load\(\)](#), and [save\(\)](#).

24.25.3.2 `stdair::FlightNumber_T stdair::BomPropertyTree::_flightNumber`

Flight number.

Definition at line 36 of file [BomPropertyTree.hpp](#).

Referenced by [load\(\)](#), and [save\(\)](#).

24.25.3.3 `stdair::Date_T stdair::BomPropertyTree::_departureDate`

Departure date.

Definition at line 39 of file [BomPropertyTree.hpp](#).

Referenced by [load\(\)](#), and [save\(\)](#).

24.25.3.4 `std::set<stdair::AirportCode_T> stdair::BomPropertyTree::_airportCodeList`

Just to have a list, for now.

Definition at line 42 of file [BomPropertyTree.hpp](#).

Referenced by [save\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/server/BomPropertyTree.hpp](#)
- [airinv/server/BomPropertyTree.cpp](#)

24.26 AIRINV::BomRootHelper Class Reference

```
#include <airinv/bom/BomRootHelper.hpp>
```

Static Public Member Functions

- static void [fillFromRouting](#) (const stdair::BomRoot &)

24.26.1 Detailed Description

Class representing the actual business functions for an airline bom root.

24.26.2 Member Function Documentation

24.26.2.1 void AIRINV::BomRootHelper::fillFromRouting (const stdair::BomRoot & *iBomRoot*)
[static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 16 of file [BomRootHelper.cpp](#).

Referenced by [AIRINV::InventoryManager::createDirectAccesses\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/bom/BomRootHelper.hpp](#)
- [airinv/bom/BomRootHelper.cpp](#)

24.27 AIRINV::BookingClassHelper Class Reference

```
#include <airinv/bom/BookingClassHelper.hpp>
```

24.27.1 Detailed Description

Class representing the actual business functions for an airline booking class.

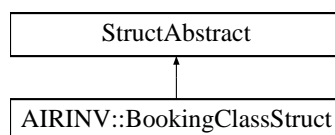
The documentation for this class was generated from the following file:

- [airinv/bom/BookingClassHelper.hpp](#)

24.28 AIRINV::BookingClassStruct Struct Reference

```
#include <airinv/bom/BookingClassStruct.hpp>
```

Inheritance diagram for AIRINV::BookingClassStruct:



Public Member Functions

- stdair::ClassCode_T [getFullSubclassCode](#) () const
- void [fill](#) (stdair::BookingClass &) const
- const [std::string describe](#) () const
- [BookingClassStruct](#) ()

Public Attributes

- stdair::ClassCode_T [_classCode](#)
- stdair::SubclassCode_T [_subclassCode](#)
- stdair::ClassCode_T [_parentClassCode](#)
- stdair::SubclassCode_T [_parentSubclassCode](#)
- stdair::AuthorizationLevel_T [_cumulatedProtection](#)
- stdair::AuthorizationLevel_T [_protection](#)
- stdair::NbOfSeats_T [_nego](#)
- stdair::OverbookingRate_T [_noShowPercentage](#)
- stdair::OverbookingRate_T [_overbookingPercentage](#)
- stdair::NbOfBookings_T [_nbOfBookings](#)
- stdair::NbOfBookings_T [_nbOfGroupBookings](#)
- stdair::NbOfBookings_T [_nbOfPendingGroupBookings](#)
- stdair::NbOfBookings_T [_nbOfStaffBookings](#)
- stdair::NbOfBookings_T [_nbOfWLBookings](#)
- stdair::NbOfBookings_T [_etb](#)
- stdair::Availability_T [_netClassAvailability](#)
- stdair::Availability_T [_segmentAvailability](#)
- stdair::Availability_T [_netRevenueAvailability](#)

24.28.1 Detailed Description

Utility Structure for the parsing of BookingClass structures.

24.28.2 Constructor & Destructor Documentation

24.28.2.1 AIRINV::BookingClassStruct::BookingClassStruct ()

Default Constructor.

Definition at line 16 of file [BookingClassStruct.cpp](#).

24.28.3 Member Function Documentation

24.28.3.1 stdair::ClassCode_T AIRINV::BookingClassStruct::getFullSubclassCode () const

Returns the concatenation of the class and subclass codes.

Definition at line 20 of file [BookingClassStruct.cpp](#).

References [_classCode](#), and [_subclassCode](#).

24.28.3.2 `void AIRINV::BookingClassStruct::fill (stdair::BookingClass & ioBookingClass)
const`

Fill the BookingClass objects with the attributes of the [BookingClassStruct](#).

Definition at line 44 of file [BookingClassStruct.cpp](#).

24.28.3.3 `const std::string AIRINV::BookingClassStruct::describe () const`

Give a description of the structure (for display purposes).

Definition at line 27 of file [BookingClassStruct.cpp](#).

References [_classCode](#), [_subclassCode](#), [_parentClassCode](#), [_parentSubclassCode](#), [_cumulatedProtection](#), [_protection](#), [_nego](#), [_noShowPercentage](#), [_overbooking-Percentage](#), [_nbOfBookings](#), [_nbOfGroupBookings](#), [_nbOfPendingGroupBookings](#), [_nbOfStaffBookings](#), [_nbOfWLBookings](#), [_etb](#), [_netClassAvailability](#), [_segment-Availability](#), and [_netRevenueAvailability](#).

Referenced by [AIRINV::FareFamilyStruct::describe\(\)](#).

24.28.4 Member Data Documentation

24.28.4.1 `stdair::ClassCode_T AIRINV::BookingClassStruct::_classCode`

Definition at line 26 of file [BookingClassStruct.hpp](#).

Referenced by [getFullSubclassCode\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#).

24.28.4.2 `stdair::SubclassCode_T AIRINV::BookingClassStruct::_subclassCode`

Definition at line 27 of file [BookingClassStruct.hpp](#).

Referenced by [getFullSubclassCode\(\)](#), [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#).

24.28.4.3 `stdair::ClassCode_T AIRINV::BookingClassStruct::_parentClassCode`

Definition at line 28 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#).

24.28.4.4 `stdair::SubclassCode_T AIRINV::BookingClassStruct::_parentSubclass-
Code`

Definition at line 29 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeParentSubclass-Code::operator\(\)](#).

24.28.4.5 stdair::AuthorizationLevel_T AIRINV::BookingClassStruct::_cumulated-Protection

Definition at line 30 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeCumulated-Protection::operator\(\)](#).

24.28.4.6 stdair::AuthorizationLevel_T AIRINV::BookingClassStruct::_protection

Definition at line 31 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#).

24.28.4.7 stdair::NbOfSeats_T AIRINV::BookingClassStruct::_nego

Definition at line 32 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#).

24.28.4.8 stdair::OverbookingRate_T AIRINV::BookingClassStruct::_noShow-Percentage

Definition at line 33 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#).

24.28.4.9 stdair::OverbookingRate_T AIRINV::BookingClassStruct::_overbooking-Percentage

Definition at line 34 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#).

24.28.4.10 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfBookings

Definition at line 35 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#).

24.28.4.11 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfGroup-Bookings

Definition at line 36 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#).

24.28.4.12 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfPending-GroupBookings

Definition at line 37 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfPending-GroupBkgs::operator\(\)](#).

24.28.4.13 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfStaff-Bookings

Definition at line 38 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#).

24.28.4.14 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_nbOfWLBookings

Definition at line 39 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#).

24.28.4.15 stdair::NbOfBookings_T AIRINV::BookingClassStruct::_etb

Definition at line 40 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#).

24.28.4.16 stdair::Availability_T AIRINV::BookingClassStruct::_netClassAvailability

Definition at line 41 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#).

24.28.4.17 stdair::Availability_T AIRINV::BookingClassStruct::_segmentAvailability

Definition at line 42 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSegment-Availability::operator\(\)](#).

24.28.4.18 stdair::Availability_T AIRINV::BookingClassStruct::_netRevenue-Availability

Definition at line 43 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeRevenue-Availability::operator\(\)](#).

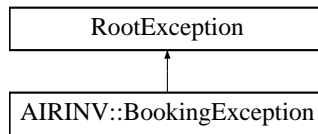
The documentation for this struct was generated from the following files:

- [airinv/bom/BookingClassStruct.hpp](#)
- [airinv/bom/BookingClassStruct.cpp](#)

24.29 AIRINV::BookingException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::BookingException:



24.29.1 Detailed Description

Specific exception related to bookings made against the inventory.

The documentation for this class was generated from the following file:

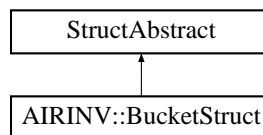
- [airinv/AIRINV_Types.hpp](#)

24.30 AIRINV::BucketStruct Struct Reference

Utility Structure for the parsing of Bucket structures.

```
#include <airinv/bom/BucketStruct.hpp>
```

Inheritance diagram for AIRINV::BucketStruct:



Public Member Functions

- void [fill](#) (stdair::Bucket &) const
- const [std::string describe](#) () const
- [BucketStruct](#) ()

Public Attributes

- stdair::Yield_T [_yieldRangeUpperValue](#)
- stdair::CabinCapacity_T [_availability](#)
- stdair::NbOfSeats_T [_nbOfSeats](#)
- stdair::SeatIndex_T [_seatIndex](#)

24.30.1 Detailed Description

Utility Structure for the parsing of Bucket structures.

24.30.2 Constructor & Destructor Documentation

24.30.2.1 AIRINV::BucketStruct::BucketStruct ()

Default Constructor.

Definition at line 16 of file [BucketStruct.cpp](#).

24.30.3 Member Function Documentation

24.30.3.1 void AIRINV::BucketStruct::fill (stdair::Bucket & ioBucket) const

Fill the Bucket objects with the attributes of the [BucketStruct](#).

Definition at line 29 of file [BucketStruct.cpp](#).

References [_yieldRangeUpperValue](#), [_availability](#), and [_nbOfSeats](#).

24.30.3.2 const std::string AIRINV::BucketStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 20 of file [BucketStruct.cpp](#).

References [_yieldRangeUpperValue](#), [_availability](#), [_nbOfSeats](#), and [_seatIndex](#).

Referenced by [AIRINV::LegCabinStruct::describe\(\)](#).

24.30.4 Member Data Documentation

24.30.4.1 stdair::Yield_T AIRINV::BucketStruct::_yieldRangeUpperValue

Definition at line 28 of file [BucketStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#).

24.30.4.2 stdair::CabinCapacity_T AIRINV::BucketStruct::_availability

Definition at line 29 of file [BucketStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), and [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#).

24.30.4.3 stdair::NbOfSeats_T AIRINV::BucketStruct::_nbOfSeats

Definition at line 30 of file [BucketStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

24.30.4.4 stdair::SeatIndex_T AIRINV::BucketStruct::_seatIndex

Definition at line 31 of file [BucketStruct.hpp](#).

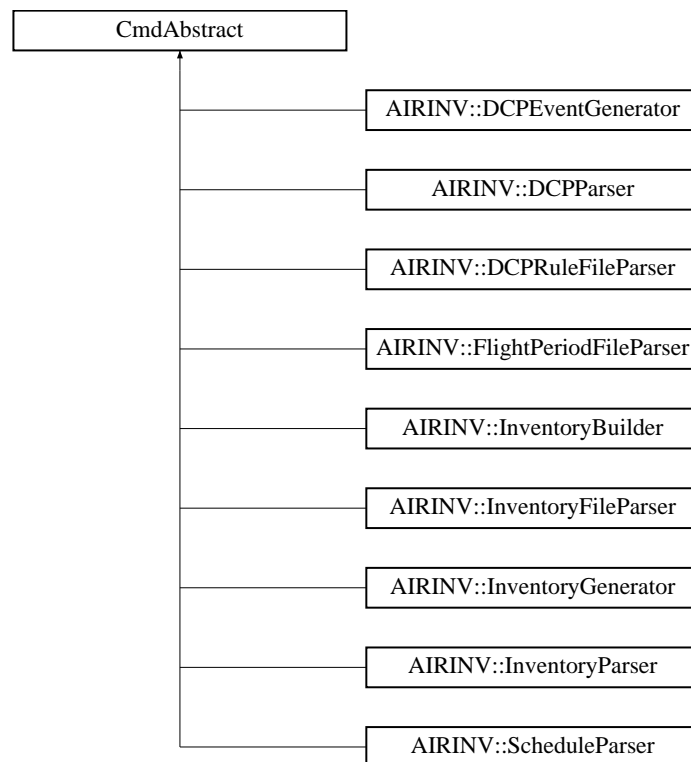
Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSeatIndex-
::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/BucketStruct.hpp](#)
- [airinv/bom/BucketStruct.cpp](#)

24.31 CmdAbstract Class Reference

Inheritance diagram for CmdAbstract:



The documentation for this class was generated from the following file:

- [airinv/command/InventoryBuilder.hpp](#)

24.32 COMMAND Struct Reference

```
#include <airinv/ui/cmdline/readline_autocomp.hpp>
```

Public Attributes

- char const * [name](#)
- [pt2Func](#) * [func](#)
- char * [doc](#)

24.32.1 Detailed Description

A structure which contains information on the commands this program can understand.

24.32.2 Member Data Documentation

24.32.2.1 char const* **COMMAND::name**

User printable name of the function.

Definition at line 45 of file [readline_autocomp.hpp](#).

Referenced by [find_command\(\)](#), and [com_help\(\)](#).

24.32.2.2 [pt2Func](#)* **COMMAND::func**

Function to call to do the job.

Definition at line 50 of file [readline_autocomp.hpp](#).

Referenced by [execute_line\(\)](#).

24.32.2.3 char* **COMMAND::doc**

Documentation for this function.

Definition at line 55 of file [readline_autocomp.hpp](#).

The documentation for this struct was generated from the following file:

- [airinv/ui/cmdline/readline_autocomp.hpp](#)

24.33 std::complex Class Reference

STL class.

24.33.1 Detailed Description

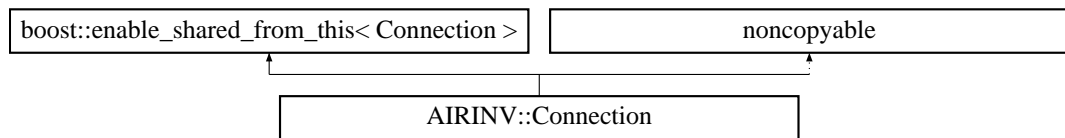
STL class.

The documentation for this class was generated from the following file:

24.34 AIRINV::Connection Class Reference

```
#include <airinv/server/Connection.hpp>
```

Inheritance diagram for AIRINV::Connection:



Public Member Functions

- [Connection](#) (boost::asio::io_service &, [RequestHandler](#) &)
- boost::asio::ip::tcp::socket & [socket](#) ()
- void [start](#) ()

24.34.1 Detailed Description

Represents a single connection from a client.

24.34.2 Constructor & Destructor Documentation

24.34.2.1 AIRINV::Connection::Connection (boost::asio::io_service & *ioService*, [RequestHandler](#) & *ioHandler*)

Constructor.

Construct a connection with the given io_service.

Definition at line 16 of file [Connection.cpp](#).

24.34.3 Member Function Documentation

24.34.3.1 boost::asio::ip::tcp::socket & AIRINV::Connection::socket ()

Get the socket associated with the connection.

Definition at line 22 of file [Connection.cpp](#).

24.34.3.2 void AIRINV::Connection::start ()

Start the first asynchronous operation for the connection.

Definition at line 27 of file [Connection.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/server/Connection.hpp](#)
- [airinv/server/Connection.cpp](#)

24.35 std::basic_string::const_iterator Class Reference

STL iterator class.

24.35.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.36 std::string::const_iterator Class Reference

STL iterator class.

24.36.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.37 std::wstring::const_iterator Class Reference

STL iterator class.

24.37.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.38 std::deque::const_iterator Class Reference

STL iterator class.

24.38.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.39 std::list::const_iterator Class Reference

STL iterator class.

24.39.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.40 std::map::const_iterator Class Reference

STL iterator class.

24.40.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.41 std::multimap::const_iterator Class Reference

STL iterator class.

24.41.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.42 std::set::const_iterator Class Reference

STL iterator class.

24.42.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.43 std::multiset::const_iterator Class Reference

STL iterator class.

24.43.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.44 std::vector::const_iterator Class Reference

STL iterator class.

24.44.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.45 std::basic_string::const_reverse_iterator Class Reference

STL iterator class.

24.45.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.46 std::string::const_reverse_iterator Class Reference

STL iterator class.

24.46.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.47 std::wstring::const_reverse_iterator Class Reference

STL iterator class.

24.47.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.48 std::deque::const_reverse_iterator Class Reference

STL iterator class.

24.48.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.49 std::list::const_reverse_iterator Class Reference

STL iterator class.

24.49.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.50 std::map::const_reverse_iterator Class Reference

STL iterator class.

24.50.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.51 std::multimap::const_reverse_iterator Class Reference

STL iterator class.

24.51.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.52 std::set::const_reverse_iterator Class Reference

STL iterator class.

24.52.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.53 `std::multiset::const_reverse_iterator` Class Reference

STL iterator class.

24.53.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.54 `std::vector::const_reverse_iterator` Class Reference

STL iterator class.

24.54.1 Detailed Description

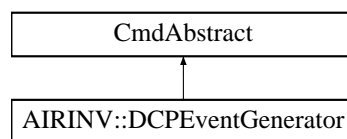
STL iterator class.

The documentation for this class was generated from the following file:

24.55 `AIRINV::DCPEventGenerator` Class Reference

```
#include <airinv/command/vault/DCPEventGenerator.hpp>
```

Inheritance diagram for `AIRINV::DCPEventGenerator`:



Friends

- class [DCPFileParser](#)
- struct [DCPParserHelper::doEndDCP](#)
- class [DCPParser](#)

24.55.1 Detailed Description

Class handling the generation / instantiation of the DCP BOM.

24.55.2 Friends And Related Function Documentation

24.55.2.1 friend class DCPFileParser [friend]

Definition at line 31 of file [DCPEventGenerator.hpp](#).

24.55.2.2 friend struct DCPParserHelper::doEndDCP [friend]

Definition at line 32 of file [DCPEventGenerator.hpp](#).

24.55.2.3 friend class DCPParser [friend]

Definition at line 33 of file [DCPEventGenerator.hpp](#).

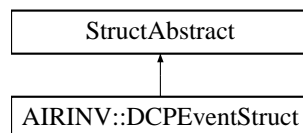
The documentation for this class was generated from the following files:

- [airinv/command/vault/DCPEventGenerator.hpp](#)
- [airinv/command/vault/DCPEventGenerator.cpp](#)

24.56 AIRINV::DCPEventStruct Struct Reference

```
#include <airinv/bom/DCPEventStruct.hpp>
```

Inheritance diagram for AIRINV::DCPEventStruct:



Public Member Functions

- [DCPEventStruct](#) ()
- stdair::Date_T [getDate](#) () const
- stdair::Duration_T [getTime](#) () const
- const [std::string describe](#) () const
- const unsigned int [getAirlineListSize](#) () const
- const unsigned int [getClassCodeListSize](#) () const
- const stdair::AirlineCode_T & [getFirstAirlineCode](#) () const
- void [beginAirline](#) ()
- bool [hasNotReachedEndAirline](#) () const
- stdair::AirlineCode_T [getCurrentAirlineCode](#) () const

- void [iterateAirline](#) ()
- const [std::string](#) & [getFirstClassCode](#) () const
- void [beginClassCode](#) ()
- bool [hasNotReachedEndClassCode](#) () const
- [std::string](#) [getCurrentClassCode](#) () const
- void [iterateClassCode](#) ()

Public Attributes

- [stdair::year_t](#) [_itYear](#)
- [stdair::month_t](#) [_itMonth](#)
- [stdair::day_t](#) [_itDay](#)
- [stdair::hour_t](#) [_itHours](#)
- [stdair::minute_t](#) [_itMinutes](#)
- [stdair::second_t](#) [_itSeconds](#)
- [stdair::AirlineCodeList_T::iterator](#) [_itCurrentAirlineCode](#)
- [stdair::ClassList_StringList_T::iterator](#) [_itCurrentClassCode](#)
- [stdair::AirportCode_T](#) [_origin](#)
- [stdair::AirportCode_T](#) [_destination](#)
- [stdair::Date_T](#) [_dateRangeStart](#)
- [stdair::Date_T](#) [_dateRangeEnd](#)
- [stdair::Duration_T](#) [_timeRangeStart](#)
- [stdair::Duration_T](#) [_timeRangeEnd](#)
- [stdair::CabinCode_T](#) [_cabinCode](#)
- [stdair::CityCode_T](#) [_pos](#)
- [stdair::ChannelLabel_T](#) [_channel](#)
- [stdair::DayDuration_T](#) [_advancePurchase](#)
- [stdair::SaturdayStay_T](#) [_saturdayStay](#)
- [stdair::ChangeFees_T](#) [_changeFees](#)
- [stdair::NonRefundable_T](#) [_nonRefundable](#)
- [stdair::DayDuration_T](#) [_minimumStay](#)
- [stdair::PriceValue_T](#) [_DCP](#)
- [stdair::AirlineCode_T](#) [_airlineCode](#)
- [stdair::ClassCode_T](#) [_classCode](#)
- [stdair::AirlineCodeList_T](#) [_airlineCodeList](#)
- [stdair::ClassList_StringList_T](#) [_classCodeList](#)

24.56.1 Detailed Description

Utility Structure for the parsing of Flight-Period structures.

24.56.2 Constructor & Destructor Documentation

24.56.2.1 AIRINV::DCPEventStruct::DCPEventStruct ()

Default constructor.

Definition at line 18 of file [DCPEventStruct.cpp](#).

24.56.3 Member Function Documentation

24.56.3.1 stdair::Date_T AIRINV::DCPEventStruct::getDate () const

Get the date from the staging details.

Definition at line 38 of file [DCPEventStruct.cpp](#).

References [_itYear](#), [_itMonth](#), and [_itDay](#).

24.56.3.2 stdair::Duration_T AIRINV::DCPEventStruct::getTime () const

Get the time from the staging details.

Definition at line 44 of file [DCPEventStruct.cpp](#).

References [_itHours](#), [_itMinutes](#), and [_itSeconds](#).

24.56.3.3 const std::string AIRINV::DCPEventStruct::describe () const

Display of the structure.

Definition at line 53 of file [DCPEventStruct.cpp](#).

References [_origin](#), [_destination](#), [_pos](#), [_dateRangeStart](#), [_dateRangeEnd](#), [_timeRangeStart](#), [_timeRangeEnd](#), [_cabinCode](#), [_channel](#), [_saturdayStay](#), [_changeFees](#), [_nonRefundable](#), [_advancePurchase](#), [_minimumStay](#), [_DCP](#), [_airlineCodeList](#), and [_classCodeList](#).

24.56.3.4 const unsigned int AIRINV::DCPEventStruct::getAirlineListSize () const [inline]

Get the size of the airline code list.

Definition at line 37 of file [DCPEventStruct.hpp](#).

References [_airlineCodeList](#).

24.56.3.5 const unsigned int AIRINV::DCPEventStruct::getClassCodeListSize () const [inline]

Get the size of the class code list.

Definition at line 42 of file [DCPEventStruct.hpp](#).

References [_classCodeList](#).

24.56.3.6 const stdair::AirlineCode_T & AIRINV::DCPEventStruct::getFirstAirlineCode () const

Get the first airline code.

Definition at line 87 of file [DCPEventStruct.cpp](#).

References [_airlineCodeList](#).

24.56.3.7 void AIRINV::DCPEventStruct::beginAirline ()

Initialise the internal iterators on airline code: The current iterator is set on the first airline code, the next iterator is set on the second one.

Definition at line 95 of file [DCPEventStruct.cpp](#).

References [_itCurrentAirlineCode](#), and [_airlineCodeList](#).

24.56.3.8 bool AIRINV::DCPEventStruct::hasNotReachedEndAirline () const

States whether or not the end of the (airline code) list has been reached.

Definition at line 100 of file [DCPEventStruct.cpp](#).

References [_itCurrentAirlineCode](#), and [_airlineCodeList](#).

24.56.3.9 stdair::AirlineCode_T AIRINV::DCPEventStruct::getCurrentAirlineCode () const

Get the current element (airline code).

Definition at line 106 of file [DCPEventStruct.cpp](#).

References [_itCurrentAirlineCode](#), and [_airlineCodeList](#).

24.56.3.10 void AIRINV::DCPEventStruct::iterateAirline ()

Iterate for one element (airline code): increment both internal iterators on Buckets.

Definition at line 112 of file [DCPEventStruct.cpp](#).

References [_itCurrentAirlineCode](#), and [_classCodeList](#).

24.56.3.11 const std::string & AIRINV::DCPEventStruct::getFirstClassCode () const

Get the first class code list as a string.

Definition at line 119 of file [DCPEventStruct.cpp](#).

References [_classCodeList](#).

24.56.3.12 void AIRINV::DCPEventStruct::beginClassCode ()

Initialise the internal iterators on class code: The current iterator is set on the first class code, the next iterator is set on the second one.

Definition at line 127 of file [DCPEventStruct.cpp](#).

References [_itCurrentClassCode](#), and [_classCodeList](#).

24.56.3.13 bool AIRINV::DCPEventStruct::hasNotReachedEndClassCode () const

States whether or not the end of the (class code) list has been reached.

Definition at line 132 of file [DCPEventStruct.cpp](#).

References [_itCurrentClassCode](#), and [_classCodeList](#).

24.56.3.14 `std::string AIRINV::DCPEventStruct::getCurrentClassCode () const`

Get the current element (class code).

Definition at line 138 of file [DCPEventStruct.cpp](#).

References [_itCurrentClassCode](#), and [_classCodeList](#).

24.56.3.15 `void AIRINV::DCPEventStruct::iterateClassCode ()`

Iterate for one element (classCode): increment both internal iterators on Buckets.

Definition at line 145 of file [DCPEventStruct.cpp](#).

References [_itCurrentClassCode](#), and [_classCodeList](#).

24.56.4 Member Data Documentation

24.56.4.1 `stdair::year_t AIRINV::DCPEventStruct::_itYear`

Staging Date.

Definition at line 87 of file [DCPEventStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.56.4.2 `stdair::month_t AIRINV::DCPEventStruct::_itMonth`

Definition at line 88 of file [DCPEventStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.56.4.3 `stdair::day_t AIRINV::DCPEventStruct::_itDay`

Definition at line 89 of file [DCPEventStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.56.4.4 `stdair::hour_t AIRINV::DCPEventStruct::_itHours`

Staging Time.

Definition at line 93 of file [DCPEventStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.56.4.5 `stdair::minute_t AIRINV::DCPEventStruct::_itMinutes`

Definition at line 94 of file [DCPEventStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.56.4.6 `stdair::second_t AIRINV::DCPEventStruct::_itSeconds`

Definition at line 95 of file [DCPEventStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.56.4.7 stdair::AirlineCodeList_T::iterator AIRINV::DCPEventStruct::_itCurrent-AirlineCode

Iterator for the current airline code list.

Definition at line 98 of file [DCPEventStruct.hpp](#).

Referenced by [beginAirline\(\)](#), [hasNotReachedEndAirline\(\)](#), [getCurrentAirlineCode\(\)](#), and [iterateAirline\(\)](#).

24.56.4.8 stdair::ClassList_StringList_T::iterator AIRINV::DCPEventStruct::_itCurrent-ClassCode

Iterator for the current class code.

Definition at line 101 of file [DCPEventStruct.hpp](#).

Referenced by [beginClassCode\(\)](#), [hasNotReachedEndClassCode\(\)](#), [getCurrentClassCode\(\)](#), and [iterateClassCode\(\)](#).

24.56.4.9 stdair::AirportCode_T AIRINV::DCPEventStruct::_origin

Origin.

Definition at line 104 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.10 stdair::AirportCode_T AIRINV::DCPEventStruct::_destination

Destination.

Definition at line 107 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.11 stdair::Date_T AIRINV::DCPEventStruct::_dateRangeStart

Start Range date available for this DCP event.

Definition at line 110 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.12 stdair::Date_T AIRINV::DCPEventStruct::_dateRangeEnd

Start Range date available for this DCP event.

Definition at line 113 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.13 stdair::Duration_T AIRINV::DCPEventStruct::_timeRangeStart

Start time from the time range available for this DCP event.

Definition at line 116 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.14 stdair::Duration_T AIRINV::DCPEventStruct::_timeRangeEnd

End time from the time range available for this DCP event.

Definition at line 119 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.15 stdair::CabinCode_T AIRINV::DCPEventStruct::_cabinCode

Cabin code.

Definition at line 122 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.16 stdair::CityCode_T AIRINV::DCPEventStruct::_pos

Point-of-sale.

Definition at line 125 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.17 stdair::ChannelLabel_T AIRINV::DCPEventStruct::_channel

Channel distribution.

Definition at line 128 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.18 stdair::DayDuration_T AIRINV::DCPEventStruct::_advancePurchase

Number of days that the ticket is sold before the flightDate.

Definition at line 131 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.19 stdair::SaturdayStay_T AIRINV::DCPEventStruct::_saturdayStay

Boolean saying whether a saturday is considered during the stay .

Definition at line 134 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.20 stdair::ChangeFees_T AIRINV::DCPEventStruct::_changeFees

Boolean saying whether the change fees option is requested or not.

Definition at line 137 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.21 stdair::NonRefundable_T AIRINV::DCPEventStruct::_nonRefundable

Boolean saying whether the refundable option is requested or not.

Definition at line 140 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.22 stdair::DayDuration_T AIRINV::DCPEventStruct::_minimumStay

Number of days that the customer spent into the destination city.

Definition at line 143 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.23 stdair::PriceValue_T AIRINV::DCPEventStruct::_DCP

Price.

Definition at line 146 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

24.56.4.24 stdair::AirlineCode_T AIRINV::DCPEventStruct::_airlineCode

Airline code

Definition at line 149 of file [DCPEventStruct.hpp](#).

24.56.4.25 stdair::ClassCode_T AIRINV::DCPEventStruct::_classCode

Code

Definition at line 152 of file [DCPEventStruct.hpp](#).

24.56.4.26 stdair::AirlineCodeList_T AIRINV::DCPEventStruct::_airlineCodeList

Airline Code List

Definition at line 155 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#), [getFirstAirlineCode\(\)](#), [beginAirline\(\)](#), [hasNotReachedEndAirline\(\)](#), [getCurrentAirlineCode\(\)](#), and [getAirlineListSize\(\)](#).

24.56.4.27 stdair::ClassList_StringList_T AIRINV::DCPEventStruct::_classCodeList

Numbers of different Airline Codes Class Code List

Definition at line 161 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#), [iterateAirline\(\)](#), [getFirstClassCode\(\)](#), [beginClassCode\(\)](#), [hasNotReachedEndClassCode\(\)](#), [getCurrentClassCode\(\)](#), [iterateClassCode\(\)](#), and [getClassCodeListSize\(\)](#).

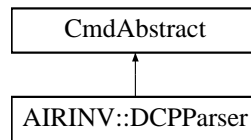
The documentation for this struct was generated from the following files:

- [airinv/bom/DCPEventStruct.hpp](#)
- [airinv/bom/DCPEventStruct.cpp](#)

24.57 AIRINV::DCPParser Class Reference

```
#include <airinv/command/vault/DCPParser.hpp>
```

Inheritance diagram for AIRINV::DCPParser:



Static Public Member Functions

- static void [DCPRuleGeneration](#) (const stdair::Filename_T &, stdair::BomRoot &)

24.57.1 Detailed Description

Class wrapping the parser entry point.

24.57.2 Member Function Documentation

24.57.2.1 void AIRINV::DCPParser::DCPRuleGeneration (const stdair::Filename_T & *iFilename*, stdair::BomRoot & *ioBomRoot*) [static]

Parses the CSV file describing the DCPs for the simulator, and generates the event structures accordingly.

Parameters

<i>const</i>	stdair::Filename_T& The file-name of the CSV-formatted DCP input file.
<i>stdair::Bom-Root&</i>	Root of the BOM tree.

Definition at line 16 of file [DCPParser.cpp](#).

References [AIRINV::DCPRuleFileParser::generateDCPRules\(\)](#).

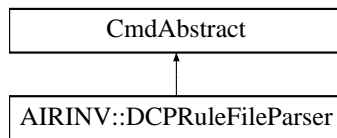
The documentation for this class was generated from the following files:

- airinv/command/vault/[DCPParser.hpp](#)
- airinv/command/vault/[DCPParser.cpp](#)

24.58 AIRINV::DCPRuleFileParser Class Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPRuleFileParser:



Public Member Functions

- [DCPRuleFileParser](#) (stdair::BomRoot &ioBomRoot, const stdair::Filename_T &i-Filename)
- bool [generateDCPRules](#) ()

24.58.1 Detailed Description

Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

24.58.2 Constructor & Destructor Documentation

24.58.2.1 AIRINV::DCPRuleFileParser::DCPRuleFileParser (stdair::BomRoot & ioBomRoot, const stdair::Filename_T & iFilename)

Constructor.

Definition at line 572 of file [DCPParserHelper.cpp](#).

24.58.3 Member Function Documentation

24.58.3.1 bool AIRINV::DCPRuleFileParser::generateDCPRules ()

Parse the input file and generate the Inventories.

Definition at line 593 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParser::DCPRuleGeneration\(\)](#).

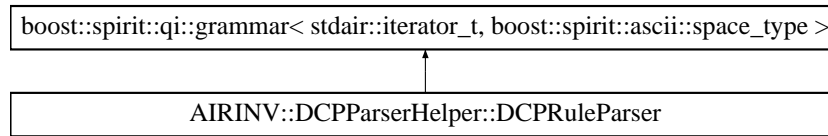
The documentation for this class was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.59 AIRINV::DCPParserHelper::DCPRuleParser Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::DCPRuleParser:



Public Member Functions

- [DCPRuleParser](#) (stdair::BomRoot &, DCPRuleStruct &)

Public Attributes

- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [start](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [comments](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [DCP_rule](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [DCP_rule_end](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [DCP_key](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [DCP_id](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [origin](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [destination](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [dateRangeStart](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [dateRangeEnd](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [date](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [timeRangeStart](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [timeRangeEnd](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [time](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [position](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [cabinCode](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [channel](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [advancePurchase](#)

- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [saturdayStay](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [changeFees](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [non-Refundable](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [minimumStay](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [DCP](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [segment](#)
- boost::spirit::qi::rule < stdair::iterator_t, boost::spirit::ascii::space_type > [list_class](#)
- stdair::BomRoot & [_bomRoot](#)
- DCPRuleStruct & [_DCPRule](#)

24.59.1 Detailed Description

DCP: DCPID; OriginCity; DestinationCity; DateRangeStart; DateRangeEnd; DepartureTimeRangeStart; DepartureTimeRangeEnd; POS; AdvancePurchase; SaturdayNight; ChangeFees; NonRefundable; MinimumStay; Price; AirlineCode; Class;

DCPID OriginCity (3-char airport code) DestinationCity (3-char airport code) DateRangeStart (yyyy-mm-dd) DateRangeEnd (yyyy-mm-dd) DepartureTimeRangeStart (hh:mm) DepartureTimeRangeEnd (hh:mm) POS (3-char position city) Cabin Code (1-char cabin code) Channel (D=direct, I=indirect, N=oNline, F=oFfline) AdvancePurchase SaturdayNight (T=True, F=False) ChangeFees (T=True, F=False) NonRefundable (T=True, F=False) MinimumStay Price AirlineCode (2-char airline code) ClassList (List of 1-char class code)

Grammar: Demand ::= PrefDepDate ',' Origin ',' Destination ',' PassengerType ',' - DemandParams ',' PosDist ',' ChannelDist ',' TripDist ',' StayDist ',' FfDist ',' PrefDepTimeDist ',' minWTP ',' TimeValueDist ',' DtdDist EndOfDemand PrefDepDate ::= date PassengerType ::= 'T' | 'F' DemandParams ::= DemandMean ',' DemandStdDev PosDist ::= PosPair (',' PosPair)* PosPair ::= PosCode ':' PosShare PosCode ::= AirportCode | "row" PosShare ::= real ChannelDist ::= ChannelPair (',' ChannelPair)* ChannelPair ::= Channel_Code ':' ChannelShare ChannelCode ::= "DF" | "DN" | "IF" | "IN" ChannelShare ::= real TripDist ::= TripPair (',' TripPair)* TripPair ::= TripCode ':' TripShare - TripCode ::= "RO" | "RI" | "OW" TripShare ::= real StayDist ::= StayPair (',' StayPair)* StayPair ::= [0;3]-digit-integer ':' stay_share StayShare ::= real FFDist ::= FF_Pair (',' FF_Pair)* FFPair ::= FFCODE ':' FFShare FFCODE ::= 'P' | 'G' | 'S' | 'M' | 'N' FFShare ::= real PrefDepTimeDist ::= PrefDepTimePair (',' PrefDepTimePair)* PrefDepTimePair ::= time ':' PrefDepTimeShare PrefDepTimeShare ::= real minWTP ::= real TimeValueDist ::= TimeValuePair (',' TimeValuePair)* TimeValuePair ::= [0;2]-digit-integer ':' TimeValueShare TimeValueShare ::= real DTDDist ::= DTDPair (',' DTDPair)* DTDPair ::= real ':' DTDDShare DTDDShare ::= real EndOfDemand ::= ';' Grammar for the DCP-Rule parser.

24.59.2 Constructor & Destructor Documentation

24.59.2.1 AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser (*stdair::BomRoot & ioBomRoot*, *DCPRuleStruct & ioDCPRule*)

Definition at line 453 of file [DCPParserHelper.cpp](#).

References [start](#), [comments](#), [DCP_rule](#), [DCP_key](#), [segment](#), [DCP_rule_end](#), [_bomRoot](#), [_DCPRule](#), [DCP_id](#), [origin](#), [destination](#), [dateRangeStart](#), [dateRangeEnd](#), [timeRangeStart](#), [timeRangeEnd](#), [position](#), [cabinCode](#), [channel](#), [advancePurchase](#), [saturdayStay](#), [changeFees](#), [nonRefundable](#), [minimumStay](#), [DCP](#), [AIRINV::DCPParserHelper::uint1_4_p](#), [date](#), [AIRINV::DCPParserHelper::year_p](#), [AIRINV::DCPParserHelper::month_p](#), [AIRINV::DCPParserHelper::day_p](#), [time](#), [AIRINV::DCPParserHelper::hour_p](#), [AIRINV::DCPParserHelper::minute_p](#), [AIRINV::DCPParserHelper::second_p](#), and [list_class](#).

24.59.3 Member Data Documentation

24.59.3.1 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::start`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.2 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::comments`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.3 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::DCP_rule`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.4 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::DCP_rule_end`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.5 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::DCP_key`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.6 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::DCP_id`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.7 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::origin`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.8 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::destination`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.9 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::dateRangeStart`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.10 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::dateRangeEnd`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.11 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::date`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.12 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::timeRangeStart`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.13 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::timeRangeEnd`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.14 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::time`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.15 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::position`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.16 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::cabinCode`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.17 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::channel`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.18 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::advancePurchase`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.19 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::saturdayStay`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.20 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::changeFees`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.21 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
`AIRINV::DCPParserHelper::DCPRuleParser::nonRefundable`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.22 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
AIRINV::DCPParserHelper::DCPRuleParser::minimumStay

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.23 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
AIRINV::DCPParserHelper::DCPRuleParser::DCP

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.24 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
AIRINV::DCPParserHelper::DCPRuleParser::segment

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.25 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`
AIRINV::DCPParserHelper::DCPRuleParser::list_class

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.26 `stdair::BomRoot&` **AIRINV::DCPParserHelper::DCPRuleParser::_bomRoot**

Definition at line 320 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

24.59.3.27 `DCPRuleStruct&` **AIRINV::DCPParserHelper::DCPRuleParser::_DCPRule**

Definition at line 321 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.60 AIRINV::DefaultMap Struct Reference

```
#include <airinv/basic/BasConst_Curves.hpp>
```

Static Public Member Functions

- static [FRAT5Curve_T](#) [createPickupFRAT5Curve](#) ()

24.60.1 Detailed Description

Default PoS probability mass.

24.60.2 Member Function Documentation

24.60.2.1 FRAT5Curve_T AIRINV::DefaultMap::createPickupFRAT5Curve () [static]

Definition at line 16 of file [BasConst.cpp](#).

The documentation for this struct was generated from the following files:

- [airinv/basic/BasConst_Curves.hpp](#)
- [airinv/basic/BasConst.cpp](#)

24.61 AIRINV::InventoryParserHelper::InventoryParser::definition Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Public Member Functions

- [definition](#) ([InventoryParser](#) const &self)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > const & [start](#) () const

Public Attributes

- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_date_list](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [not_to_be_parsed](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_date](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_date_end](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_key](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [airline_code](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_number](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_type_code](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [flight_visibility_code](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [date](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [leg_list](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [leg](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [leg_key](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [leg_details](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [leg_cabin_list](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [leg_cabin_details](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [bucket_list](#)
- [boost::spirit::classic::rule](#) < [ScannerT](#) > [bucket_details](#)

- boost::spirit::classic::rule < ScannerT > [time](#)
- boost::spirit::classic::rule < ScannerT > [segment_list](#)
- boost::spirit::classic::rule < ScannerT > [segment](#)
- boost::spirit::classic::rule < ScannerT > [segment_key](#)
- boost::spirit::classic::rule < ScannerT > [full_segment_cabin_details](#)
- boost::spirit::classic::rule < ScannerT > [segment_cabin_list](#)
- boost::spirit::classic::rule < ScannerT > [segment_cabin_key](#)
- boost::spirit::classic::rule < ScannerT > [segment_cabin_details](#)
- boost::spirit::classic::rule < ScannerT > [class_list](#)
- boost::spirit::classic::rule < ScannerT > [class_key](#)
- boost::spirit::classic::rule < ScannerT > [parent_subclass_code](#)
- boost::spirit::classic::rule < ScannerT > [class_protection](#)
- boost::spirit::classic::rule < ScannerT > [class_nego](#)
- boost::spirit::classic::rule < ScannerT > [class_details](#)
- boost::spirit::classic::rule < ScannerT > [family_cabin_list](#)
- boost::spirit::classic::rule < ScannerT > [family_cabin_details](#)

24.61.1 Constructor & Destructor Documentation

24.61.1.1 AIRINV::InventoryParserHelper::InventoryParser::definition::definition (InventoryParser const & self)

Definition at line 872 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::airline_code_p\(\)](#), [AIRINV::InventoryParserHelper::flight_number_p\(\)](#), [AIRINV::InventoryParserHelper::day_p\(\)](#), [AIRINV::InventoryParserHelper::month_p\(\)](#), [AIRINV::InventoryParserHelper::year_p\(\)](#), [AIRINV::InventoryParserHelper::airport_p\(\)](#), [AIRINV::InventoryParserHelper::cabin_code_p\(\)](#), [AIRINV::InventoryParserHelper::hours_p\(\)](#), [AIRINV::InventoryParserHelper::minutes_p\(\)](#), [AIRINV::InventoryParserHelper::seconds_p\(\)](#), [AIRINV::InventoryParserHelper::uint1_3_p](#), [AIRINV::InventoryParserHelper::class_code_p\(\)](#), [AIRINV::InventoryParserHelper::uint1_2_p](#), [AIRINV::InventoryParserHelper::family_code_p](#), and [AIRINV::InventoryParserHelper::class_code_list_p\(\)](#).

24.61.2 Member Function Documentation

24.61.2.1 bsc::rule< ScannerT > const & AIRINV::InventoryParserHelper::InventoryParser::definition::start () const

Entry point of the parser.

Definition at line 1078 of file [InventoryParserHelper.cpp](#).

24.61.3 Member Data Documentation

24.61.3.1 boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition::flight_date_list

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.2 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::not_to_be_parsed`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.3 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::flight_date`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.4 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::flight_date_end`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.5 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::flight_key`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.6 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::airline_code`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.7 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::flight_number`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.8 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::flight_type_code`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.9 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::flight_visibility_code`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.10 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::date`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.11 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::leg_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.12 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::leg`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.13 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::leg_key`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.14 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::leg_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.15 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::leg_cabin_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.16 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::leg_cabin_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.17 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::bucket_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.18 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::bucket_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.19 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::time`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.20 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::segment_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.21 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::segment`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.22 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::segment_key`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.23 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::full_segment_cabin_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.24 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::segment_cabin_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.25 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::segment_cabin_key`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.26 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::segment_cabin_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.27 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::class_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.28 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::class_key`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.29 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::parent_subclass_code`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.30 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::class_protection`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.31 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::-
InventoryParser::definition::class_nego`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.32 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition::class_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.33 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition::family_cabin_list`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

24.61.3.34 `boost::spirit::classic::rule<ScannerT> AIRINV::InventoryParserHelper::InventoryParser::definition::family_cabin_details`

Definition at line 464 of file [InventoryParserHelper.hpp](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.62 AIRINV::ScheduleParserHelper::FlightPeriodParser::definition Struct - Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Public Member Functions

- [definition](#) ([FlightPeriodParser](#) const &self)
- `boost::spirit::classic::rule < ScannerT > const & start () const`

Public Attributes

- `boost::spirit::classic::rule < ScannerT > flight_period_list`
- `boost::spirit::classic::rule < ScannerT > not_to_be_parsed`
- `boost::spirit::classic::rule < ScannerT > flight_period`
- `boost::spirit::classic::rule < ScannerT > flight_period_end`
- `boost::spirit::classic::rule < ScannerT > flight_key`
- `boost::spirit::classic::rule < ScannerT > airline_code`
- `boost::spirit::classic::rule < ScannerT > flight_number`
- `boost::spirit::classic::rule < ScannerT > date`
- `boost::spirit::classic::rule < ScannerT > dow`
- `boost::spirit::classic::rule < ScannerT > time`
- `boost::spirit::classic::rule < ScannerT > date_offset`
- `boost::spirit::classic::rule < ScannerT > leg`
- `boost::spirit::classic::rule < ScannerT > leg_key`
- `boost::spirit::classic::rule < ScannerT > leg_details`
- `boost::spirit::classic::rule < ScannerT > leg_cabin_details`

- boost::spirit::classic::rule < ScannerT > [segment_section](#)
- boost::spirit::classic::rule < ScannerT > [segment_key](#)
- boost::spirit::classic::rule < ScannerT > [full_segment_cabin_details](#)
- boost::spirit::classic::rule < ScannerT > [segment_cabin_details](#)
- boost::spirit::classic::rule < ScannerT > [full_family_cabin_details](#)
- boost::spirit::classic::rule < ScannerT > [family_cabin_details](#)
- boost::spirit::classic::rule < ScannerT > [generic_segment](#)
- boost::spirit::classic::rule < ScannerT > [specific_segment_list](#)

24.62.1 Constructor & Destructor Documentation

24.62.1.1 AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::definition (FlightPeriodParser const & self)

Definition at line 475 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::airline_code_p\(\)](#), [AIRINV::ScheduleParserHelper::flight_number_p\(\)](#), [AIRINV::ScheduleParserHelper::year_p\(\)](#), [AIRINV::ScheduleParserHelper::month_p\(\)](#), [AIRINV::ScheduleParserHelper::day_p\(\)](#), [AIRINV::ScheduleParserHelper::dow_p\(\)](#), [AIRINV::ScheduleParserHelper::airport_p\(\)](#), [AIRINV::ScheduleParserHelper::hours_p\(\)](#), [AIRINV::ScheduleParserHelper::minutes_p\(\)](#), [AIRINV::ScheduleParserHelper::seconds_p\(\)](#), [AIRINV::ScheduleParserHelper::int1_p\(\)](#), [AIRINV::ScheduleParserHelper::cabin_code_p\(\)](#), [AIRINV::ScheduleParserHelper::class_code_list_p\(\)](#), and [AIRINV::ScheduleParserHelper::family_code_p\(\)](#).

24.62.2 Member Function Documentation

24.62.2.1 bsc::rule< ScannerT > const & AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::start () const

Entry point of the parser.

Definition at line 617 of file [ScheduleParserHelper.cpp](#).

24.62.3 Member Data Documentation

24.62.3.1 boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::flight_period_list

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.2 boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::not_to_be_parsed

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.3 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::flight_period`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.4 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::flight_period_end`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.5 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::flight_key`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.6 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::airline_code`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.7 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::flight_number`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.8 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::date`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.9 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::dow`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.10 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::time`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.11 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::date_offset`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.12 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-`
`FlightPeriodParser::definition::leg`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.13 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::leg_key`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.14 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::leg_details`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.15 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::leg_cabin_details`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.16 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::segment_section`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.17 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::segment_key`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.18 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::full_segment_cabin_details`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.19 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::segment_cabin_details`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.20 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::full_family_cabin_details`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.21 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::family_cabin_details`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.22 `boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition::generic_segment`

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

24.62.3.23 boost::spirit::classic::rule<ScannerT> AIRINV::ScheduleParserHelper::FlightPeriodParser::definition::specific_segment_list

Definition at line 259 of file [ScheduleParserHelper.hpp](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.63 std::deque Class Reference

STL class.

Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.63.1 Detailed Description

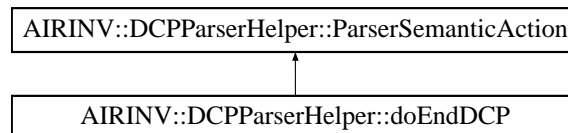
STL class.

The documentation for this class was generated from the following files:

24.64 AIRINV::DCPParserHelper::doEndDCP Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::doEndDCP:



Public Member Functions

- [doEndDCP](#) (stdair::BomRoot &, DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- stdair::BomRoot & [_bomRoot](#)
- DCPRuleStruct & [_DCPRule](#)

24.64.1 Detailed Description

Mark the end of the DCP-rule parsing.

24.64.2 Constructor & Destructor Documentation

24.64.2.1 AIRINV::DCPParserHelper::doEndDCP::doEndDCP (stdair::BomRoot & *ioBomRoot*, DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 399 of file [DCPParserHelper.cpp](#).

24.64.3 Member Function Documentation

24.64.3.1 void AIRINV::DCPParserHelper::doEndDCP::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 406 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#), and [_bomRoot](#).

24.64.4 Member Data Documentation

24.64.4.1 stdair::BomRoot& AIRINV::DCPParserHelper::doEndDCP::_bomRoot

Actor Specific Context.

Definition at line 226 of file [DCPParserHelper.hpp](#).

Referenced by [operator\(\)](#)().

24.64.4.2 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DC-PRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [operator\(\)](#).

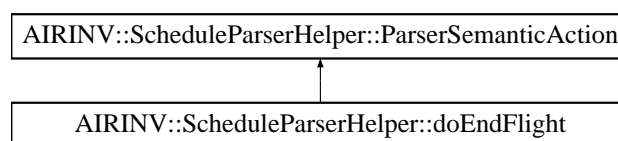
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.65 AIRINV::ScheduleParserHelper::doEndFlight Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::doEndFlight:



Public Member Functions

- [doEndFlight](#) (stdair::BomRoot &, [FlightPeriodStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- stdair::BomRoot & [_bomRoot](#)
- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.65.1 Detailed Description

Mark the end of the flight-period parsing.

24.65.2 Constructor & Destructor Documentation

24.65.2.1 AIRINV::ScheduleParserHelper::doEndFlight::doEndFlight (*stdair::BomRoot & ioBomRoot, FlightPeriodStruct & ioFlightPeriod*)

Actor Constructor.

Definition at line 376 of file [ScheduleParserHelper.cpp](#).

24.65.3 Member Function Documentation

24.65.3.1 void AIRINV::ScheduleParserHelper::doEndFlight::operator() (*iterator_t iStr, iterator_t iStrEnd*) const

Actor Function (functor).

Definition at line 384 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_legAlreadyDefined](#), [AIRINV::FlightPeriodStruct::_legList](#), [AIRINV::FlightPeriodStruct::_itLeg](#), [AIRINV::LegStruct::_cabinList](#), [AIRINV::FlightPeriodStruct::describe\(\)](#), and [_bomRoot](#).

24.65.4 Member Data Documentation

24.65.4.1 *stdair::BomRoot&* AIRINV::ScheduleParserHelper::doEndFlight::_bomRoot

Actor Specific Context.

Definition at line 198 of file [ScheduleParserHelper.hpp](#).

Referenced by [operator\(\)](#).

24.65.4.2 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParser](#)

Helper::storeBoardingTime::operator>(), AIRINV::ScheduleParserHelper::storeOffTime::operator>(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator>(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator>(), AIRINV::ScheduleParserHelper::storeCapacity::operator>(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator>(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator>(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator>(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator>(), AIRINV::ScheduleParserHelper::storeClasses::operator>(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator>(), AIRINV::ScheduleParserHelper::storeFClasses::operator>(), and operator().

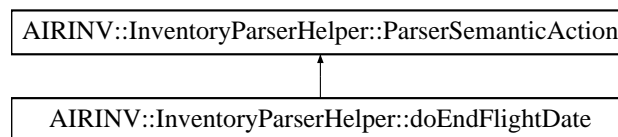
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.66 AIRINV::InventoryParserHelper::doEndFlightDate Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::doEndFlightDate:



Public Member Functions

- [doEndFlightDate](#) (stdair::BomRoot &, [FlightDateStruct](#) &, unsigned int &)
- void [operator\(\)](#) (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- stdair::BomRoot & [_bomRoot](#)
- unsigned int & [_nbOfFlights](#)
- [FlightDateStruct](#) & [_flightDate](#)

24.66.1 Detailed Description

Mark the end of the inventory parsing.

24.66.2 Constructor & Destructor Documentation

24.66.2.1 AIRINV::InventoryParserHelper::doEndFlightDate::doEndFlightDate (stdair::BomRoot & ioBomRoot, FlightDateStruct & ioFlightDate, unsigned int & ioNbOfFlights)

Actor Constructor.

Definition at line 746 of file [InventoryParserHelper.cpp](#).

24.66.3 Member Function Documentation

24.66.3.1 void AIRINV::InventoryParserHelper::doEndFlightDate::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 755 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itSegment](#), [AIRINV::SegmentStruct::_cabinList](#), [AIRINV::FlightDateStruct::_segmentList](#), [_bomRoot](#), and [_nbOfFlights](#).

24.66.4 Member Data Documentation

24.66.4.1 stdair::BomRoot& AIRINV::InventoryParserHelper::doEndFlightDate::_bomRoot

Actor Specific Context.

Definition at line 432 of file [InventoryParserHelper.hpp](#).

Referenced by [operator\(\)\(\)](#).

24.66.4.2 unsigned int& AIRINV::InventoryParserHelper::doEndFlightDate::_nbOfFlights

Definition at line 433 of file [InventoryParserHelper.hpp](#).

Referenced by [operator\(\)\(\)](#).

24.66.4.3 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)\(\)](#), [AIRINV::Inventory](#)

ParserHelper::storeLegOffPoint::operator>(), AIRINV::InventoryParserHelper::storeBoardingDate::operator>(), AIRINV::InventoryParserHelper::storeBoardingTime::operator>(), AIRINV::InventoryParserHelper::storeOffDate::operator>(), AIRINV::InventoryParserHelper::storeOffTime::operator>(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator>(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator>(), AIRINV::InventoryParserHelper::storeAU::operator>(), AIRINV::InventoryParserHelper::storeUPR::operator>(), AIRINV::InventoryParserHelper::storeBookingCounter::operator>(), AIRINV::InventoryParserHelper::storeNAV::operator>(), AIRINV::InventoryParserHelper::storeGAV::operator>(), AIRINV::InventoryParserHelper::storeACP::operator>(), AIRINV::InventoryParserHelper::storeETB::operator>(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator>(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator>(), AIRINV::InventoryParserHelper::storeSeatIndex::operator>(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator>(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator>(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator>(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator>(), AIRINV::InventoryParserHelper::storeClassCode::operator>(), AIRINV::InventoryParserHelper::storeSubclassCode::operator>(), AIRINV::InventoryParserHelper::storeParentClassCode::operator>(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator>(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator>(), AIRINV::InventoryParserHelper::storeProtection::operator>(), AIRINV::InventoryParserHelper::storeNego::operator>(), AIRINV::InventoryParserHelper::storeNoShow::operator>(), AIRINV::InventoryParserHelper::storeOverbooking::operator>(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator>(), AIRINV::InventoryParserHelper::storeClassETB::operator>(), AIRINV::InventoryParserHelper::storeClassAvailability::operator>(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator>(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator>(), AIRINV::InventoryParserHelper::storeFamilyCode::operator>(), AIRINV::InventoryParserHelper::storeFClasses::operator>(), and operator()).

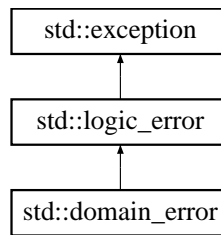
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.67 std::domain_error Class Reference

STL class.

Inheritance diagram for std::domain_error:



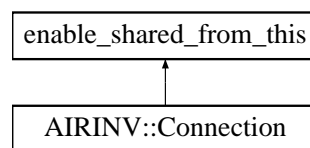
24.67.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.68 enable_shared_from_this Class Reference

Inheritance diagram for `enable_shared_from_this`:



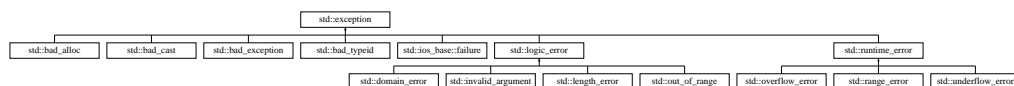
The documentation for this class was generated from the following file:

- [airinv/server/Connection.hpp](#)

24.69 std::exception Class Reference

STL class.

Inheritance diagram for `std::exception`:



24.69.1 Detailed Description

STL class.

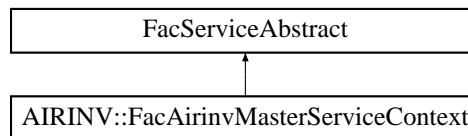
The documentation for this class was generated from the following file:

24.70 AIRINV::FacAirinvMasterServiceContext Class Reference

Factory for Bucket.

```
#include <airinv/factory/FacAirinvMasterServiceContext.h>
```

Inheritance diagram for AIRINV::FacAirinvMasterServiceContext:



Public Member Functions

- [~FacAirinvMasterServiceContext](#) ()
- [AIRINV_Master_ServiceContext & create](#) ()

Static Public Member Functions

- static [FacAirinvMasterServiceContext & instance](#) ()

Protected Member Functions

- [FacAirinvMasterServiceContext](#) ()

24.70.1 Detailed Description

Factory for Bucket.

24.70.2 Constructor & Destructor Documentation

24.70.2.1 AIRINV::FacAirinvMasterServiceContext::~~FacAirinvMasterServiceContext ()

Destructor.

The Destruction put the `_instance` to NULL in order to be clean for the next [FacAirinvMasterServiceContext::instance\(\)](#)

Definition at line 17 of file [FacAirinvMasterServiceContext.cpp](#).

24.70.2.2 AIRINV::FacAirinvMasterServiceContext::FacAirinvMasterServiceContext () [inline, protected]

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 44 of file [FacAirinvMasterServiceContext.hpp](#).

Referenced by [instance\(\)](#).

24.70.3 Member Function Documentation

24.70.3.1 FacAirinvMasterServiceContext & AIRINV::FacAirinvMasterServiceContext- ::instance () [static]

Provide the unique instance.

The singleton is instantiated when first used

Returns

[FacAirinvMasterServiceContext&](#)

Definition at line 22 of file [FacAirinvMasterServiceContext.cpp](#).

References [FacAirinvMasterServiceContext\(\)](#).

24.70.3.2 AIRINV_Master_ServiceContext & AIRINV::FacAirinvMasterServiceContext- ::create ()

Create a new [AIRINV_Master_ServiceContext](#) object.

This new object is added to the list of instantiated objects.

Returns

[AIRINV_Master_ServiceContext&](#) The newly created object.

Definition at line 34 of file [FacAirinvMasterServiceContext.cpp](#).

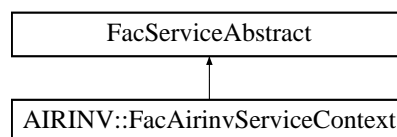
The documentation for this class was generated from the following files:

- [airinv/factory/FacAirinvMasterServiceContext.hpp](#)
- [airinv/factory/FacAirinvMasterServiceContext.cpp](#)

24.71 AIRINV::FacAirinvServiceContext Class Reference

```
#include <airinv/factory/FacAirinvServiceContext.hpp>
```

Inheritance diagram for AIRINV::FacAirinvServiceContext:



Public Member Functions

- [~FacAirinvServiceContext](#) ()
- [AIRINV_ServiceContext](#) & [create](#) ()

Static Public Member Functions

- static [FacAirinvServiceContext](#) & [instance](#) ()

Protected Member Functions

- [FacAirinvServiceContext](#) ()

24.71.1 Detailed Description

Factory for Bucket.

24.71.2 Constructor & Destructor Documentation

24.71.2.1 AIRINV::FacAirinvServiceContext::~~FacAirinvServiceContext ()

Destructor.

The Destruction put the `_instance` to NULL in order to be clean for the next [FacAirinv-ServiceContext::instance\(\)](#)

Definition at line 17 of file [FacAirinvServiceContext.cpp](#).

24.71.2.2 AIRINV::FacAirinvServiceContext::FacAirinvServiceContext () [inline, protected]

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 42 of file [FacAirinvServiceContext.hpp](#).

Referenced by [instance\(\)](#).

24.71.3 Member Function Documentation

24.71.3.1 FacAirinvServiceContext & AIRINV::FacAirinvServiceContext::instance () [static]

Provide the unique instance.

The singleton is instantiated when first used

Returns

[FacAirinvServiceContext](#)&

Definition at line 22 of file [FacAirinvServiceContext.cpp](#).

References [FacAirinvServiceContext\(\)](#).

24.71.3.2 AIRINV_ServiceContext & AIRINV::FacAirinvServiceContext::create ()

Create a new [AIRINV_ServiceContext](#) object.

This new object is added to the list of instantiated objects.

Returns

[AIRINV_ServiceContext](#)& The newly created object.

Definition at line 34 of file [FacAirinvServiceContext.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacAirinvServiceContext.hpp](#)
- [airinv/factory/FacAirinvServiceContext.cpp](#)

24.72 AIRINV::FacBomAbstract Class Reference

```
#include <airinv/factory/FacBomAbstract.hpp>
```

Public Types

- typedef [std::vector](#) < [BomAbstract](#) * > [BomPool_T](#)

Static Public Member Functions

- static [std::size_t](#) [getID](#) (const [BomAbstract](#) *)
- static [std::size_t](#) [getID](#) (const [BomAbstract](#) &)
- static [std::string](#) [getIDString](#) (const [BomAbstract](#) *)
- static [std::string](#) [getIDString](#) (const [BomAbstract](#) &)

Protected Member Functions

- [FacBomAbstract](#) ()
- [FacBomAbstract](#) (const [FacBomAbstract](#) &)
- virtual [~FacBomAbstract](#) ()

Protected Attributes

- [BomPool_T](#) _pool

Friends

- class [FacSupervisor](#)

24.72.1 Detailed Description

Base class for Factory layer.

24.72.2 Member Typedef Documentation

24.72.2.1 `typedef std::vector<BomAbstract*> AIRINV::FacBomAbstract::BomPool_T`

Define the list (pool) of Bom objects.

Definition at line 22 of file [FacBomAbstract.hpp](#).

24.72.3 Constructor & Destructor Documentation

24.72.3.1 `AIRINV::FacBomAbstract::FacBomAbstract () [inline, protected]`

Default Constructor.

This constructor is protected to ensure the class is abstract.

Definition at line 41 of file [FacBomAbstract.hpp](#).

24.72.3.2 `AIRINV::FacBomAbstract::FacBomAbstract (const FacBomAbstract &) [inline, protected]`

Definition at line 42 of file [FacBomAbstract.hpp](#).

24.72.3.3 `AIRINV::FacBomAbstract::~~FacBomAbstract () [protected, virtual]`

Destructor.

Definition at line 16 of file [FacBomAbstract.cpp](#).

24.72.4 Member Function Documentation

24.72.4.1 `std::size_t AIRINV::FacBomAbstract::getID (const BomAbstract * iBomAbstract_ptr) [static]`

Return the ID corresponding to the given object pointer.

Definition at line 35 of file [FacBomAbstract.cpp](#).

Referenced by [getID\(\)](#), and [getIDString\(\)](#).

24.72.4.2 `std::size_t AIRINV::FacBomAbstract::getID (const BomAbstract & iBomAbstract)`
[static]

Return the ID corresponding to the given object reference.

Definition at line 43 of file [FacBomAbstract.cpp](#).

References [getID\(\)](#).

24.72.4.3 `std::string AIRINV::FacBomAbstract::getIDString (const BomAbstract * iBomAbstract_ptr)` [static]

Return the ID, as a string, corresponding to the given object pointer.

Definition at line 48 of file [FacBomAbstract.cpp](#).

References [getID\(\)](#).

Referenced by [getIDString\(\)](#).

24.72.4.4 `std::string AIRINV::FacBomAbstract::getIDString (const BomAbstract & iBomAbstract)` [static]

Return the ID, as a string, corresponding to the given object reference.

Definition at line 56 of file [FacBomAbstract.cpp](#).

References [getIDString\(\)](#).

24.72.5 Friends And Related Function Documentation

24.72.5.1 `friend class FacSupervisor` [friend]

Definition at line 18 of file [FacBomAbstract.hpp](#).

24.72.6 Member Data Documentation

24.72.6.1 `BomPool_T AIRINV::FacBomAbstract::_pool` [protected]

List of instantiated Business Objects

Definition at line 53 of file [FacBomAbstract.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacBomAbstract.hpp](#)
- [airinv/factory/FacBomAbstract.cpp](#)

24.73 AIRINV::FacServiceAbstract Class Reference

```
#include <airinv/factory/FacServiceAbstract.hpp>
```

Public Types

- typedef [std::vector](#) < [ServiceAbstract](#) * > [ServicePool_T](#)

Public Member Functions

- virtual [~FacServiceAbstract](#) ()
- void [clean](#) ()

Protected Member Functions

- [FacServiceAbstract](#) ()

Protected Attributes

- [ServicePool_T](#) _pool

24.73.1 Detailed Description

Base class for the (Service) Factory layer.

24.73.2 Member Typedef Documentation

24.73.2.1 typedef [std::vector](#)<[ServiceAbstract](#)*> [AIRINV::FacServiceAbstract::ServicePool_T](#)

Define the list (pool) of Service objects.

Definition at line 20 of file [FacServiceAbstract.hpp](#).

24.73.3 Constructor & Destructor Documentation

24.73.3.1 [AIRINV::FacServiceAbstract::~~FacServiceAbstract](#) () [virtual]

Destructor.

Definition at line 13 of file [FacServiceAbstract.cpp](#).

References [clean\(\)](#).

24.73.3.2 [AIRINV::FacServiceAbstract::FacServiceAbstract](#) () [inline, protected]

Default Constructor.

This constructor is protected to ensure the class is abstract.

Definition at line 31 of file [FacServiceAbstract.hpp](#).

24.73.4 Member Function Documentation

24.73.4.1 void AIRINV::FacServiceAbstract::clean ()

Destroyed all the object instantiated by this factory.

Definition at line 18 of file [FacServiceAbstract.cpp](#).

References [_pool](#).

Referenced by [~FacServiceAbstract\(\)](#).

24.73.5 Member Data Documentation

24.73.5.1 ServicePool_T AIRINV::FacServiceAbstract::_pool [protected]

List of instantiated Business Objects

Definition at line 34 of file [FacServiceAbstract.hpp](#).

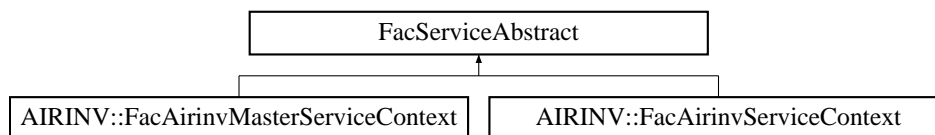
Referenced by [clean\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacServiceAbstract.hpp](#)
- [airinv/factory/FacServiceAbstract.cpp](#)

24.74 FacServiceAbstract Class Reference

Inheritance diagram for FacServiceAbstract:



The documentation for this class was generated from the following file:

- [airinv/factory/FacAirinvMasterServiceContext.hpp](#)

24.75 AIRINV::FacSupervisor Class Reference

```
#include <airinv/factory/FacSupervisor.hpp>
```

Public Types

- typedef [std::vector](#) < [FacBomAbstract](#) * > [BomFactoryPool_T](#)
- typedef [std::vector](#) < [FacServiceAbstract](#) * > [ServiceFactoryPool_T](#)

Public Member Functions

- void [registerBomFactory](#) ([FacBomAbstract *](#))
- void [registerServiceFactory](#) ([FacServiceAbstract *](#))
- void [cleanBomLayer](#) ()
- void [cleanServiceLayer](#) ()
- [~FacSupervisor](#) ()

Static Public Member Functions

- static [FacSupervisor](#) & [instance](#) ()
- static void [cleanFactory](#) ()

Protected Member Functions

- [FacSupervisor](#) ()
- [FacSupervisor](#) (const [FacSupervisor](#) &)

24.75.1 Detailed Description

Singleton class to register and clean all Factories.

24.75.2 Member Typedef Documentation

24.75.2.1 `typedef std::vector<FacBomAbstract*> AIRINV::FacSupervisor::BomFactoryPool_T`

Define the pool (list) of factories.

Definition at line 21 of file [FacSupervisor.hpp](#).

24.75.2.2 `typedef std::vector<FacServiceAbstract*> AIRINV::FacSupervisor::ServiceFactoryPool_T`

Definition at line 22 of file [FacSupervisor.hpp](#).

24.75.3 Constructor & Destructor Documentation

24.75.3.1 `AIRINV::FacSupervisor::~~FacSupervisor ()`

Destructor

The static instance is deleted (and reset to NULL) by the static [cleanFactory\(\)](#) method.

Definition at line 41 of file [FacSupervisor.cpp](#).

References [cleanBomLayer\(\)](#), and [cleanServiceLayer\(\)](#).

24.75.3.2 AIRINV::FacSupervisor::FacSupervisor () [protected]

Default Constructor.

This constructor is protected to ensure the singleton pattern.

Definition at line 16 of file [FacSupervisor.cpp](#).

Referenced by [instance\(\)](#).

24.75.3.3 AIRINV::FacSupervisor::FacSupervisor (const FacSupervisor &) [inline, protected]

Definition at line 66 of file [FacSupervisor.hpp](#).

24.75.4 Member Function Documentation

24.75.4.1 FacSupervisor & AIRINV::FacSupervisor::instance () [static]

Provides the unique instance.

The singleton is instantiated when first used.

Returns

[FacSupervisor&](#)

Definition at line 20 of file [FacSupervisor.cpp](#).

References [FacSupervisor\(\)](#).

24.75.4.2 void AIRINV::FacSupervisor::registerBomFactory (FacBomAbstract * ioFacBomAbstract_ptr)

Register a newly instantiated concrete factory for the Bom layer.

When a concrete Factory is firstly instantiated this factory have to register itself to the [FacSupervisor](#)

Parameters

<i>Fac-Abstract&</i>	the concrete Factory to register.
--------------------------	-----------------------------------

Definition at line 30 of file [FacSupervisor.cpp](#).

24.75.4.3 void AIRINV::FacSupervisor::registerServiceFactory (FacServiceAbstract * ioFacServiceAbstract_ptr)

Register a newly instantiated concrete factory for the Service layer.

When a concrete Factory is firstly instantiated this factory have to register itself to the [FacSupervisor](#).

Parameters

<i>FacService-Abstract</i> &	the concrete Factory to register.
------------------------------	-----------------------------------

Definition at line 36 of file [FacSupervisor.cpp](#).

24.75.4.4 void AIRINV::FacSupervisor::cleanBomLayer ()

Clean all created object.

Call the clean method of all the instantiated factories for the Bom layer.

Definition at line 47 of file [FacSupervisor.cpp](#).

Referenced by [~FacSupervisor\(\)](#), and [cleanFactory\(\)](#).

24.75.4.5 void AIRINV::FacSupervisor::cleanServiceLayer ()

Clean all Service created object.

Call the clean method of all the instantiated factories for the Service layer.

Definition at line 61 of file [FacSupervisor.cpp](#).

Referenced by [~FacSupervisor\(\)](#), and [cleanFactory\(\)](#).

24.75.4.6 void AIRINV::FacSupervisor::cleanFactory () [static]

Clean the static instance.

The singleton is deleted.

Definition at line 75 of file [FacSupervisor.cpp](#).

References [cleanBomLayer\(\)](#), and [cleanServiceLayer\(\)](#).

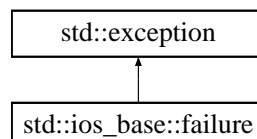
The documentation for this class was generated from the following files:

- [airinv/factory/FacSupervisor.hpp](#)
- [airinv/factory/FacSupervisor.cpp](#)

24.76 std::ios_base::failure Class Reference

STL class.

Inheritance diagram for std::ios_base::failure:



24.76.1 Detailed Description

STL class.

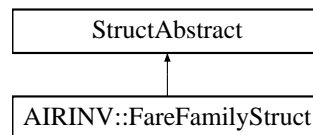
The documentation for this class was generated from the following file:

24.77 AIRINV::FareFamilyStruct Struct Reference

Utility Structure for the parsing of fare family details.

```
#include <airinv/bom/FareFamilyStruct.hpp>
```

Inheritance diagram for AIRINV::FareFamilyStruct:



Public Member Functions

- [FareFamilyStruct](#) ()
- [FareFamilyStruct](#) (const stdair::FamilyCode_T &, const stdair::ClassList_String_T &)
- void [fill](#) (stdair::FareFamily &) const
- const [std::string describe](#) () const

Public Attributes

- stdair::FamilyCode_T [_familyCode](#)
- stdair::ClassList_String_T [_classes](#)
- [BookingClassStructList_T _classList](#)

24.77.1 Detailed Description

Utility Structure for the parsing of fare family details.

24.77.2 Constructor & Destructor Documentation

24.77.2.1 AIRINV::FareFamilyStruct::FareFamilyStruct ()

Default constructor.

Definition at line 16 of file [FareFamilyStruct.cpp](#).

24.77.2.2 AIRINV::FareFamilyStruct::FareFamilyStruct (const stdair::FamilyCode_T & *iFamilyCode*, const stdair::ClassList_String_T & *iClasses*)

Main constructor.

Definition at line 23 of file [FareFamilyStruct.cpp](#).

24.77.3 Member Function Documentation

24.77.3.1 void AIRINV::FareFamilyStruct::fill (stdair::FareFamily & *ioFareFamily*) const

Fill the FareFamily objects with the attributes of the [FareFamilyStruct](#).

Definition at line 47 of file [FareFamilyStruct.cpp](#).

24.77.3.2 const std::string AIRINV::FareFamilyStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 29 of file [FareFamilyStruct.cpp](#).

References [_familyCode](#), [_classes](#), [_classList](#), and [AIRINV::BookingClassStruct::describe\(\)](#).

Referenced by [AIRINV::SegmentCabinStruct::describe\(\)](#).

24.77.4 Member Data Documentation

24.77.4.1 stdair::FamilyCode_T AIRINV::FareFamilyStruct::_familyCode

Definition at line 28 of file [FareFamilyStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#).

24.77.4.2 stdair::ClassList_String_T AIRINV::FareFamilyStruct::_classes

Definition at line 29 of file [FareFamilyStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#).

24.77.4.3 BookingClassStructList_T AIRINV::FareFamilyStruct::_classList

Definition at line 30 of file [FareFamilyStruct.hpp](#).

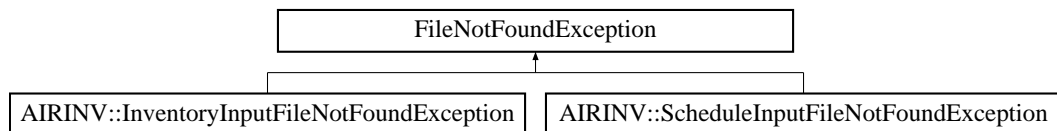
Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/FareFamilyStruct.hpp](#)
- [airinv/bom/FareFamilyStruct.cpp](#)

24.78 FileNotFoundException Class Reference

Inheritance diagram for FileNotFoundException:



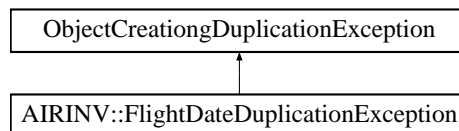
The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.79 AIRINV::FlightDateDuplicationException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::FlightDateDuplicationException:



Public Member Functions

- [FlightDateDuplicationException](#) (const [std::string](#) &iWhat)

24.79.1 Detailed Description

Duplicated flight date object.

24.79.2 Constructor & Destructor Documentation

24.79.2.1 `AIRINV::FlightDateDuplicationException::FlightDateDuplicationException (const std::string & iWhat) [inline]`

Constructor.

Definition at line 95 of file [AIRINV_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.80 AIRINV::FlightDateHelper Class Reference

```
#include <airinv/bom/FlightDateHelper.hpp>
```

Static Public Member Functions

- static void [fillFromRouting](#) (const stdair::FlightDate &)
- static void [updateAvailabilityPool](#) (const stdair::FlightDate &, const stdair::CabinCode_T &)
- static void [updateBookingControls](#) (stdair::FlightDate &)

24.80.1 Detailed Description

Class representing the actual business functions for an airline flight-date.

24.80.2 Member Function Documentation

24.80.2.1 void AIRINV::FlightDateHelper::fillFromRouting (const stdair::FlightDate & *iFlightDate*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 51 of file [FlightDateHelper.cpp](#).

24.80.2.2 void AIRINV::FlightDateHelper::updateAvailabilityPool (const stdair::FlightDate & *iFlightDate*, const stdair::CabinCode_T & *iCabinCode*) [static]

Update the availability pool of all the segment-cabins after a reservation.

Definition at line 67 of file [FlightDateHelper.cpp](#).

Referenced by [AIRINV::SegmentCabinHelper::updateFromReservation\(\)](#).

24.80.2.3 void AIRINV::FlightDateHelper::updateBookingControls (stdair::FlightDate & *ioFlightDate*) [static]

Update booking controls after optimisation.

Definition at line 22 of file [FlightDateHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::buildPseudoBidPriceVector\(\)](#), and [AIRINV::SegmentCabinHelper::updateBookingControlsUsingPseudoBidPriceVector\(\)](#).

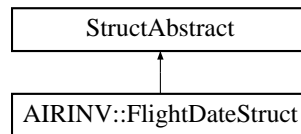
The documentation for this class was generated from the following files:

- [airinv/bom/FlightDateHelper.hpp](#)
- [airinv/bom/FlightDateHelper.cpp](#)

24.81 AIRINV::FlightDateStruct Struct Reference

```
#include <airinv/bom/FlightDateStruct.hpp>
```

Inheritance diagram for AIRINV::FlightDateStruct:



Public Member Functions

- `stdair::Date_T` [getDate](#) () const
- `stdair::Duration_T` [getTime](#) () const
- `const std::string` [describe](#) () const
- `void` [addAirport](#) (const `stdair::AirportCode_T` &)
- `void` [buildSegments](#) ()
- `void` [addSegmentCabin](#) (const [SegmentStruct](#) &, const [SegmentCabinStruct](#) &)
- `void` [addSegmentCabin](#) (const [SegmentCabinStruct](#) &)
- `void` [addFareFamily](#) (const [SegmentStruct](#) &, const [SegmentCabinStruct](#) &, const [FareFamilyStruct](#) &)
- `void` [addFareFamily](#) (const [SegmentCabinStruct](#) &, const [FareFamilyStruct](#) &)
- [FlightDateStruct](#) ()

Public Attributes

- `stdair::AirlineCode_T` [_airlineCode](#)
- `stdair::FlightNumber_T` [_flightNumber](#)
- `stdair::Date_T` [_flightDate](#)
- [FlightTypeCode](#) [_flightTypeCode](#)
- [FlightVisibilityCode](#) [_flightVisibilityCode](#)
- [LegStructList_T](#) [_legList](#)
- [SegmentStructList_T](#) [_segmentList](#)
- `unsigned int` [_itYear](#)
- `unsigned int` [_itMonth](#)
- `unsigned int` [_itDay](#)
- `int` [_dateOffSet](#)
- `long` [_itHours](#)
- `long` [_itMinutes](#)
- `long` [_itSeconds](#)

- [AirportList_T _airportList](#)
- [AirportOrderedList_T _airportOrderedList](#)
- [bool _legAlreadyDefined](#)
- [LegStruct _itLeg](#)
- [LegCabinStruct _itLegCabin](#)
- [BucketStruct _itBucket](#)
- [bool _areSegmentDefinitionsSpecific](#)
- [SegmentStruct _itSegment](#)
- [SegmentCabinStruct _itSegmentCabin](#)
- [BookingClassStruct _itBookingClass](#)

24.81.1 Detailed Description

Utility Structure for the parsing of Flight-Date structures.

24.81.2 Constructor & Destructor Documentation

24.81.2.1 AIRINV::FlightDateStruct::FlightDateStruct ()

Constructor.

Definition at line 17 of file [FlightDateStruct.cpp](#).

24.81.3 Member Function Documentation

24.81.3.1 stdair::Date_T AIRINV::FlightDateStruct::getDate () const

Set the date from the staging details.

Definition at line 25 of file [FlightDateStruct.cpp](#).

References [_itYear](#), [_itMonth](#), and [_itDay](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)\(\)](#).

24.81.3.2 stdair::Duration_T AIRINV::FlightDateStruct::getTime () const

Set the time from the staging details.

Definition at line 30 of file [FlightDateStruct.cpp](#).

References [_itHours](#), [_itMinutes](#), and [_itSeconds](#).

Referenced by [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)\(\)](#).

24.81.3.3 `const std::string AIRINV::FlightDateStruct::describe () const`

Give a description of the structure (for display purposes).

Definition at line 37 of file [FlightDateStruct.cpp](#).

References [_airlineCode](#), [_flightNumber](#), [_flightDate](#), [_flightTypeCode](#), [_flightVisibilityCode](#), [AIRINV::FlightVisibilityCode::getCode\(\)](#), [_legList](#), [AIRINV::LegStruct::describe\(\)](#), [_segmentList](#), and [AIRINV::SegmentStruct::describe\(\)](#).

24.81.3.4 `void AIRINV::FlightDateStruct::addAirport (const stdair::AirportCode.T & iAirport)`

Add the given airport to the internal lists (if not already existing).

Definition at line 67 of file [FlightDateStruct.cpp](#).

References [_airportList](#), and [_airportOrderedList](#).

Referenced by [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#).

24.81.3.5 `void AIRINV::FlightDateStruct::buildSegments ()`

Build the list of [SegmentStruct](#) objects.

Definition at line 83 of file [FlightDateStruct.cpp](#).

References [_airportOrderedList](#), [_segmentList](#), [AIRINV::SegmentStruct::_boardingPoint](#), [AIRINV::SegmentStruct::_offPoint](#), and [_airportList](#).

24.81.3.6 `void AIRINV::FlightDateStruct::addSegmentCabin (const SegmentStruct & iSegment, const SegmentCabinStruct & iCabin)`

Add, to the Segment structure whose key corresponds to the given (board point, off point) pair, the specific segment cabin details (mainly, the list of the class codes).

Note that the Segment structure is retrieved from the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 116 of file [FlightDateStruct.cpp](#).

References [_segmentList](#), [AIRINV::SegmentStruct::_boardingPoint](#), [AIRINV::SegmentStruct::_offPoint](#), and [AIRINV::SegmentStruct::_cabinList](#).

24.81.3.7 `void AIRINV::FlightDateStruct::addSegmentCabin (const SegmentCabinStruct & iCabin)`

Add, to all the Segment structures, the general segment cabin details (mainly, the list of the class codes).

Note that the Segment structures are stored within the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 153 of file [FlightDateStruct.cpp](#).

References [_segmentList](#), and [AIRINV::SegmentStruct::_cabinList](#).

24.81.3.8 void AIRINV::FlightDateStruct::addFareFamily (const SegmentStruct & *iSegment*,
const SegmentCabinStruct & *iCabin*, const FareFamilyStruct & *iFareFamily*)

Add, to the SegmentCabin structure whose key corresponds to the given cabin code, the specific segment fare family details (mainly, the list of the class codes).

Note that the SegmentCabin structure is retrieved from the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 167 of file [FlightDateStruct.cpp](#).

References [_segmentList](#), [AIRINV::SegmentStruct::_boardingPoint](#), [AIRINV::SegmentStruct::_offPoint](#), [AIRINV::SegmentCabinStruct::_cabinCode](#), and [AIRINV::SegmentCabinStruct::_fareFamilies](#).

24.81.3.9 void AIRINV::FlightDateStruct::addFareFamily (const SegmentCabinStruct &
iCabin, const FareFamilyStruct & *iFareFamily*)

Add, to all the Segment structures, the general fare family sets (list of fare families).

Note that the SegmentCabin structures are stored within the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 231 of file [FlightDateStruct.cpp](#).

References [_segmentList](#), [AIRINV::SegmentStruct::_cabinList](#), [AIRINV::SegmentCabinStruct::_cabinCode](#), and [AIRINV::SegmentCabinStruct::_fareFamilies](#).

24.81.4 Member Data Documentation

24.81.4.1 stdair::AirlineCode_T AIRINV::FlightDateStruct::_airlineCode

Definition at line 81 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

24.81.4.2 stdair::FlightNumber_T AIRINV::FlightDateStruct::_flightNumber

Definition at line 82 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#).

24.81.4.3 stdair::Date_T AIRINV::FlightDateStruct::_flightDate

Definition at line 83 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#).

24.81.4.4 FlightTypeCode AIRINV::FlightDateStruct::_flightTypeCode

Definition at line 84 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#).

24.81.4.5 FlightVisibilityCode AIRINV::FlightDateStruct::_flightVisibilityCode

Definition at line 85 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#).

24.81.4.6 LegStructList_T AIRINV::FlightDateStruct::_legList

Definition at line 86 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#).

24.81.4.7 SegmentStructList_T AIRINV::FlightDateStruct::_segmentList

Definition at line 87 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [buildSegments\(\)](#), [addSegmentCabin\(\)](#), [addFareFamily\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

24.81.4.8 unsigned int AIRINV::FlightDateStruct::_itYear

Staging Date.

Definition at line 90 of file [FlightDateStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.81.4.9 unsigned int AIRINV::FlightDateStruct::_itMonth

Definition at line 91 of file [FlightDateStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.81.4.10 unsigned int AIRINV::FlightDateStruct::_itDay

Definition at line 92 of file [FlightDateStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.81.4.11 int AIRINV::FlightDateStruct::_dateOffSet

Definition at line 93 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#).

24.81.4.12 long AIRINV::FlightDateStruct::_itHours

Staging Time.

Definition at line 96 of file [FlightDateStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.81.4.13 long AIRINV::FlightDateStruct::_itMinutes

Definition at line 97 of file [FlightDateStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.81.4.14 long AIRINV::FlightDateStruct::_itSeconds

Definition at line 98 of file [FlightDateStruct.hpp](#).

Referenced by [getTime\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#).

24.81.4.15 AirportList_T AIRINV::FlightDateStruct::_airportList

Staging Airport List (helper to derive the list of Segment structures).

Definition at line 102 of file [FlightDateStruct.hpp](#).

Referenced by [addAirport\(\)](#), and [buildSegments\(\)](#).

24.81.4.16 AirportOrderedList_T AIRINV::FlightDateStruct::_airportOrderedList

Definition at line 103 of file [FlightDateStruct.hpp](#).

Referenced by [addAirport\(\)](#), and [buildSegments\(\)](#).

24.81.4.17 bool AIRINV::FlightDateStruct::_legAlreadyDefined

Staging Leg (resp. Cabin) structure, gathering the result of the iteration on one leg (resp. cabin).

Definition at line 107 of file [FlightDateStruct.hpp](#).

24.81.4.18 LegStruct AIRINV::FlightDateStruct::_itLeg

Definition at line 108 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#).

24.81.4.19 LegCabinStruct AIRINV::FlightDateStruct::_itLegCabin

Definition at line 109 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), -

AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator().

24.81.4.20 BucketStruct AIRINV::FlightDateStruct::_itBucket

Definition at line 110 of file [FlightDateStruct.hpp](#).

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), and AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator().

24.81.4.21 bool AIRINV::FlightDateStruct::_areSegmentDefinitionsSpecific

Staging Segment-related attributes.

Definition at line 113 of file [FlightDateStruct.hpp](#).

24.81.4.22 SegmentStruct AIRINV::FlightDateStruct::_itSegment

Definition at line 114 of file [FlightDateStruct.hpp](#).

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

24.81.4.23 SegmentCabinStruct AIRINV::FlightDateStruct::_itSegmentCabin

Definition at line 115 of file [FlightDateStruct.hpp](#).

Referenced by AIRINV::InventoryParserHelper::storeAirlineCode::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), and AIRINV::InventoryParserHelper::storeFClasses::operator().

24.81.4.24 BookingClassStruct AIRINV::FlightDateStruct::_itBookingClass

Definition at line 116 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#).

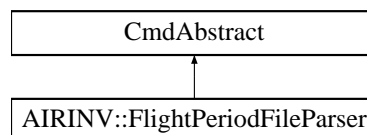
The documentation for this struct was generated from the following files:

- [airinv/bom/FlightDateStruct.hpp](#)
- [airinv/bom/FlightDateStruct.cpp](#)

24.82 AIRINV::FlightPeriodFileParser Class Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::FlightPeriodFileParser:



Public Member Functions

- [FlightPeriodFileParser](#) (stdair::BomRoot &ioBomRoot, const stdair::Filename_T &iFilename)
- bool [generateInventories](#) ()

24.82.1 Detailed Description

Short Description

Detailed Description. Class wrapping the initialisation and entry point of the parser.

24.83 AIRINV::ScheduleParserHelper::FlightPeriodParser Struct Reference 250

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

24.82.2 Constructor & Destructor Documentation

24.82.2.1 AIRINV::FlightPeriodFileParser::FlightPeriodFileParser (stdair::BomRoot & ioBomRoot, const stdair::Filename_T & iFilename)

Constructor.

Definition at line 631 of file [ScheduleParserHelper.cpp](#).

24.82.3 Member Function Documentation

24.82.3.1 bool AIRINV::FlightPeriodFileParser::generateInventories ()

Parse the input file and generate the Inventories.

Definition at line 655 of file [ScheduleParserHelper.cpp](#).

Referenced by [AIRINV::ScheduleParser::generateInventories\(\)](#).

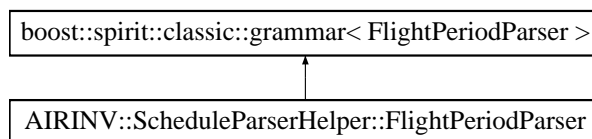
The documentation for this class was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.83 AIRINV::ScheduleParserHelper::FlightPeriodParser Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::FlightPeriodParser:



Classes

- struct [definition](#)

Public Member Functions

- [FlightPeriodParser](#) (stdair::BomRoot &, [FlightPeriodStruct](#) &)

Public Attributes

- [stdair::BomRoot](#) & [_bomRoot](#)
- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.83.1 Detailed Description

AirlineCode; FlightNumber; DateRangeStart; DateRangeEnd; DOW; (list) BoardingPoint; OffPoint; BoardingTime; DateOffset; OffTime; ElapsedTime; (list) CabinCode; Capacity; SegmentSpecificity (0 or 1); (list) (optional BoardingPoint; OffPoint); CabinCode; Classes BA; 9; 2007-04-20; 2007-04-30; 0000011; LHR; BKK; 22:00; +1; 15:15; 11:15; C; 12; M; 300; BKK; SYD; 18:10; +1; 06:05; 08:55; C; 20; M; 250; 0; C; CDIU; 1; CD; 2; IU; M; YHBKLMNOPQRSTUVWXYZ; 3; YHBKLMNOPQRSTUVWXYZ BA; 9; 2007-04-20; 2007-04-30; 1111100; LHR; SIN; 22:00; +1; 15:15; 11:15; C; 15; M; 310; SIN; SYD; 18:10; +1; 06:05; 08:55; C; 25; M; 260; 1; LHR; SIN; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTUVWXYZ; 2; YHBKLMNOPQRSTUVWXYZ SIN; SYD; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTUVWXYZ; 2; YHBKLMNOPQRSTUVWXYZ LHR; SYD; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTUVWXYZ; 2; YHBKLMNOPQRSTUVWXYZ

Grammar: DOW ::= int FlightKey ::= AirlineCode ';' FlightNumber ';' DateRangeStart ';' DateRangeEnd ';' DOW LegKey ::= BoardingPoint ';' OffPoint LegDetails ::= BoardingTime ['/ BoardingDateOffset] ';' OffTime ['/ BoardingDateOffset] ';' Elapsed LegCabinDetails ::= CabinCode ';' Capacity Leg ::= LegKey ';' LegDetails (';' CabinDetails)+ SegmentKey ::= BoardingPoint ';' OffPoint SegmentCabinDetails ::= CabinCode ';' Classes (';' FamilyCabinDetails)+ FamilyCabinDetails ::= FamilyCode ';' - Classes FullSegmentCabinDetails ::= (';' SegmentCabinDetails)+ GenericSegment ::= '0' (';' SegmentCabinDetails)+ SpecificSegments ::= '1' (';' SegmentKey ';' FullSegmentCabinDetails)+ SegmentSection ::= GenericSegment | SpecificSegments FlightPeriod ::= FlightKey (';' Leg)+ ';' SegmentSection ';' EndOfFlight EndOfFlight ::= ';' Grammar for the Flight-Period parser.

24.83.2 Constructor & Destructor Documentation

24.83.2.1 AIRINV::ScheduleParserHelper::FlightPeriodParser::FlightPeriodParser (stdair::BomRoot & *ioBomRoot*, FlightPeriodStruct & *ioFlightPeriod*)

Definition at line 466 of file [ScheduleParserHelper.cpp](#).

24.83.3 Member Data Documentation

24.83.3.1 stdair::BomRoot& AIRINV::ScheduleParserHelper::FlightPeriodParser::_bomRoot

Definition at line 273 of file [ScheduleParserHelper.hpp](#).

24.83.3.2 FlightPeriodStruct& AIRINV::ScheduleParserHelper::FlightPeriodParser::_flightPeriod

Definition at line 274 of file [ScheduleParserHelper.hpp](#).

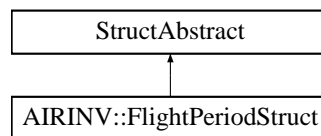
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.84 AIRINV::FlightPeriodStruct Struct Reference

```
#include <airinv/bom/FlightPeriodStruct.hpp>
```

Inheritance diagram for AIRINV::FlightPeriodStruct:



Public Member Functions

- `stdair::Date_T` [getDate](#) () const
- `stdair::Duration_T` [getTime](#) () const
- `const std::string` [describe](#) () const
- `void` [addAirport](#) (const `stdair::AirportCode_T` &)
- `void` [buildSegments](#) ()
- `void` [addSegmentCabin](#) (const [SegmentStruct](#) &, const [SegmentCabinStruct](#) &)
- `void` [addSegmentCabin](#) (const [SegmentCabinStruct](#) &)
- `void` [addFareFamily](#) (const [SegmentStruct](#) &, const [SegmentCabinStruct](#) &, const [FareFamilyStruct](#) &)
- `void` [addFareFamily](#) (const [SegmentCabinStruct](#) &, const [FareFamilyStruct](#) &)
- [FlightPeriodStruct](#) ()

Public Attributes

- `stdair::AirlineCode_T` [_airlineCode](#)
- `stdair::FlightNumber_T` [_flightNumber](#)
- `stdair::DatePeriod_T` [_dateRange](#)
- `stdair::DoWStruct` [_dow](#)
- [LegStructList_T](#) [_legList](#)
- [SegmentStructList_T](#) [_segmentList](#)
- `bool` [_legAlreadyDefined](#)
- [LegStruct](#) [_itLeg](#)
- [LegCabinStruct](#) [_itLegCabin](#)
- `stdair::Date_T` [_dateRangeStart](#)
- `stdair::Date_T` [_dateRangeEnd](#)
- `unsigned int` [_itYear](#)

- unsigned int [_itMonth](#)
- unsigned int [_itDay](#)
- int [_dateOffset](#)
- long [_itHours](#)
- long [_itMinutes](#)
- long [_itSeconds](#)
- [AirportList_T _airportList](#)
- [AirportOrderedList_T _airportOrderedList](#)
- bool [_areSegmentDefinitionsSpecific](#)
- [SegmentStruct _itSegment](#)
- [SegmentCabinStruct _itSegmentCabin](#)

24.84.1 Detailed Description

Utility Structure for the parsing of Flight-Period structures.

24.84.2 Constructor & Destructor Documentation

24.84.2.1 AIRINV::FlightPeriodStruct::FlightPeriodStruct ()

Constructor.

Definition at line 17 of file [FlightPeriodStruct.cpp](#).

24.84.3 Member Function Documentation

24.84.3.1 stdair::Date_T AIRINV::FlightPeriodStruct::getDate () const

Set the date from the staging details.

Definition at line 24 of file [FlightPeriodStruct.cpp](#).

References [_itYear](#), [_itMonth](#), and [_itDay](#).

Referenced by [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

24.84.3.2 stdair::Duration_T AIRINV::FlightPeriodStruct::getTime () const

Set the time from the staging details.

Definition at line 29 of file [FlightPeriodStruct.cpp](#).

References [_itHours](#), [_itMinutes](#), and [_itSeconds](#).

Referenced by [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#).

24.84.3.3 `const std::string AIRINV::FlightPeriodStruct::describe () const`

Give a description of the structure (for display purposes).

Definition at line 36 of file [FlightPeriodStruct.cpp](#).

References [_airlineCode](#), [_flightNumber](#), [_dateRange](#), [_dow](#), [_legList](#), [AIRINV::LegStruct::describe\(\)](#), [_segmentList](#), and [AIRINV::SegmentStruct::describe\(\)](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

24.84.3.4 `void AIRINV::FlightPeriodStruct::addAirport (const std::air::AirportCode.T & iAirport)`

Add the given airport to the internal lists (if not already existing).

Definition at line 62 of file [FlightPeriodStruct.cpp](#).

References [_airportList](#), and [_airportOrderedList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#).

24.84.3.5 `void AIRINV::FlightPeriodStruct::buildSegments ()`

Build the list of [SegmentStruct](#) objects.

Definition at line 78 of file [FlightPeriodStruct.cpp](#).

References [_airportOrderedList](#), [_segmentList](#), [AIRINV::SegmentStruct::_boardingPoint](#), [AIRINV::SegmentStruct::_offPoint](#), and [_airportList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#).

24.84.3.6 `void AIRINV::FlightPeriodStruct::addSegmentCabin (const SegmentStruct & iSegment, const SegmentCabinStruct & iCabin)`

Add, to the Segment structure whose key corresponds to the given (board point, off point) pair, the specific segment cabin details (mainly, the list of the class codes).

Note that the Segment structure is retrieved from the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 111 of file [FlightPeriodStruct.cpp](#).

References [_segmentList](#), [AIRINV::SegmentStruct::_boardingPoint](#), [AIRINV::SegmentStruct::_offPoint](#), and [AIRINV::SegmentStruct::_cabinList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#).

24.84.3.7 `void AIRINV::FlightPeriodStruct::addSegmentCabin (const SegmentCabinStruct & iCabin)`

Add, to all the Segment structures, the general segment cabin details (mainly, the list of the class codes).

Note that the Segment structures are stored within the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 148 of file [FlightPeriodStruct.cpp](#).

References [_segmentList](#), and [AIRINV::SegmentStruct::_cabinList](#).

24.84.3.8 `void AIRINV::FlightPeriodStruct::addFareFamily (const SegmentStruct & iSegment, const SegmentCabinStruct & iCabin, const FareFamilyStruct & iFareFamily)`

Add, to the SegmentCabin structure whose key corresponds to the given cabin code, the specific segment fare family details (mainly, the list of the class codes).

Note that the SegmentCabin structure is retrieved from the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 161 of file [FlightPeriodStruct.cpp](#).

References [_segmentList](#), [AIRINV::SegmentStruct::_boardingPoint](#), [AIRINV::SegmentStruct::_offPoint](#), [AIRINV::SegmentCabinStruct::_cabinCode](#), and [AIRINV::SegmentCabinStruct::_fareFamilies](#).

Referenced by [AIRINV::ScheduleParserHelper::storeFCClasses::operator\(\)](#).

24.84.3.9 `void AIRINV::FlightPeriodStruct::addFareFamily (const SegmentCabinStruct & iCabin, const FareFamilyStruct & iFareFamily)`

Add, to all the Segment structures, the general fare family sets (list of fare families).

Note that the SegmentCabin structures are stored within the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 225 of file [FlightPeriodStruct.cpp](#).

References [_segmentList](#), [AIRINV::SegmentStruct::_cabinList](#), [AIRINV::SegmentCabinStruct::_cabinCode](#), and [AIRINV::SegmentCabinStruct::_fareFamilies](#).

24.84.4 Member Data Documentation

24.84.4.1 `stdair::AirlineCode_T AIRINV::FlightPeriodStruct::_airlineCode`

Definition at line 80 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

24.84.4.2 `stdair::FlightNumber_T AIRINV::FlightPeriodStruct::_flightNumber`

Definition at line 81 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#).

24.84.4.3 `stdair::DatePeriod_T AIRINV::FlightPeriodStruct::_dateRange`

Definition at line 82 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

24.84.4.4 stdair::DoWStruct AIRINV::FlightPeriodStruct::_dow

Definition at line 83 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#).

24.84.4.5 LegStructList_T AIRINV::FlightPeriodStruct::_legList

Definition at line 84 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

24.84.4.6 SegmentStructList_T AIRINV::FlightPeriodStruct::_segmentList

Definition at line 85 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), [buildSegments\(\)](#), [addSegmentCabin\(\)](#), and [addFareFamily\(\)](#).

24.84.4.7 bool AIRINV::FlightPeriodStruct::_legAlreadyDefined

Staging Leg (resp. Cabin) structure, gathering the result of the iteration on one leg (resp. cabin).

Definition at line 89 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

24.84.4.8 LegStruct AIRINV::FlightPeriodStruct::_itLeg

Definition at line 90 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

24.84.4.9 LegCabinStruct AIRINV::FlightPeriodStruct::_itLegCabin

Definition at line 91 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#).

24.84.4.10 stdair::Date_T AIRINV::FlightPeriodStruct::_dateRangeStart

Staging Date.

Definition at line 94 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

24.84.4.11 stdair::Date_T AIRINV::FlightPeriodStruct::_dateRangeEnd

Definition at line 95 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

24.84.4.12 unsigned int AIRINV::FlightPeriodStruct::_itYear

Definition at line 96 of file [FlightPeriodStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.84.4.13 unsigned int AIRINV::FlightPeriodStruct::_itMonth

Definition at line 97 of file [FlightPeriodStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.84.4.14 unsigned int AIRINV::FlightPeriodStruct::_itDay

Definition at line 98 of file [FlightPeriodStruct.hpp](#).

Referenced by [getDate\(\)](#).

24.84.4.15 int AIRINV::FlightPeriodStruct::_dateOffset

Definition at line 99 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#).

24.84.4.16 long AIRINV::FlightPeriodStruct::_itHours

Staging Time.

Definition at line 102 of file [FlightPeriodStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.84.4.17 long AIRINV::FlightPeriodStruct::_itMinutes

Definition at line 103 of file [FlightPeriodStruct.hpp](#).

Referenced by [getTime\(\)](#).

24.84.4.18 long AIRINV::FlightPeriodStruct::_itSeconds

Definition at line 104 of file [FlightPeriodStruct.hpp](#).

Referenced by [getTime\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#).

24.84.4.19 AirportList_T AIRINV::FlightPeriodStruct::_airportList

Staging Airport List (helper to derive the list of Segment structures).

Definition at line 108 of file [FlightPeriodStruct.hpp](#).

Referenced by [addAirport\(\)](#), [buildSegments\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#).

24.84.4.20 AirportOrderedList_T AIRINV::FlightPeriodStruct::_airportOrderedList

Definition at line 109 of file [FlightPeriodStruct.hpp](#).

Referenced by [addAirport\(\)](#), [buildSegments\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#).

24.84.4.21 bool AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific

Staging Segment-related attributes.

Definition at line 112 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#).

24.84.4.22 SegmentStruct AIRINV::FlightPeriodStruct::_itSegment

Definition at line 113 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#).

24.84.4.23 SegmentCabinStruct AIRINV::FlightPeriodStruct::_itSegmentCabin

Definition at line 114 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#).

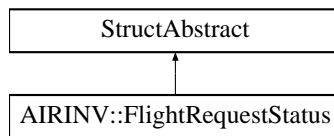
The documentation for this struct was generated from the following files:

- [airinv/bom/FlightPeriodStruct.hpp](#)
- [airinv/bom/FlightPeriodStruct.cpp](#)

24.85 AIRINV::FlightRequestStatus Struct Reference

```
#include <airinv/FlightRequestStatus.hpp>
```

Inheritance diagram for AIRINV::FlightRequestStatus:



Public Types

- enum [EN_FlightRequestStatus](#) { [OK](#) = 0, [NOT_FOUND](#), [INTERNAL_ERROR](#), [LAST_VALUE](#) }

Public Member Functions

- [EN_FlightRequestStatus](#) [getCode](#) () const
- const [std::string](#) [describe](#) () const
- [FlightRequestStatus](#) (const [EN_FlightRequestStatus](#) &)
- [FlightRequestStatus](#) (const [std::string](#) &iCode)

Static Public Member Functions

- static const [std::string](#) & [getLabel](#) (const [EN_FlightRequestStatus](#) &)
- static const [std::string](#) & [getCodeLabel](#) (const [EN_FlightRequestStatus](#) &)
- static [std::string](#) [describeLabels](#) ()

24.85.1 Detailed Description

Enumeration of flight type codes.

24.85.2 Member Enumeration Documentation

24.85.2.1 enum AIRINV::FlightRequestStatus::EN_FlightRequestStatus

Enumerator:

OK
NOT_FOUND
INTERNAL_ERROR
LAST_VALUE

Definition at line 17 of file [FlightRequestStatus.hpp](#).

24.85.3 Constructor & Destructor Documentation

24.85.3.1 AIRINV::FlightRequestStatus::FlightRequestStatus (const EN_FlightRequestStatus & *iFlightRequestStatus*)

Constructor.

Definition at line 25 of file [FlightRequestStatus.cpp](#).

24.85.3.2 AIRINV::FlightRequestStatus::FlightRequestStatus (const std::string & *iCode*)

Constructor.

Definition at line 30 of file [FlightRequestStatus.cpp](#).

References [LAST_VALUE](#), [OK](#), [NOT_FOUND](#), [INTERNAL_ERROR](#), and [describe-Labels\(\)](#).

24.85.4 Member Function Documentation

24.85.4.1 const std::string & AIRINV::FlightRequestStatus::getLabel (const EN_FlightRequestStatus & *iCode*) [static]

Get the label as a string.

Definition at line 58 of file [FlightRequestStatus.cpp](#).

24.85.4.2 const std::string & AIRINV::FlightRequestStatus::getCodeLabel (const EN_FlightRequestStatus & *iCode*) [static]

Get the label as a single char.

Definition at line 64 of file [FlightRequestStatus.cpp](#).

24.85.4.3 std::string AIRINV::FlightRequestStatus::describeLabels () [static]

List the labels.

Definition at line 69 of file [FlightRequestStatus.cpp](#).

References [LAST_VALUE](#).

Referenced by [FlightRequestStatus\(\)](#).

24.85.4.4 FlightRequestStatus::EN_FlightRequestStatus AIRINV::FlightRequestStatus::getCode () const

Get the enumerated value.

Definition at line 82 of file [FlightRequestStatus.cpp](#).

24.85.4.5 const std::string AIRINV::FlightRequestStatus::describe () const

Give a description of the structure (for display purposes).

Definition at line 87 of file [FlightRequestStatus.cpp](#).

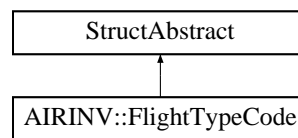
The documentation for this struct was generated from the following files:

- [airinv/FlightRequestStatus.hpp](#)
- [airinv/basic/FlightRequestStatus.cpp](#)

24.86 AIRINV::FlightTypeCode Struct Reference

```
#include <airinv/basic/FlightTypeCode.hpp>
```

Inheritance diagram for AIRINV::FlightTypeCode:



Public Types

- enum [EN_FlightTypeCode](#) { [DOMESTIC](#) = 0, [INTERNATIONAL](#), [GROUND_HANDLING](#), [LAST_VALUE](#) }

Public Member Functions

- [EN_FlightTypeCode](#) [getCode](#) () const
- const [std::string](#) [describe](#) () const
- [FlightTypeCode](#) (const [EN_FlightTypeCode](#) &)
- [FlightTypeCode](#) (const [std::string](#) &iCode)

Static Public Member Functions

- static const [std::string](#) & [getLabel](#) (const [EN_FlightTypeCode](#) &)
- static const [std::string](#) & [getCodeLabel](#) (const [EN_FlightTypeCode](#) &)
- static [std::string](#) [describeLabels](#) ()

24.86.1 Detailed Description

Enumeration of flight type codes.

24.86.2 Member Enumeration Documentation

24.86.2.1 enum AIRINV::FlightTypeCode::EN_FlightTypeCode

Enumerator:

DOMESTIC

INTERNATIONAL
GROUND_HANDLING
LAST_VALUE

Definition at line 17 of file [FlightTypeCode.hpp](#).

24.86.3 Constructor & Destructor Documentation

24.86.3.1 AIRINV::FlightTypeCode::FlightTypeCode (const EN_FlightTypeCode & *iFlightTypeCode*)

Constructor.

Definition at line 24 of file [FlightTypeCode.cpp](#).

24.86.3.2 AIRINV::FlightTypeCode::FlightTypeCode (const std::string & *iCode*)

Constructor.

Definition at line 29 of file [FlightTypeCode.cpp](#).

References [LAST_VALUE](#), [DOMESTIC](#), [INTERNATIONAL](#), [GROUND_HANDLING](#), and [describeLabels\(\)](#).

24.86.4 Member Function Documentation

24.86.4.1 const std::string & AIRINV::FlightTypeCode::getLabel (const EN_FlightTypeCode & *iCode*) [static]

Get the label as a string.

Definition at line 54 of file [FlightTypeCode.cpp](#).

24.86.4.2 const std::string & AIRINV::FlightTypeCode::getCodeLabel (const EN_FlightTypeCode & *iCode*) [static]

Get the label as a single char.

Definition at line 60 of file [FlightTypeCode.cpp](#).

24.86.4.3 std::string AIRINV::FlightTypeCode::describeLabels () [static]

List the labels.

Definition at line 65 of file [FlightTypeCode.cpp](#).

References [LAST_VALUE](#).

Referenced by [FlightTypeCode\(\)](#).

24.86.4.4 FlightTypeCode::EN_FlightTypeCode AIRINV::FlightTypeCode::getCode () const

Get the enumerated value.

Definition at line 77 of file [FlightTypeCode.cpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)\(\)](#).

24.86.4.5 const std::string AIRINV::FlightTypeCode::describe () const

Give a description of the structure (for display purposes).

Definition at line 82 of file [FlightTypeCode.cpp](#).

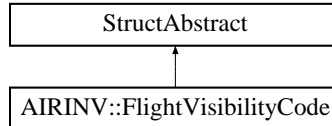
The documentation for this struct was generated from the following files:

- [airinv/basic/FlightTypeCode.hpp](#)
- [airinv/basic/FlightTypeCode.cpp](#)

24.87 AIRINV::FlightVisibilityCode Struct Reference

```
#include <airinv/basic/FlightVisibilityCode.hpp>
```

Inheritance diagram for AIRINV::FlightVisibilityCode:



Public Types

- enum [EN_FlightVisibilityCode](#) { [NORMAL](#) = 0, [HIDDEN](#), [PSEUDO](#), [LAST_VALUE](#) }

Public Member Functions

- [EN_FlightVisibilityCode](#) [getCode](#) () const
- const [std::string](#) [describe](#) () const
- [FlightVisibilityCode](#) (const [EN_FlightVisibilityCode](#) &)
- [FlightVisibilityCode](#) (const [std::string](#) &iCode)

Static Public Member Functions

- static const [std::string](#) & [getLabel](#) (const [EN_FlightVisibilityCode](#) &)
- static const [std::string](#) & [getCodeLabel](#) (const [EN_FlightVisibilityCode](#) &)
- static [std::string](#) [describeLabels](#) ()

24.87.1 Detailed Description

Enumeration of flight visibility codes.

24.87.2 Member Enumeration Documentation

24.87.2.1 enum AIRINV::FlightVisibilityCode::EN_FlightVisibilityCode

Enumerator:

NORMAL
HIDDEN
PSEUDO
LAST_VALUE

Definition at line 17 of file [FlightVisibilityCode.hpp](#).

24.87.3 Constructor & Destructor Documentation

24.87.3.1 AIRINV::FlightVisibilityCode::FlightVisibilityCode (const EN_FlightVisibilityCode & iFlightVisibilityCode)

Constructor.

Definition at line 25 of file [FlightVisibilityCode.cpp](#).

24.87.3.2 AIRINV::FlightVisibilityCode::FlightVisibilityCode (const std::string & iCode)

Constructor.

Definition at line 30 of file [FlightVisibilityCode.cpp](#).

References [LAST_VALUE](#), [NORMAL](#), [HIDDEN](#), [PSEUDO](#), and [describeLabels\(\)](#).

24.87.4 Member Function Documentation

24.87.4.1 const std::string & AIRINV::FlightVisibilityCode::getLabel (const EN_FlightVisibilityCode & iCode) [static]

Get the label as a string.

Definition at line 57 of file [FlightVisibilityCode.cpp](#).

24.87.4.2 const std::string & AIRINV::FlightVisibilityCode::getCodeLabel (const EN_FlightVisibilityCode & iCode) [static]

Get the label as a single char.

Definition at line 63 of file [FlightVisibilityCode.cpp](#).

24.87.4.3 std::string AIRINV::FlightVisibilityCode::describeLabels () [static]

List the labels.

Definition at line 68 of file [FlightVisibilityCode.cpp](#).

References [LAST_VALUE](#).

Referenced by [FlightVisibilityCode\(\)](#).

24.87.4.4 FlightVisibilityCode::EN_FlightVisibilityCode AIRINV::FlightVisibilityCode::getCode () const

Get the enumerated value.

Definition at line 81 of file [FlightVisibilityCode.cpp](#).

Referenced by [AIRINV::FlightDateStruct::describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#).

24.87.4.5 const std::string AIRINV::FlightVisibilityCode::describe () const

Give a description of the structure (for display purposes).

Definition at line 86 of file [FlightVisibilityCode.cpp](#).

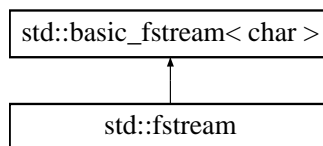
The documentation for this struct was generated from the following files:

- [airinv/basic/FlightVisibilityCode.hpp](#)
- [airinv/basic/FlightVisibilityCode.cpp](#)

24.88 std::fstream Class Reference

STL class.

Inheritance diagram for std::fstream:



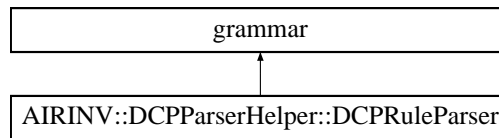
24.88.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.89 grammar Class Reference

Inheritance diagram for grammar:

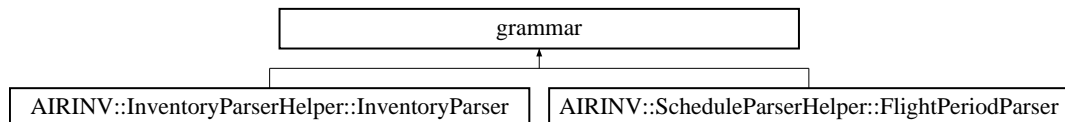


The documentation for this class was generated from the following file:

- [airinv/command/vault/DCPParserHelper.hpp](#)

24.90 grammar Class Reference

Inheritance diagram for grammar:



The documentation for this class was generated from the following file:

- [airinv/command/ScheduleParserHelper.hpp](#)

24.91 AIRINV::GuillotineBlockHelper Class Reference

```
#include <airinv/bom/GuillotineBlockHelper.hpp>
```

Static Public Member Functions

- static void [takeSnapshots](#) (stdair::GuillotineBlock &, const stdair::DateTime_T &)

24.91.1 Detailed Description

Class representing the actual business functions for an airline inventory.

24.91.2 Member Function Documentation

24.91.2.1 void AIRINV::GuillotineBlockHelper::takeSnapshots (stdair::GuillotineBlock & *ioGuillotineBlock*, const stdair::DateTime_T & *iSnapshotTime*) [static]

Take inventory snapshots.

Definition at line 27 of file [GuillotineBlockHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::updateAvailabilities\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/bom/GuillotineBlockHelper.hpp](#)
- [airinv/bom/GuillotineBlockHelper.cpp](#)

24.92 AIRINV::header Struct Reference

```
#include <airinv/server/header.hpp>
```

Public Attributes

- [std::string name](#)
- [std::string value](#)

24.92.1 Detailed Description

Header structure.

24.92.2 Member Data Documentation

24.92.2.1 std::string AIRINV::header::name

Definition at line 14 of file [header.hpp](#).

24.92.2.2 std::string AIRINV::header::value

Definition at line 15 of file [header.hpp](#).

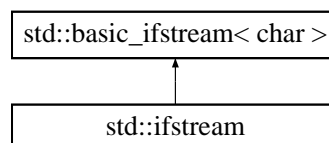
The documentation for this struct was generated from the following file:

- [airinv/server/header.hpp](#)

24.93 std::ifstream Class Reference

STL class.

Inheritance diagram for std::ifstream:



24.93.1 Detailed Description

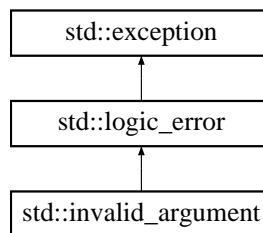
STL class.

The documentation for this class was generated from the following file:

24.94 `std::invalid_argument` Class Reference

STL class.

Inheritance diagram for `std::invalid_argument`:



24.94.1 Detailed Description

STL class.

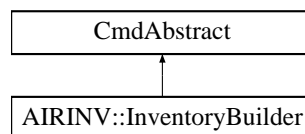
The documentation for this class was generated from the following file:

24.95 `AIRINV::InventoryBuilder` Class Reference

Class handling the generation / instantiation of the Inventory BOM.

```
#include <airinv/command/InventoryBuilder.hpp>
```

Inheritance diagram for `AIRINV::InventoryBuilder`:



Friends

- struct [InventoryParserHelper::doEndFlightDate](#)

24.95.1 Detailed Description

Class handling the generation / instantiation of the Inventory BOM.

24.95.2 Friends And Related Function Documentation

24.95.2.1 friend struct InventoryParserHelper::doEndFlightDate [friend]

Only the following class may use methods of [InventoryBuilder](#). Indeed, as those methods build the BOM, it is not good to expose them publicly.

Definition at line 49 of file [InventoryBuilder.hpp](#).

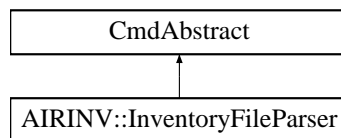
The documentation for this class was generated from the following files:

- [airinv/command/InventoryBuilder.hpp](#)
- [airinv/command/InventoryBuilder.cpp](#)

24.96 AIRINV::InventoryFileParser Class Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryFileParser:



Public Member Functions

- [InventoryFileParser](#) (stdair::BomRoot &, const stdair::Filename_T & iInventoryInputFilename)
- bool [buildInventory](#) ()

24.96.1 Detailed Description

Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

24.96.2 Constructor & Destructor Documentation

24.96.2.1 AIRINV::InventoryFileParser::InventoryFileParser (stdair::BomRoot & , const stdair::Filename_T & iInventoryInputFilename)

Constructor.

Definition at line 1092 of file [InventoryParserHelper.cpp](#).

24.96.3 Member Function Documentation

24.96.3.1 bool AIRINV::InventoryFileParser::buildInventory ()

Parse the inventory input file.

Definition at line 1116 of file [InventoryParserHelper.cpp](#).

Referenced by [AIRINV::InventoryParser::buildInventory\(\)](#).

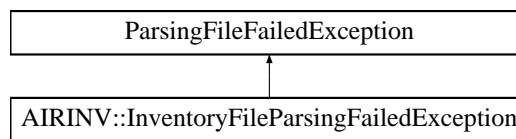
The documentation for this class was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.97 AIRINV::InventoryFileParsingFailedException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::InventoryFileParsingFailedException:



Public Member Functions

- [InventoryFileParsingFailedException](#) (const [std::string](#) &iWhat)

24.97.1 Detailed Description

The inventory input file can not be parsed.

24.97.2 Constructor & Destructor Documentation

24.97.2.1 AIRINV::InventoryFileParsingFailedException::InventoryFileParsingFailedException (const [std::string](#) & *iWhat*) [inline]

Constructor.

Definition at line 33 of file [AIRINV_Types.hpp](#).

The documentation for this class was generated from the following file:

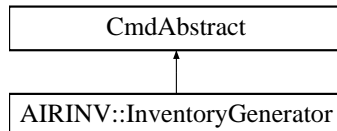
- [airinv/AIRINV_Types.hpp](#)

24.98 AIRINV::InventoryGenerator Class Reference

Class handling the generation / instantiation of the Inventory BOM.

```
#include <airinv/command/InventoryGenerator.hpp>
```

Inheritance diagram for AIRINV::InventoryGenerator:



Friends

- class [FlightPeriodFileParser](#)
- class [FFFlightPeriodFileParser](#)
- struct [ScheduleParserHelper::doEndFlight](#)
- class [ScheduleParser](#)

24.98.1 Detailed Description

Class handling the generation / instantiation of the Inventory BOM.

24.98.2 Friends And Related Function Documentation

24.98.2.1 friend class [FlightPeriodFileParser](#) [friend]

Only the following class may use methods of [InventoryGenerator](#). Indeed, as those methods build the BOM, it is not good to expose them publicly.

Definition at line 48 of file [InventoryGenerator.hpp](#).

24.98.2.2 friend class [FFFlightPeriodFileParser](#) [friend]

Definition at line 49 of file [InventoryGenerator.hpp](#).

24.98.2.3 friend struct [ScheduleParserHelper::doEndFlight](#) [friend]

Definition at line 50 of file [InventoryGenerator.hpp](#).

24.98.2.4 friend class [ScheduleParser](#) [friend]

Definition at line 51 of file [InventoryGenerator.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/command/InventoryGenerator.hpp](#)
- [airinv/command/InventoryGenerator.cpp](#)

24.99 AIRINV::InventoryHelper Class Reference

```
#include <airinv/bom/InventoryHelper.hpp>
```

Static Public Member Functions

- static void [fillFromRouting](#) (const stdair::Inventory &)
- static void [calculateAvailability](#) (const stdair::Inventory &, const [std::string](#) &, stdair::TravelSolutionStruct &)
- static void [getYieldAndBidPrice](#) (const stdair::Inventory &, const [std::string](#) &, stdair::TravelSolutionStruct &)
- static bool [sell](#) (stdair::Inventory &, const [std::string](#) & iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- static bool [cancel](#) (stdair::Inventory &, const [std::string](#) & iSegmentDateKey, const stdair::ClassCode_T &, const stdair::PartySize_T &)
- static void [takeSnapshots](#) (const stdair::Inventory &, const stdair::DateTime_T &)

24.99.1 Detailed Description

Class representing the actual business functions for an airline inventory.

24.99.2 Member Function Documentation

24.99.2.1 void AIRINV::InventoryHelper::fillFromRouting (const stdair::Inventory & *iInventory*)
[static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 28 of file [InventoryHelper.cpp](#).

24.99.2.2 void AIRINV::InventoryHelper::calculateAvailability (const stdair::Inventory & *iInventory*, const [std::string](#) & *iFullSegmentDateKey*, stdair::TravelSolutionStruct & *ioTravelSolution*) [static]

Compute the availability for the given travel solution.

Definition at line 44 of file [InventoryHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::updateAvailabilities\(\)](#).

24.99.2.3 void AIRINV::InventoryHelper::getYieldAndBidPrice (const stdair::Inventory & *iInventory*, const [std::string](#) & *iFullSegmentDateKey*, stdair::TravelSolutionStruct & *ioTravelSolution*) [static]

Get yield and bid price information for the given travel solution.

Definition at line 97 of file [InventoryHelper.cpp](#).

24.99.2.4 `bool AIRINV::InventoryHelper::sell (stdair::Inventory & ioInventory, const std::string & iSegmentDateKey, const stdair::ClassCode_T & iClassCode, const stdair::PartySize_T & iPartySize) [static]`

Make a sale with the given travel solution.

Definition at line 239 of file [InventoryHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::updateFromReservation\(\)](#).

24.99.2.5 `bool AIRINV::InventoryHelper::cancel (stdair::Inventory & ioInventory, const std::string & iSegmentDateKey, const stdair::ClassCode_T & iClassCode, const stdair::PartySize_T & iPartySize) [static]`

Make a cancellation.

Definition at line 295 of file [InventoryHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::updateFromReservation\(\)](#).

24.99.2.6 `void AIRINV::InventoryHelper::takeSnapshots (const stdair::Inventory & ilInventory, const stdair::DateTime_T & iSnapshotTime) [static]`

Take inventory snapshots.

Definition at line 351 of file [InventoryHelper.cpp](#).

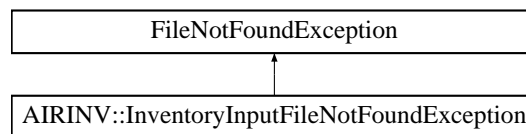
The documentation for this class was generated from the following files:

- [airinv/bom/InventoryHelper.hpp](#)
- [airinv/bom/InventoryHelper.cpp](#)

24.100 AIRINV::InventoryInputFileNotFoundException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::InventoryInputFileNotFoundException:



Public Member Functions

- [InventoryInputFileNotFoundException](#) (const [std::string](#) &*iWhat*)

24.100.1 Detailed Description

The inventory input file can not be found or opened.

24.100.2 Constructor & Destructor Documentation

24.100.2.1 AIRINV::InventoryInputFileNotFoundException::InventoryInputFileNotFoundException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 71 of file [AIRINV_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.101 AIRINV::InventoryManager Class Reference

```
#include <airinv/command/InventoryManager.hpp>
```

Static Public Member Functions

- static void [createDirectAccesses](#) (const stdair::BomRoot &)
- static void [createDirectAccesses](#) (stdair::Inventory &)
- static void [createDirectAccesses](#) (stdair::FlightDate &)
- static void [createDirectAccesses](#) (stdair::SegmentDate &)
- static void [buildSimilarSegmentCabinSets](#) (const stdair::BomRoot &)
- static void [buildSimilarSegmentCabinSets](#) (stdair::Inventory &)
- static void [buildGuillotineBlock](#) (stdair::Inventory &, const stdair::Guillotine-
Number_T &, const [DepartureDateSegmentCabinMap_T](#) &)
- static void [setDefaultBidPriceVector](#) (stdair::BomRoot &)
- static void [setDefaultBidPriceVector](#) (stdair::Inventory &)

Friends

- class [AIRINV_Master_Service](#)
- class [AIRINV_Service](#)

24.101.1 Detailed Description

Command wrapping the travel request process.

24.101.2 Member Function Documentation

24.101.2.1 void AIRINV::InventoryManager::createDirectAccesses (const stdair::BomRoot & *iBomRoot*) [static]

Create the direct accesses within the inventories such as links between leg-date and segment-date, ect.

Definition at line 717 of file [InventoryManager.cpp](#).

References [AIRINV::BomRootHelper::fillFromRouting\(\)](#).

Referenced by [createDirectAccesses\(\)](#), [AIRINV::InventoryParser::buildInventory\(\)](#), and [AIRINV::ScheduleParser::generateInventories\(\)](#).

24.101.2.2 void AIRINV::InventoryManager::createDirectAccesses (stdair::Inventory & *ioInventory*) [static]

Definition at line 737 of file [InventoryManager.cpp](#).

References [createDirectAccesses\(\)](#).

24.101.2.3 void AIRINV::InventoryManager::createDirectAccesses (stdair::FlightDate & *ioFlightDate*) [static]

Definition at line 755 of file [InventoryManager.cpp](#).

References [createDirectAccesses\(\)](#).

24.101.2.4 void AIRINV::InventoryManager::createDirectAccesses (stdair::SegmentDate & *ioSegmentDate*) [static]

Definition at line 824 of file [InventoryManager.cpp](#).

24.101.2.5 void AIRINV::InventoryManager::buildSimilarSegmentCabinSets (const stdair::BomRoot & *iBomRoot*) [static]

Build the similar segment-cabin sets and the corresponding guillotine blocks for snapshots and other data.

Definition at line 890 of file [InventoryManager.cpp](#).

Referenced by [AIRINV::ScheduleParser::generateInventories\(\)](#), and [AIRINV::AIRINV_Service::buildSampleBom\(\)](#).

24.101.2.6 void AIRINV::InventoryManager::buildSimilarSegmentCabinSets (stdair::Inventory & *ioInventory*) [static]

Definition at line 906 of file [InventoryManager.cpp](#).

References [buildGuillotineBlock\(\)](#).

24.101.2.7 void AIRINV::InventoryManager::buildGuillotineBlock (stdair::Inventory & *ioInventory*, const stdair::GuillotineNumber_T & *iGuillotineNumber*, const DepartureDateSegmentCabinMap_T & *iDDSCMap*) [static]

Definition at line 981 of file [InventoryManager.cpp](#).

Referenced by [buildSimilarSegmentCabinSets\(\)](#).

24.101.2.8 void AIRINV::InventoryManager::setDefaultBidPriceVector (stdair::BomRoot & *ioBomRoot*) [static]

Bid price vectors initialisation

Definition at line 596 of file [InventoryManager.cpp](#).

Referenced by [AIRINV::ScheduleParser::generateInventories\(\)](#).

24.101.2.9 void [AIRINV::InventoryManager::setDefaultBidPriceVector](#) ([stdair::Inventory & ioInventory](#)) [static]

Definition at line 628 of file [InventoryManager.cpp](#).

24.101.3 Friends And Related Function Documentation

24.101.3.1 friend class [AIRINV_Master_Service](#) [friend]

Definition at line 35 of file [InventoryManager.hpp](#).

24.101.3.2 friend class [AIRINV_Service](#) [friend]

Definition at line 36 of file [InventoryManager.hpp](#).

The documentation for this class was generated from the following files:

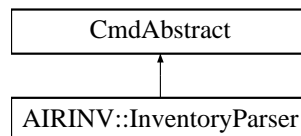
- [airinv/command/InventoryManager.hpp](#)
- [airinv/command/InventoryManager.cpp](#)

24.102 AIRINV::InventoryParser Class Reference

Class wrapping the parser entry point.

```
#include <airinv/command/InventoryParser.hpp>
```

Inheritance diagram for [AIRINV::InventoryParser](#):



Static Public Member Functions

- static void [buildInventory](#) (const [stdair::Filename_T](#) & [iInventoryFilename](#), [stdair::BomRoot](#) &)

24.102.1 Detailed Description

Class wrapping the parser entry point.

24.102.2 Member Function Documentation

24.102.2.1 void AIRINV::InventoryParser::buildInventory (const stdair::Filename_T & *inventoryFilename*, stdair::BomRoot & *ioBomRoot*) [static]

Parses the CSV file describing an airline inventory, and generates the corresponding data model in memory. It can then be used, for instance, in a simulator.

Parameters

<i>const</i>	stdair::Filename_T& The file-name of the CSV-formatted inventory input file.
<i>stdair::Bom-Root&</i>	Root of the BOM tree.

Definition at line 20 of file [InventoryParser.cpp](#).

References [AIRINV::InventoryFileParser::buildInventory\(\)](#), and [AIRINV::InventoryManager::createDirectAccesses\(\)](#).

Referenced by [AIRINV::AIRINV_Service::parseAndLoad\(\)](#).

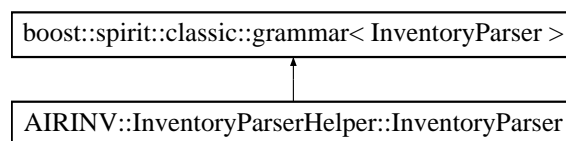
The documentation for this class was generated from the following files:

- [airinv/command/InventoryParser.hpp](#)
- [airinv/command/InventoryParser.cpp](#)

24.103 AIRINV::InventoryParserHelper::InventoryParser Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::InventoryParser:



Classes

- struct [definition](#)

Public Member Functions

- [InventoryParser](#) (stdair::BomRoot &, [FlightDateStruct](#) &, unsigned int &)

Public Attributes

- `stdair::BomRoot` & [_bomRoot](#)
- [FlightDateStruct](#) & [_flightDate](#)
- `unsigned int` & [_nbOfFlights](#)

24.103.1 Detailed Description

FlightDepDate; 2010-02-08; SIN; BKK; L; 10.0; 1.0;

Grammar: FlightDate ::= FlightDepDate ',' Origin ',' Destination EndOfFlightDate FlightDepDate ::= date EndOfFlightDate ::= ',' Grammar for the inventory parser.

24.103.2 Constructor & Destructor Documentation

24.103.2.1 `AIRINV::InventoryParserHelper::InventoryParser::InventoryParser (stdair::BomRoot & ioBomRoot, FlightDateStruct & ioFlightDate, unsigned int & ioNbOfFlights)`

Definition at line 862 of file [InventoryParserHelper.cpp](#).

24.103.3 Member Data Documentation

24.103.3.1 `stdair::BomRoot& AIRINV::InventoryParserHelper::InventoryParser::_bomRoot`

Definition at line 482 of file [InventoryParserHelper.hpp](#).

24.103.3.2 `FlightDateStruct& AIRINV::InventoryParserHelper::InventoryParser::_flightDate`

Definition at line 483 of file [InventoryParserHelper.hpp](#).

24.103.3.3 `unsigned int& AIRINV::InventoryParserHelper::InventoryParser::_nbOfFlights`

Definition at line 484 of file [InventoryParserHelper.hpp](#).

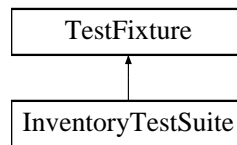
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.104 InventoryTestSuite Class Reference

```
#include <test/airinv/InventoryTestSuite.hpp>
```

Inheritance diagram for InventoryTestSuite:



Public Member Functions

- void [simpleInventory](#) ()
- [InventoryTestSuite](#) ()

Protected Attributes

- [std::stringstream _describeKey](#)

24.104.1 Detailed Description

Utility class for CPPUnit-based testing.

24.104.2 Constructor & Destructor Documentation

24.104.2.1 `InventoryTestSuite::InventoryTestSuite ()`

Test some error detection functionalities. Constructor.

24.104.3 Member Function Documentation

24.104.3.1 `void InventoryTestSuite::simpleInventory ()`

Test a simple inventory functionality.

24.104.4 Member Data Documentation

24.104.4.1 `std::stringstream InventoryTestSuite::_describeKey` `[protected]`

Definition at line 28 of file [InventoryTestSuite.hpp](#).

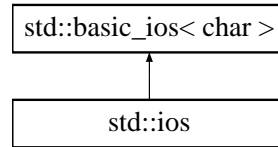
The documentation for this class was generated from the following file:

- [test/airinv/InventoryTestSuite.hpp](#)

24.105 `std::ios` Class Reference

STL class.

Inheritance diagram for std::ios:



24.105.1 Detailed Description

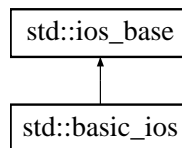
STL class.

The documentation for this class was generated from the following file:

24.106 std::ios_base Class Reference

STL class.

Inheritance diagram for std::ios_base:



Classes

- class [failure](#)
STL class.

24.106.1 Detailed Description

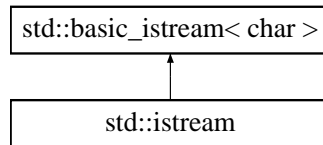
STL class.

The documentation for this class was generated from the following file:

24.107 std::istream Class Reference

STL class.

Inheritance diagram for std::istream:



24.107.1 Detailed Description

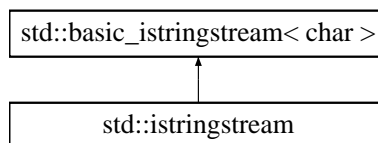
STL class.

The documentation for this class was generated from the following file:

24.108 **std::istream Class Reference**

STL class.

Inheritance diagram for `std::istream`:



24.108.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.109 **std::basic_string::iterator Class Reference**

STL iterator class.

24.109.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.110 **std::string::iterator Class Reference**

STL iterator class.

24.110.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.111 std::wstring::iterator Class Reference

STL iterator class.

24.111.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.112 std::deque::iterator Class Reference

STL iterator class.

24.112.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.113 std::list::iterator Class Reference

STL iterator class.

24.113.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.114 std::map::iterator Class Reference

STL iterator class.

24.114.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.115 **std::multimap::iterator Class Reference**

STL iterator class.

24.115.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.116 **std::set::iterator Class Reference**

STL iterator class.

24.116.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.117 **std::multiset::iterator Class Reference**

STL iterator class.

24.117.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.118 **std::vector::iterator Class Reference**

STL iterator class.

24.118.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.119 **AIRINV::LegCabinHelper Class Reference**

```
#include <airinv/bom/LegCabinHelper.hpp>
```

24.119.1 Detailed Description

Class representing the actual business functions for an airline leg-cabin.

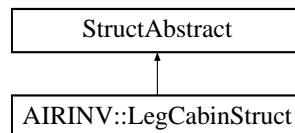
The documentation for this class was generated from the following file:

- [airinv/bom/LegCabinHelper.hpp](#)

24.120 AIRINV::LegCabinStruct Struct Reference

```
#include <airinv/bom/LegCabinStruct.hpp>
```

Inheritance diagram for AIRINV::LegCabinStruct:



Public Member Functions

- void [fill](#) (stdair::LegCabin &) const
- const [std::string describe](#) () const

Public Attributes

- stdair::CabinCode_T [_cabinCode](#)
- stdair::CabinCapacity_T [_saleableCapacity](#)
- stdair::CapacityAdjustment_T [_adjustment](#)
- stdair::CapacityAdjustment_T [_dcsRegrade](#)
- stdair::AuthorizationLevel_T [_au](#)
- stdair::Availability_T [_avPool](#)
- stdair::UPR_T [_upr](#)
- stdair::NbOfBookings_T [_nbOfBookings](#)
- stdair::Availability_T [_nav](#)
- stdair::Availability_T [_gav](#)
- stdair::OverbookingRate_T [_acp](#)
- stdair::NbOfBookings_T [_etb](#)
- stdair::NbOfBookings_T [_staffNbOfBookings](#)
- stdair::NbOfBookings_T [_wINbOfBookings](#)
- stdair::NbOfBookings_T [_groupNbOfBookings](#)
- [BucketStructList_T _bucketList](#)

24.120.1 Detailed Description

Utility Structure for the parsing of LegCabin details.

24.120.2 Member Function Documentation

24.120.2.1 void AIRINV::LegCabinStruct::fill (stdair::LegCabin & *ioLegCabin*) const

Fill the LegCabin objects with the attributes of the [LegCabinStruct](#).

Definition at line 38 of file [LegCabinStruct.cpp](#).

References [_saleableCapacity](#).

24.120.2.2 const std::string AIRINV::LegCabinStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 15 of file [LegCabinStruct.cpp](#).

References [_cabinCode](#), [_saleableCapacity](#), [_adjustment](#), [_dcsRegrade](#), [_au](#), [_avPool](#), [_upr](#), [_nbOfBookings](#), [_nav](#), [_gav](#), [_acp](#), [_etb](#), [_staffNbOfBookings](#), [_wlnNbOfBookings](#), [_groupNbOfBookings](#), [_bucketList](#), and [AIRINV::BucketStruct::describe\(\)](#).

Referenced by [AIRINV::LegStruct::describe\(\)](#).

24.120.3 Member Data Documentation

24.120.3.1 stdair::CabinCode_T AIRINV::LegCabinStruct::_cabinCode

Definition at line 26 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#).

24.120.3.2 stdair::CabinCapacity_T AIRINV::LegCabinStruct::_saleableCapacity

Definition at line 27 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#).

24.120.3.3 stdair::CapacityAdjustment_T AIRINV::LegCabinStruct::_adjustment

Definition at line 28 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

24.120.3.4 stdair::CapacityAdjustment_T AIRINV::LegCabinStruct::_dcsRegrade

Definition at line 29 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

24.120.3.5 stdair::AuthorizationLevel_T AIRINV::LegCabinStruct::_au

Definition at line 30 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#).

24.120.3.6 stdair::Availability_T AIRINV::LegCabinStruct::_avPool

Definition at line 31 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

24.120.3.7 stdair::UPR_T AIRINV::LegCabinStruct::_upr

Definition at line 32 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#).

24.120.3.8 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_nbOfBookings

Definition at line 33 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#).

24.120.3.9 stdair::Availability_T AIRINV::LegCabinStruct::_nav

Definition at line 34 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#).

24.120.3.10 stdair::Availability_T AIRINV::LegCabinStruct::_gav

Definition at line 35 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#).

24.120.3.11 stdair::OverbookingRate_T AIRINV::LegCabinStruct::_acp

Definition at line 36 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#).

24.120.3.12 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_etb

Definition at line 37 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#).

24.120.3.13 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_staffNbOfBookings

Definition at line 38 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

24.120.3.14 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_wINbOfBookings

Definition at line 39 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

24.120.3.15 stdair::NbOfBookings_T AIRINV::LegCabinStruct::_groupNbOfBookings

Definition at line 40 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

24.120.3.16 BucketStructList_T AIRINV::LegCabinStruct::_bucketList

Definition at line 41 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#).

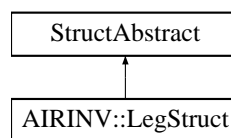
The documentation for this struct was generated from the following files:

- [airinv/bom/LegCabinStruct.hpp](#)
- [airinv/bom/LegCabinStruct.cpp](#)

24.121 AIRINV::LegStruct Struct Reference

```
#include <airinv/bom/LegStruct.hpp>
```

Inheritance diagram for AIRINV::LegStruct:



Public Member Functions

- void [fill](#) (const stdair::Date_T &iRefDate, stdair::LegDate &) const
- void [fill](#) (stdair::LegDate &) const
- const [std::string describe](#) () const
- [LegStruct](#) ()

Public Attributes

- stdair::AirportCode_T [_boardingPoint](#)
- stdair::DateOffset_T [_boardingDateOffset](#)
- stdair::Date_T [_boardingDate](#)
- stdair::Duration_T [_boardingTime](#)
- stdair::AirportCode_T [_offPoint](#)
- stdair::DateOffset_T [_offDateOffset](#)

- [stdair::Date_T _offDate](#)
- [stdair::Duration_T _offTime](#)
- [stdair::Duration_T _elapsed](#)
- [LegCabinStructList_T _cabinList](#)

24.121.1 Detailed Description

Utility Structure for the parsing of Leg structures.

24.121.2 Constructor & Destructor Documentation

24.121.2.1 AIRINV::LegStruct::LegStruct ()

Default Constructor.

Definition at line 16 of file [LegStruct.cpp](#).

24.121.3 Member Function Documentation

24.121.3.1 void AIRINV::LegStruct::fill (const stdair::Date_T & *iRefDate*, stdair::LegDate & *ioLegDate*) const

Fill the LegDate objects with the attributes of the [LegStruct](#).

The given reference date corresponds to the date of the FlightDate. Indeed, each Leg gets date off-sets, when compared to that (reference) flight-date, both for the boarding date and for the off date.

Definition at line 41 of file [LegStruct.cpp](#).

References [_offPoint](#), [_boardingDateOffset](#), [_boardingTime](#), [_offDateOffset](#), [_offTime](#), and [_elapsed](#).

24.121.3.2 void AIRINV::LegStruct::fill (stdair::LegDate & *ioLegDate*) const

Fill the LegDate objects with the attributes of the [LegStruct](#).

Definition at line 58 of file [LegStruct.cpp](#).

References [_offPoint](#), [_offDate](#), [_boardingTime](#), [_offTime](#), and [_elapsed](#).

24.121.3.3 const std::string AIRINV::LegStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 21 of file [LegStruct.cpp](#).

References [_boardingPoint](#), [_boardingDate](#), [_boardingTime](#), [_offPoint](#), [_offDate](#), [_offTime](#), [_elapsed](#), [_cabinList](#), and [AIRINV::LegCabinStruct::describe\(\)](#).

Referenced by [AIRINV::FlightDateStruct::describe\(\)](#), and [AIRINV::FlightPeriodStruct::describe\(\)](#).

24.121.4 Member Data Documentation

24.121.4.1 stdair::AirportCode_T AIRINV::LegStruct::_boardingPoint

Definition at line 26 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#).

24.121.4.2 stdair::DateOffset_T AIRINV::LegStruct::_boardingDateOffset

Definition at line 27 of file [LegStruct.hpp](#).

Referenced by [fill\(\)](#), and [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#).

24.121.4.3 stdair::Date_T AIRINV::LegStruct::_boardingDate

Definition at line 28 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#).

24.121.4.4 stdair::Duration_T AIRINV::LegStruct::_boardingTime

Definition at line 29 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#).

24.121.4.5 stdair::AirportCode_T AIRINV::LegStruct::_offPoint

Definition at line 30 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#).

24.121.4.6 stdair::DateOffset_T AIRINV::LegStruct::_offDateOffset

Definition at line 31 of file [LegStruct.hpp](#).

Referenced by [fill\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#).

24.121.4.7 stdair::Date_T AIRINV::LegStruct::_offDate

Definition at line 32 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), and [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#).

24.121.4.8 stdair::Duration_T AIRINV::LegStruct::_offTime

Definition at line 33 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#).

[::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#).

24.121.4.9 `stdair::Duration_T AIRINV::LegStruct::_elapsed`

Definition at line 34 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsed-Time::operator\(\)](#).

24.121.4.10 `LegCabinStructList_T AIRINV::LegStruct::_cabinList`

Definition at line 35 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

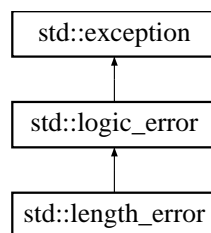
The documentation for this struct was generated from the following files:

- [airinv/bom/LegStruct.hpp](#)
- [airinv/bom/LegStruct.cpp](#)

24.122 `std::length_error` Class Reference

STL class.

Inheritance diagram for `std::length_error`:



24.122.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.123 `std::list` Class Reference

STL class.

Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.123.1 Detailed Description

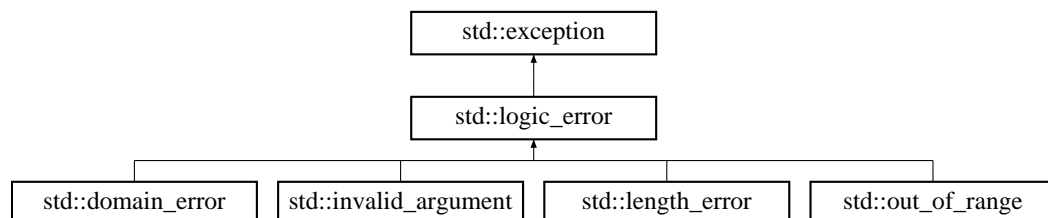
STL class.

The documentation for this class was generated from the following files:

24.124 std::logic_error Class Reference

STL class.

Inheritance diagram for std::logic_error:



24.124.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.125 std::map Class Reference

STL class.

Classes

- class [const_iterator](#)

STL iterator class.

- class [const_reverse_iterator](#)

STL iterator class.

- class [iterator](#)

STL iterator class.

- class [reverse_iterator](#)

STL iterator class.

24.125.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.126 `std::multimap` Class Reference

STL class.

Classes

- class [const_iterator](#)

STL iterator class.

- class [const_reverse_iterator](#)

STL iterator class.

- class [iterator](#)

STL iterator class.

- class [reverse_iterator](#)

STL iterator class.

24.126.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.127 `std::multiset` Class Reference

STL class.

Classes

- class [const_iterator](#)

STL iterator class.

- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

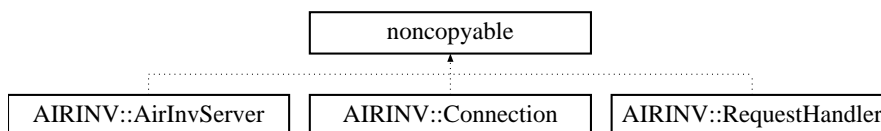
24.127.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.128 noncopyable Class Reference

Inheritance diagram for noncopyable:

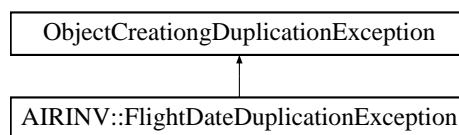


The documentation for this class was generated from the following file:

- `airinv/server/Connection.hpp`

24.129 ObjectCreationgDuplicationException Class Reference

Inheritance diagram for ObjectCreationgDuplicationException:



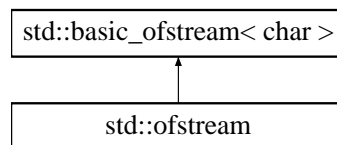
The documentation for this class was generated from the following file:

- `airinv/AIRINV_Types.hpp`

24.130 **std::ofstream Class Reference**

STL class.

Inheritance diagram for std::ofstream:



24.130.1 Detailed Description

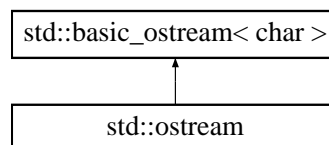
STL class.

The documentation for this class was generated from the following file:

24.131 **std::ostream Class Reference**

STL class.

Inheritance diagram for std::ostream:



24.131.1 Detailed Description

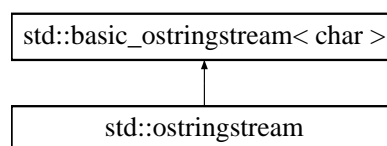
STL class.

The documentation for this class was generated from the following file:

24.132 **std::ostringstream Class Reference**

STL class.

Inheritance diagram for std::ostringstream:



24.132.1 Detailed Description

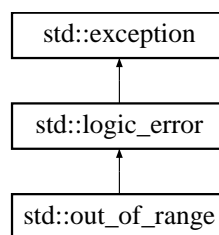
STL class.

The documentation for this class was generated from the following file:

24.133 `std::out_of_range` Class Reference

STL class.

Inheritance diagram for `std::out_of_range`:



24.133.1 Detailed Description

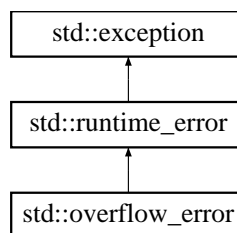
STL class.

The documentation for this class was generated from the following file:

24.134 `std::overflow_error` Class Reference

STL class.

Inheritance diagram for `std::overflow_error`:



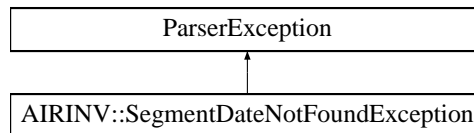
24.134.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.135 ParserException Class Reference

Inheritance diagram for ParserException:



The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.136 AIRINV::InventoryParserHelper::ParserSemanticAction Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::ParserSemanticAction:

[illegible]

Public Member Functions

- ParserSemanticAction (FlightDateStruct &)

Public Attributes

- FlightDateStruct & _flightDate

24.136.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the Inventory Parser.

24.136.2 Constructor & Destructor Documentation

24.136 AIRINV::InventoryParserHelper::ParserSemanticAction Struct Reference 200

24.136.2.1 AIRINV::InventoryParserHelper::ParserSemanticAction::ParserSemanticAction (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 26 of file [InventoryParserHelper.cpp](#).

24.136.3 Member Data Documentation

24.136.3.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParser-](#)

24.137 AIRINV::ScheduleParserHelper::ParserSemanticAction Struct Reference

Helper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

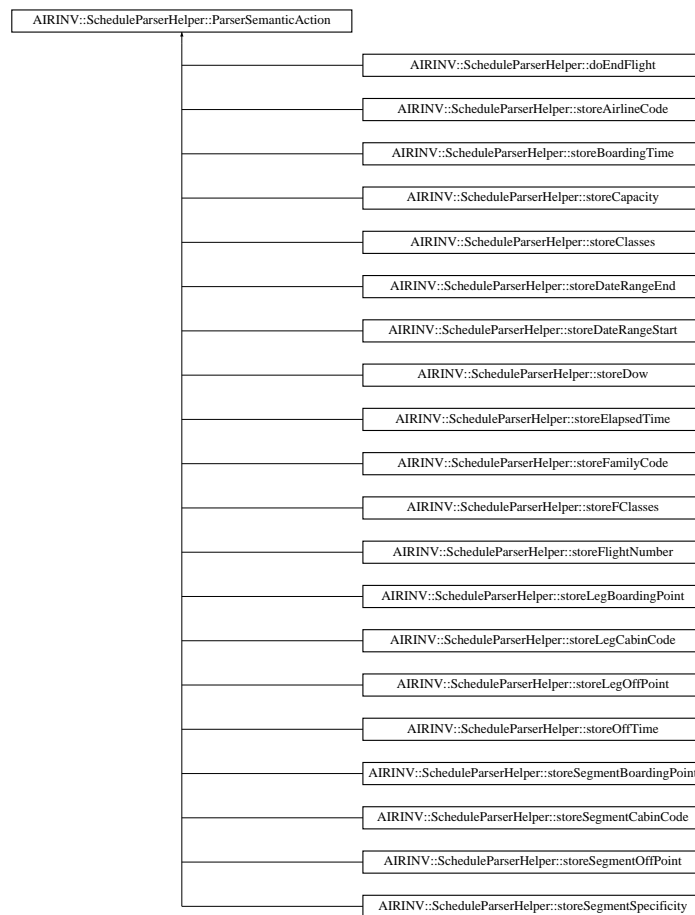
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.137 AIRINV::ScheduleParserHelper::ParserSemanticAction Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::ParserSemanticAction:



Public Member Functions

- [ParserSemanticAction](#) (FlightPeriodStruct &)

24.137 AIRINV::ScheduleParserHelper::ParserSemanticAction Struct Reference 300

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.137.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the Schedule Parser.

24.137.2 Constructor & Destructor Documentation

24.137.2.1 AIRINV::ScheduleParserHelper::ParserSemanticAction::ParserSemanticAction ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 27 of file [ScheduleParserHelper.cpp](#).

24.137.3 Member Data Documentation

24.137.3.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

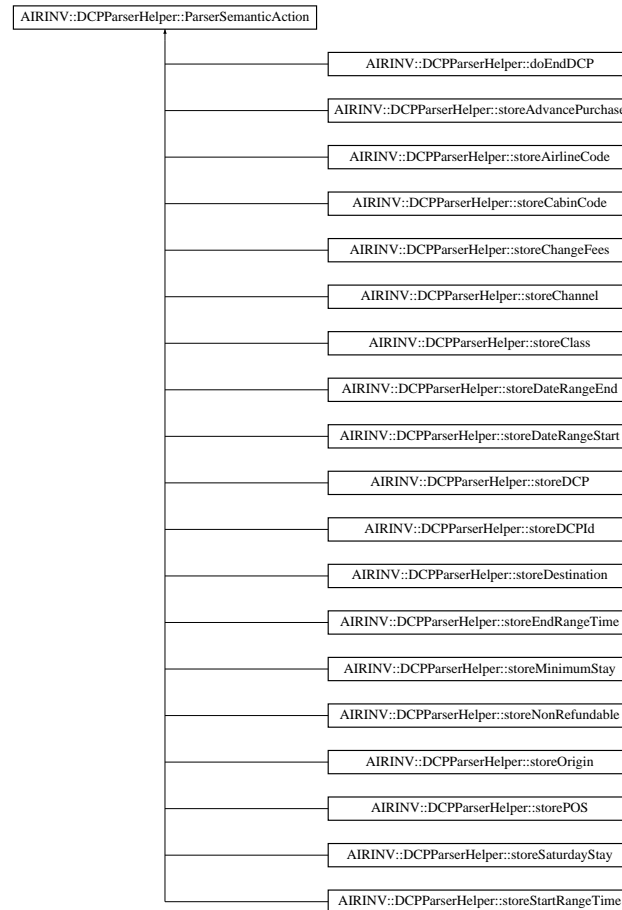
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.138 AIRINV::DCPParserHelper::ParserSemanticAction Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::ParserSemanticAction:



Public Member Functions

- [ParserSemanticAction](#) (DCPRuleStruct &)

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.138.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the DCP Parser.

24.138.2 Constructor & Destructor Documentation

24.138.2.1 AIRINV::DCPParserHelper::ParserSemanticAction::ParserSemanticAction (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 25 of file [DCPParserHelper.cpp](#).

24.138.3 Member Data Documentation

24.138.3.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

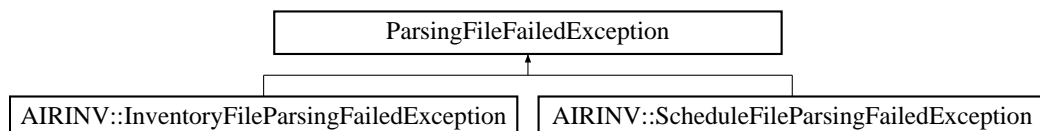
Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.139 ParsingFileFailedException Class Reference

Inheritance diagram for ParsingFileFailedException:



The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.140 **std::priority_queue Class Reference**

STL class.

24.140.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.141 **std::queue Class Reference**

STL class.

24.141.1 Detailed Description

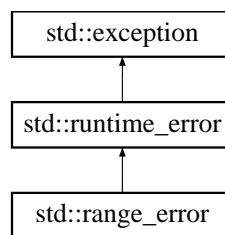
STL class.

The documentation for this class was generated from the following files:

24.142 **std::range_error Class Reference**

STL class.

Inheritance diagram for std::range_error:



24.142.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.143 **AIRINV::Reply Struct Reference**

```
#include <airinv/server/Reply.hpp>
```


Public Member Functions

- [std::vector](#) < boost::asio::const_buffer > [to_buffers](#) ()

Public Attributes

- [FlightRequestStatus::EN_FlightRequestStatus](#) _status
- [std::string](#) content

24.143.1 Detailed Description

A reply to be sent to a client.

24.143.2 Member Function Documentation

24.143.2.1 [std::vector](#)< [boost::asio::const_buffer](#) > [AIRINV::Reply::to_buffers](#) ()

Convert the reply into a vector of buffers. The buffers do not own the underlying memory blocks, therefore the reply object must remain valid and not be changed until the write operation has completed.

Definition at line 15 of file [Reply.cpp](#).

References [content](#).

24.143.3 Member Data Documentation

24.143.3.1 [FlightRequestStatus::EN_FlightRequestStatus](#) [AIRINV::Reply::_status](#)

Status.

Definition at line 20 of file [Reply.hpp](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#).

24.143.3.2 [std::string](#) [AIRINV::Reply::content](#)

The content to be sent in the reply.

Definition at line 23 of file [Reply.hpp](#).

Referenced by [to_buffers\(\)](#), and [AIRINV::RequestHandler::handleRequest\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/server/Reply.hpp](#)
- [airinv/server/Reply.cpp](#)

24.144 AIRINV::Request Struct Reference

```
#include <airinv/server/Request.hpp>
```

Public Member Functions

- [bool parseFlightDate \(\)](#)

Public Attributes

- [std::string _flightDetails](#)
- [stdair::AirlineCode_T _airlineCode](#)
- [stdair::FlightNumber_T _flightNumber](#)
- [stdair::Date_T _departureDate](#)

24.144.1 Detailed Description

A request received from a client.

24.144.2 Member Function Documentation

24.144.2.1 [bool AIRINV::Request::parseFlightDate \(\)](#)

Parse the incoming request.

Expected requested is of the form: <airline_code>,<flight_number>,<flight_date>, where date format is YYYY-MM-DD. For instance: BA,341,2010-09-20.

Definition at line 12 of file [Request.cpp](#).

References [_airlineCode](#), [_flightNumber](#), and [_departureDate](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#).

24.144.3 Member Data Documentation

24.144.3.1 [std::string AIRINV::Request::_flightDetails](#)

String as it comes from the connected client.

Definition at line 29 of file [Request.hpp](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#).

24.144.3.2 [stdair::AirlineCode_T AIRINV::Request::_airlineCode](#)

Parsed airline code.

Definition at line 31 of file [Request.hpp](#).

Referenced by [parseFlightDate\(\)](#).

24.144.3.3 stdair::FlightNumber_T AIRINV::Request::_flightNumber

Parsed flight number.

Definition at line 33 of file [Request.hpp](#).

Referenced by [parseFlightDate\(\)](#).

24.144.3.4 stdair::Date_T AIRINV::Request::_departureDate

Parsed departure date.

Definition at line 35 of file [Request.hpp](#).

Referenced by [parseFlightDate\(\)](#).

The documentation for this struct was generated from the following files:

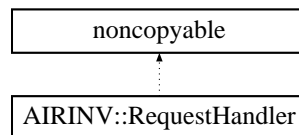
- [airinv/server/Request.hpp](#)
- [airinv/server/Request.cpp](#)

24.145 AIRINV::RequestHandler Class Reference

The common handler for all incoming requests.

```
#include <airinv/server/RequestHandler.hpp>
```

Inheritance diagram for AIRINV::RequestHandler:



Public Member Functions

- [RequestHandler](#) (const stdair::AirlineCode_T &)
- bool [handleRequest](#) ([Request](#) &, [Reply](#) &) const

24.145.1 Detailed Description

The common handler for all incoming requests.

24.145.2 Constructor & Destructor Documentation

24.145.2.1 AIRINV::RequestHandler::RequestHandler (const stdair::AirlineCode_T & *iAirlineCode*)

Constructor.

Parameters

<code>const</code>	<code>stdair::AirlineCode_T</code> & Airline code of the inventory owner.
--------------------	---

Definition at line 20 of file [RequestHandler.cpp](#).

24.145.3 Member Function Documentation

24.145.3.1 `bool AIRINV::RequestHandler::handleRequest (Request & ioRequest, Reply & ioReply) const`

Handle a request and produce a reply.

Definition at line 26 of file [RequestHandler.cpp](#).

References [AIRINV::Request::parseFlightDate\(\)](#), [AIRINV::Reply::_status](#), [AIRINV::Reply::content](#), and [AIRINV::Request::_flightDetails](#).

The documentation for this class was generated from the following files:

- [airinv/server/RequestHandler.hpp](#)
- [airinv/server/RequestHandler.cpp](#)

24.146 AIRINV::RequestParser Class Reference

Parser for incoming requests.

```
#include <airinv/server/RequestParser.hpp>
```

Public Member Functions

- [RequestParser](#) ()
Construct ready to parse the request method.
- void [reset](#) ()
Reset to initial parser state.
- `template<typename InputIterator >`
`boost::tuple< boost::tribool, InputIterator > parse (Request &req, InputIterator`
`begin, InputIterator end)`

24.146.1 Detailed Description

Parser for incoming requests.

24.146.2 Constructor & Destructor Documentation

24.146.2.1 `AIRINV::RequestParser::RequestParser ()`

Construct ready to parse the request method.

Definition at line 13 of file [RequestParser.cpp](#).

24.146.3 Member Function Documentation

24.146.3.1 `void AIRINV::RequestParser::reset ()`

Reset to initial parser state.

Definition at line 18 of file [RequestParser.cpp](#).

24.146.3.2 `template<typename InputIterator > boost::tuple<boost::tribool, InputIterator>
AIRINV::RequestParser::parse (Request & req, InputIterator begin, InputIterator
end) [inline]`

Parse some data. The tribool return value is true when a complete request has been parsed, false if the data is invalid, indeterminate when more data is required. The InputIterator return value indicates how much of the input has been consumed.

Definition at line 30 of file [RequestParser.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/server/RequestParser.hpp](#)
- [airinv/server/RequestParser.cpp](#)

24.147 `std::map::reverse_iterator` Class Reference

STL iterator class.

24.147.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.148 `std::basic_string::reverse_iterator` Class Reference

STL iterator class.

24.148.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.149 `std::string::reverse_iterator` Class Reference

STL iterator class.

24.149.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.150 std::wstring::reverse_iterator Class Reference

STL iterator class.

24.150.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.151 std::deque::reverse_iterator Class Reference

STL iterator class.

24.151.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.152 std::list::reverse_iterator Class Reference

STL iterator class.

24.152.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.153 std::vector::reverse_iterator Class Reference

STL iterator class.

24.153.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.154 `std::multimap::reverse_iterator` Class Reference

STL iterator class.

24.154.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.155 `std::set::reverse_iterator` Class Reference

STL iterator class.

24.155.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.156 `std::multiset::reverse_iterator` Class Reference

STL iterator class.

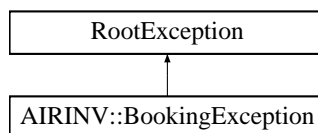
24.156.1 Detailed Description

STL iterator class.

The documentation for this class was generated from the following file:

24.157 `RootException` Class Reference

Inheritance diagram for `RootException`:



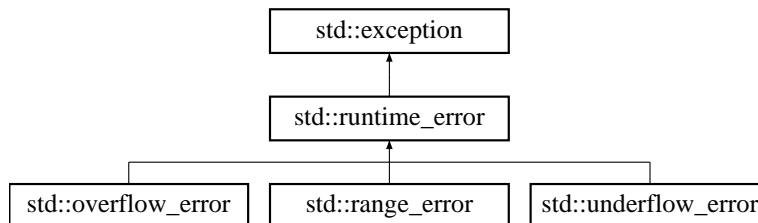
The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.158 `std::runtime_error` Class Reference

STL class.

Inheritance diagram for `std::runtime_error`:

**24.158.1 Detailed Description**

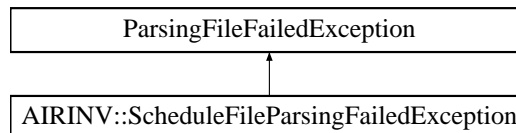
STL class.

The documentation for this class was generated from the following file:

24.159 `AIRINV::ScheduleFileParsingFailedException` Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for `AIRINV::ScheduleFileParsingFailedException`:

**Public Member Functions**

- [ScheduleFileParsingFailedException](#) (const `std::string` &iWhat)

24.159.1 Detailed Description

The schedule input file can not be parsed.

24.159.2 Constructor & Destructor Documentation

24.159.2.1 `AIRINV::ScheduleFileParsingFailedException::ScheduleFileParsingFailedException (const std::string &iWhat) [inline]`

Constructor.

Definition at line 46 of file [AIRINV_Types.hpp](#).

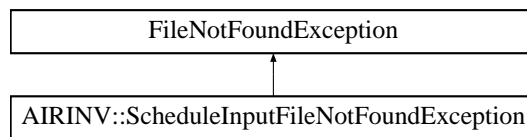
The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.160 AIRINV::ScheduleInputFileNotFoundException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::ScheduleInputFileNotFoundException:



Public Member Functions

- [ScheduleInputFileNotFoundException](#) (const [std::string](#) &iWhat)

24.160.1 Detailed Description

The schedule input file can not be found or opened.

24.160.2 Constructor & Destructor Documentation

24.160.2.1 AIRINV::ScheduleInputFileNotFoundException::Schedule-
InputFileNotFoundException (const [std::string](#) & iWhat)
[inline]

Constructor.

Definition at line 83 of file [AIRINV_Types.hpp](#).

The documentation for this class was generated from the following file:

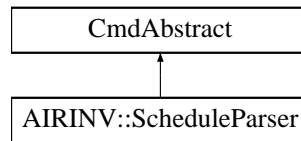
- [airinv/AIRINV_Types.hpp](#)

24.161 AIRINV::ScheduleParser Class Reference

Class wrapping the parser entry point.

```
#include <airinv/command/ScheduleParser.hpp>
```

Inheritance diagram for AIRINV::ScheduleParser:



Static Public Member Functions

- static void [generateInventories](#) (const stdair::Filename_T &iScheduleFilename, stdair::BomRoot &)

24.161.1 Detailed Description

Class wrapping the parser entry point.

24.161.2 Member Function Documentation

24.161.2.1 void AIRINV::ScheduleParser::generateInventories (const stdair::Filename_T &iScheduleFilename, stdair::BomRoot & ioBomRoot) [static]

Parse the CSV file describing the airline schedules for the simulator, and generates the inventories accordingly.

Parameters

<i>const</i>	stdair::Filename_T& The file-name of the CSV-formatted schedule input file.
<i>stdair::Bom-Root&</i>	Root of the BOM tree.

Definition at line 20 of file [ScheduleParser.cpp](#).

References [AIRINV::FlightPeriodFileParser::generateInventories\(\)](#), [AIRINV::InventoryManager::createDirectAccesses\(\)](#), [AIRINV::InventoryManager::buildSimilarSegmentCabinSets\(\)](#), and [AIRINV::InventoryManager::setDefaultBidPriceVector\(\)](#).

Referenced by [AIRINV::AIRINV_Service::parseAndLoad\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/ScheduleParser.hpp](#)
- [airinv/command/ScheduleParser.cpp](#)

24.162 AIRINV::SegmentCabinHelper Class Reference

Class representing the actual business functions for an airline segment-cabin.

```
#include <airinv/bom/SegmentCabinHelper.hpp>
```

Static Public Member Functions

- static void [updateFromReservation](#) (const stdair::FlightDate &, stdair::SegmentCabin &, const stdair::PartySize_T &)
- static void [buildPseudoBidPriceVector](#) (stdair::SegmentCabin &)
- static void [updateBookingControlsUsingPseudoBidPriceVector](#) (const stdair::SegmentCabin &)
- static void [updateAUs](#) (const stdair::SegmentCabin &)
- static void [updateAvailabilities](#) (const stdair::SegmentCabin &)
- static void [initialiseAU](#) (stdair::SegmentCabin &)

24.162.1 Detailed Description

Class representing the actual business functions for an airline segment-cabin.

24.162.2 Member Function Documentation

24.162.2.1 void AIRINV::SegmentCabinHelper::updateFromReservation (const stdair::FlightDate & *iFlightDate*, stdair::SegmentCabin & *ioSegmentCabin*, const stdair::PartySize_T & *iNbOfBookings*) [static]

Update the segment-cabin with the reservation.

Definition at line 57 of file [SegmentCabinHelper.cpp](#).

References [AIRINV::FlightDateHelper::updateAvailabilityPool\(\)](#).

Referenced by [AIRINV::InventoryHelper::sell\(\)](#), and [AIRINV::InventoryHelper::cancel\(\)](#).

24.162.2.2 void AIRINV::SegmentCabinHelper::buildPseudoBidPriceVector (stdair::SegmentCabin & *ioSegmentCabin*) [static]

Build the pseudo bid price vector from the vectors of the leg-cabins.

Definition at line 82 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::FlightDateHelper::updateBookingControls\(\)](#).

24.162.2.3 void AIRINV::SegmentCabinHelper::updateBookingControlsUsingPseudoBidPriceVector (const stdair::SegmentCabin & *iSegmentCabin*) [static]

Update the booking controls using the pseudo bid price vector.

Definition at line 126 of file [SegmentCabinHelper.cpp](#).

References [updateAUs\(\)](#).

Referenced by [AIRINV::FlightDateHelper::updateBookingControls\(\)](#).

24.162.2.4 void AIRINV::SegmentCabinHelper::updateAUs (const stdair::SegmentCabin & *iSegmentCabin*) [static]

Update the authorisation levels using the booking limits.

Definition at line 158 of file [SegmentCabinHelper.cpp](#).

Referenced by [updateBookingControlsUsingPseudoBidPriceVector\(\)](#).

24.162.2.5 void AIRINV::SegmentCabinHelper::updateAvailabilities (const stdair::SegmentCabin & *iSegmentCabin*) [static]

Update the availability of the booking classes.

Definition at line 190 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::GuillotineBlockHelper::takeSnapshots\(\)](#), and [AIRINV::InventoryHelper::calculateAvailability\(\)](#).

24.162.2.6 void AIRINV::SegmentCabinHelper::initialiseAU (stdair::SegmentCabin & *iSegmentCabin*) [static]

Initialise the AU for the booking classes.

Definition at line 21 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::SegmentDateHelper::fillFromRouting\(\)](#).

The documentation for this class was generated from the following files:

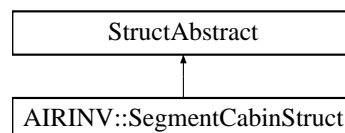
- [airinv/bom/SegmentCabinHelper.hpp](#)
- [airinv/bom/SegmentCabinHelper.cpp](#)

24.163 AIRINV::SegmentCabinStruct Struct Reference

Utility Structure for the parsing of SegmentCabin details.

```
#include <airinv/bom/SegmentCabinStruct.hpp>
```

Inheritance diagram for AIRINV::SegmentCabinStruct:



Public Member Functions

- void [fill](#) (stdair::SegmentCabin &) const
- const [std::string describe](#) () const

Public Attributes

- [stdair::CabinCode_T _cabinCode](#)
- [stdair::NbOfBookings_T _nbOfBookings](#)
- [FareFamilyStruct _itFareFamily](#)
- [FareFamilyStructList_T _fareFamilies](#)

24.163.1 Detailed Description

Utility Structure for the parsing of SegmentCabin details.

24.163.2 Member Function Documentation

24.163.2.1 `void AIRINV::SegmentCabinStruct::fill (stdair::SegmentCabin & ioSegmentCabin) const`

Fill the SegmentCabin objects with the attributes of the [SegmentCabinStruct](#).

Definition at line 33 of file [SegmentCabinStruct.cpp](#).

24.163.2.2 `const std::string AIRINV::SegmentCabinStruct::describe () const`

Give a description of the structure (for display purposes).

Definition at line 15 of file [SegmentCabinStruct.cpp](#).

References [_cabinCode](#), [_nbOfBookings](#), [_fareFamilies](#), and [AIRINV::FareFamilyStruct::describe\(\)](#).

Referenced by [AIRINV::SegmentStruct::describe\(\)](#).

24.163.3 Member Data Documentation

24.163.3.1 `stdair::CabinCode_T AIRINV::SegmentCabinStruct::_cabinCode`

Definition at line 28 of file [SegmentCabinStruct.hpp](#).

Referenced by [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#).

24.163.3.2 `stdair::NbOfBookings_T AIRINV::SegmentCabinStruct::_nbOfBookings`

Definition at line 29 of file [SegmentCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#).

24.163.3.3 `FareFamilyStruct AIRINV::SegmentCabinStruct::_itFareFamily`

Definition at line 30 of file [SegmentCabinStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#).

24.163.3.4 FareFamilyStructList_T AIRINV::SegmentCabinStruct::_fareFamilies

Definition at line 31 of file [SegmentCabinStruct.hpp](#).

Referenced by [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/SegmentCabinStruct.hpp](#)
- [airinv/bom/SegmentCabinStruct.cpp](#)

24.164 AIRINV::SegmentDateHelper Class Reference

```
#include <airinv/bom/SegmentDateHelper.hpp>
```

Static Public Member Functions

- static void [fillFromRouting](#) (stdair::SegmentDate &)
- static void [updateElapsedTimeFromRouting](#) (stdair::SegmentDate &)
- static void [updateDistanceFromElapsedTime](#) (stdair::SegmentDate &)

24.164.1 Detailed Description

Class representing the actual business functions for an airline segment-date.

24.164.2 Member Function Documentation

24.164.2.1 void AIRINV::SegmentDateHelper::fillFromRouting (stdair::SegmentDate & *ioSegmentDate*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 18 of file [SegmentDateHelper.cpp](#).

References [updateElapsedTimeFromRouting\(\)](#), and [AIRINV::SegmentCabinHelper::initialiseAU\(\)](#).

24.164.2.2 void AIRINV::SegmentDateHelper::updateElapsedTimeFromRouting (
 stdair::SegmentDate & ioSegmentDate) [static]

Calculate and set the elapsed time according to the leg routing.

Actually, the elapsed time of the segment is the sum of the elapsed times of the routing legs, plus the stop-over times. The stop-over time is the difference between the board time of a routing leg, and the off time of the previous leg. That is, it is the time spent at the corresponding airport.

Of course, in case of mono-leg segments, there is no stop-over, and the elapsed time of the segment is equal to the elapsed time of the single routing leg.

Definition at line 73 of file [SegmentDateHelper.cpp](#).

References [updateDistanceFromElapsedTime\(\)](#).

Referenced by [fillFromRouting\(\)](#).

24.164.2.3 void AIRINV::SegmentDateHelper::updateDistanceFromElapsedTime (
 stdair::SegmentDate & ioSegmentDate) [static]

Method computing the distance of the segment (in kilometers).

Definition at line 116 of file [SegmentDateHelper.cpp](#).

Referenced by [updateElapsedTimeFromRouting\(\)](#).

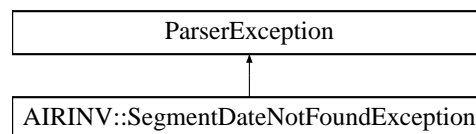
The documentation for this class was generated from the following files:

- [airinv/bom/SegmentDateHelper.hpp](#)
- [airinv/bom/SegmentDateHelper.cpp](#)

24.165 AIRINV::SegmentDateNotFoundException Class Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Inheritance diagram for AIRINV::SegmentDateNotFoundException:



Public Member Functions

- [SegmentDateNotFoundException](#) (const [std::string](#) &iWhat)

24.165.1 Detailed Description

Specific exception when some BOM objects can not be found within the inventory.

24.165.2 Constructor & Destructor Documentation

24.165.2.1 AIRINV::SegmentDateNotFoundException::SegmentDateNotFoundException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 59 of file [AIRINV_Types.hpp](#).

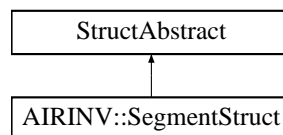
The documentation for this class was generated from the following file:

- [airinv/AIRINV_Types.hpp](#)

24.166 AIRINV::SegmentStruct Struct Reference

```
#include <airinv/bom/SegmentStruct.hpp>
```

Inheritance diagram for AIRINV::SegmentStruct:



Public Member Functions

- void [fill](#) (stdair::SegmentDate &) const
- const [std::string describe](#) () const

Public Attributes

- stdair::AirportCode_T [_boardingPoint](#)
- stdair::AirportCode_T [_offPoint](#)
- stdair::Date_T [_boardingDate](#)
- stdair::Duration_T [_boardingTime](#)
- stdair::Date_T [_offDate](#)
- stdair::Duration_T [_offTime](#)
- stdair::Duration_T [_elapsed](#)
- [SegmentCabinStructList_T_cabinList](#)

24.166.1 Detailed Description

Utility Structure for the parsing of Segment structures.

24.166.2 Member Function Documentation

24.166.2.1 void AIRINV::SegmentStruct::fill (stdair::SegmentDate & *ioSegmentDate*) const

Fill the SegmentDate objects with the attributes of the [SegmentStruct](#).

Definition at line 36 of file [SegmentStruct.cpp](#).

References [_offDate](#), [_boardingTime](#), [_offTime](#), and [_elapsed](#).

24.166.2.2 const std::string AIRINV::SegmentStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 14 of file [SegmentStruct.cpp](#).

References [_boardingPoint](#), [_boardingTime](#), [_offPoint](#), [_offTime](#), [_elapsed](#), [_cabinList](#), and [AIRINV::SegmentCabinStruct::describe\(\)](#).

Referenced by [AIRINV::FlightDateStruct::describe\(\)](#), and [AIRINV::FlightPeriodStruct::describe\(\)](#).

24.166.3 Member Data Documentation

24.166.3.1 stdair::AirportCode_T AIRINV::SegmentStruct::_boardingPoint

Definition at line 25 of file [SegmentStruct.hpp](#).

Referenced by [AIRINV::FlightDateStruct::buildSegments\(\)](#), [AIRINV::FlightDateStruct::addSegmentCabin\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::buildSegments\(\)](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#).

24.166.3.2 stdair::AirportCode_T AIRINV::SegmentStruct::_offPoint

Definition at line 26 of file [SegmentStruct.hpp](#).

Referenced by [AIRINV::FlightDateStruct::buildSegments\(\)](#), [AIRINV::FlightDateStruct::addSegmentCabin\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::buildSegments\(\)](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#).

24.166.3.3 stdair::Date_T AIRINV::SegmentStruct::_boardingDate

Definition at line 27 of file [SegmentStruct.hpp](#).

24.166.3.4 stdair::Duration_T AIRINV::SegmentStruct::_boardingTime

Definition at line 28 of file [SegmentStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

24.166.3.5 stdair::Date_T AIRINV::SegmentStruct::_offDate

Definition at line 29 of file [SegmentStruct.hpp](#).

Referenced by [fill\(\)](#).

24.166.3.6 stdair::Duration_T AIRINV::SegmentStruct::_offTime

Definition at line 30 of file [SegmentStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

24.166.3.7 stdair::Duration_T AIRINV::SegmentStruct::_elapsed

Definition at line 31 of file [SegmentStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

24.166.3.8 SegmentCabinStructList_T AIRINV::SegmentStruct::_cabinList

Definition at line 32 of file [SegmentStruct.hpp](#).

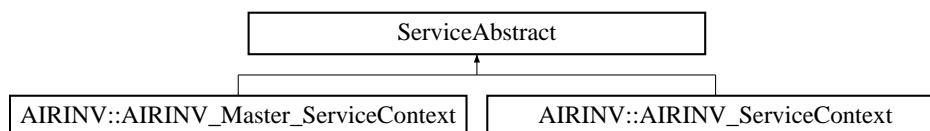
Referenced by [AIRINV::FlightDateStruct::addSegmentCabin\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/SegmentStruct.hpp](#)
- [airinv/bom/SegmentStruct.cpp](#)

24.167 ServiceAbstract Class Reference

Inheritance diagram for ServiceAbstract:



The documentation for this class was generated from the following file:

- [airinv/service/AIRINV_Master_ServiceContext.hpp](#)

24.168 AIRINV::ServiceAbstract Class Reference

```
#include <airinv/service/ServiceAbstract.hpp>
```

Public Member Functions

- virtual [~ServiceAbstract](#) ()
- virtual void [toStream](#) (std::ostream &ioOut) const
- virtual void [fromStream](#) (std::istream &ioIn)

Protected Member Functions

- [ServiceAbstract](#) ()

24.168.1 Detailed Description

Base class for the Service layer.

24.168.2 Constructor & Destructor Documentation

24.168.2.1 virtual AIRINV::ServiceAbstract::~~ServiceAbstract () [inline, virtual]

Destructor.

Definition at line 18 of file [ServiceAbstract.hpp](#).

24.168.2.2 AIRINV::ServiceAbstract::ServiceAbstract () [inline, protected]

Protected Default Constructor to ensure this class is abstract.

Definition at line 30 of file [ServiceAbstract.hpp](#).

24.168.3 Member Function Documentation

24.168.3.1 virtual void AIRINV::ServiceAbstract::toStream (std::ostream & *ioOut*) const [inline, virtual]

Dump a Business Object into an output stream.

Parameters

<i>ostream&</i>	the output stream.
---------------------	--------------------

Definition at line 22 of file [ServiceAbstract.hpp](#).

24.168.3.2 virtual void AIRINV::ServiceAbstract::fromStream (std::istream & ioln)
[inline, virtual]

Read a Business Object from an input stream.

Parameters

<i>istream&</i>	the input stream.
---------------------	-------------------

Definition at line 26 of file [ServiceAbstract.hpp](#).

Referenced by [operator>>\(\)](#).

The documentation for this class was generated from the following file:

- [airinv/service/ServiceAbstract.hpp](#)

24.169 std::set Class Reference

STL class.

Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.169.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.170 swift::SKeymap Class Reference

The readline keymap wrapper.

```
#include <airinv/ui/cmdline/SReadline.hpp>
```

Public Member Functions

- [SKeymap](#) (bool PrintableBound=false)
Creates a new keymap.
- [SKeymap](#) (Keymap Pattern)
Creates a new keymap which is a copy of Pattern.
- [~SKeymap](#) ()
Frees the allocated keymap.
- void [Bind](#) (int Key, KeyCallback Callback)
Binds the given key to a function.
- void [Unbind](#) (int Key)
Unbinds the given key.
- [SKeymap](#) (const [SKeymap](#) &rhs)
Copy constructor.
- [SKeymap](#) & [operator=](#) (const [SKeymap](#) &rhs)
operator=

Friends

- class [SReadline](#)

24.170.1 Detailed Description

The readline keymap wrapper.

Attention: It is not thread safe! Supports: key binding, key unbinding

24.170.2 Constructor & Destructor Documentation

24.170.2.1 `swift::SKeymap::SKeymap (bool PrintableBound = false)` [`inline`, `explicit`]

Creates a new keymap.

Parameters

<i>Printable-Bound</i>	if true - the printable characters are bound if false - the keymap is empty
------------------------	---

Definition at line 319 of file [SReadline.hpp](#).

24.170.2.2 `swift::SKeymap::SKeymap (Keymap Pattern)` [`inline`, `explicit`]

Creates a new keymap which is a copy of Pattern.

Parameters

<i>Pattern</i>	A keymap to be copied.
----------------	------------------------

Definition at line 342 of file [SReadline.hpp](#).

24.170.2.3 `swift::SKeymap::~~SKeymap () [inline]`

Frees the allocated keymap.

Definition at line 354 of file [SReadline.hpp](#).

24.170.2.4 `swift::SKeymap::SKeymap (const SKeymap & rhs) [inline]`

Copy constructor.

Parameters

<i>rhs</i>	Right hand side object of SKeymap
------------	---

Definition at line 395 of file [SReadline.hpp](#).

24.170.3 Member Function Documentation

24.170.3.1 `void swift::SKeymap::Bind (int Key, KeyCallback Callback) [inline]`

Binds the given key to a function.

Parameters

<i>Key</i>	A key to be bound
<i>Callback</i>	A function to be called when the Key is pressed

Definition at line 366 of file [SReadline.hpp](#).

24.170.3.2 `void swift::SKeymap::Unbind (int Key) [inline]`

Unbinds the given key.

Parameters

<i>Key</i>	A key to be unbound
------------	---------------------

Definition at line 381 of file [SReadline.hpp](#).

24.170.3.3 `SKeymap& swift::SKeymap::operator= (const SKeymap & rhs) [inline]`

operator=

Parameters

<i>rhs</i>	Right hand side object of SKeymap
------------	---

Definition at line 407 of file [SReadline.hpp](#).

24.170.4 Friends And Related Function Documentation

24.170.4.1 friend class [SReadline](#) [[friend](#)]

Definition at line 415 of file [SReadline.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/ui/cmdline/SReadline.hpp](#)

24.171 swift::SReadline Class Reference

The readline library wrapper.

```
#include <airinv/ui/cmdline/SReadline.hpp>
```

Public Member Functions

- [SReadline](#) (const size_t Limit=DefaultHistoryLimit)
Constructs the object, sets the completion function.
- [SReadline](#) (const std::string &historyFileName, const size_t Limit=DefaultHistoryLimit)
Constructs the object, sets the completion function, loads history.
- [~SReadline](#) ()
Saves the session history (if the file name was provided) and destroys the object.
- std::string [GetLine](#) (const std::string &Prompt)
Gets a single line from a user.
- template<typename Container >
std::string [GetLine](#) (const std::string &Prompt, Container &ReadTokens)
Gets a single line from a user.
- template<typename Container >
std::string [GetLine](#) (const std::string &Prompt, Container &ReadTokens, bool &BreakOut)
Gets a single line from a user.
- std::string [GetLine](#) (const std::string &Prompt, bool &BreakOut)
Gets a single line from a user.
- template<typename ContainerType >
void [GetHistory](#) (ContainerType &Container)
Fills the given container with the current history list.
- bool [SaveHistory](#) (std::ostream &OS)

Saves the history to the given file stream.

- bool [SaveHistory](#) (const [std::string](#) &FileName)

Saves the history to the given file.

- void [ClearHistory](#) ()

Clears the history. Does not affect the file where the previous session history is saved.

- bool [LoadHistory](#) ([std::istream](#) &IS)

Loads a history from a file stream.

- bool [LoadHistory](#) (const [std::string](#) &FileName)

Loads a history from the given file.

- template<typename ContainerType >
void [RegisterCompletions](#) (const ContainerType &Container)

Allows to register custom completers.

- void [SetKeymap](#) ([SKeymap](#) &NewKeymap)

Sets the given keymap.

24.171.1 Detailed Description

The readline library wrapper.

Attention: It is not thread safe! Supports: editing, history, custom completers

24.171.2 Constructor & Destructor Documentation

24.171.2.1 `swift::SReadline::SReadline (const size_t Limit = DefaultHistoryLimit)
[inline]`

Constructs the object, sets the completion function.

Parameters

<i>Limit</i>	History size
--------------	--------------

Definition at line [431](#) of file [SReadline.hpp](#).

24.171.2.2 `swift::SReadline::SReadline (const std::string & historyFileName, const size_t
Limit = DefaultHistoryLimit) [inline]`

Constructs the object, sets the completion function, loads history.

Parameters

<i>historyFile- Name</i>	File name to load history from
<i>Limit</i>	History size

Definition at line [446](#) of file [SReadline.hpp](#).

References [LoadHistory\(\)](#).

24.171.2.3 swift::SReadline::~SReadline () [inline]

Saves the session history (if the file name was provided) and destroys the object.

Definition at line 460 of file [SReadline.hpp](#).

References [SaveHistory\(\)](#).

24.171.3 Member Function Documentation

24.171.3.1 std::string swift::SReadline::GetLine (const std::string & Prompt) [inline]

Gets a single line from a user.

Parameters

<i>Prompt</i>	A printed prompt
---------------	------------------

Returns

A string which was actually inputed

Definition at line 471 of file [SReadline.hpp](#).

Referenced by [GetLine\(\)](#).

24.171.3.2 template<typename Container > std::string swift::SReadline::GetLine (const std::string & Prompt, Container & ReadTokens) [inline]

Gets a single line from a user.

Parameters

<i>Prompt</i>	A printed prompt
<i>ReadTokens</i>	A user inputed string splitted into tokens. The container is cleared first

Returns

A string which was actually inputed

Definition at line 485 of file [SReadline.hpp](#).

References [GetLine\(\)](#).

24.171.3.3 template<typename Container > std::string swift::SReadline::GetLine (const std::string & Prompt, Container & ReadTokens, bool & BreakOut) [inline]

Gets a single line from a user.

Parameters

<i>Prompt</i>	A printed prompt
<i>BreakOut</i>	it is set to true if the EOF found
<i>ReadTokens</i>	A user inputted string splitted into tokens. The container is cleared first

Returns

A string which was actually inputed

Definition at line 500 of file [SReadline.hpp](#).

References [GetLine\(\)](#).

24.171.3.4 `std::string swift::SReadline::GetLine (const std::string & Prompt, bool & BreakOut) [inline]`

Gets a single line from a user.

Parameters

<i>Prompt</i>	A printed prompt
<i>BreakOut</i>	it is set to true if the EOF found

Returns

A string which was actually inputed

Definition at line 515 of file [SReadline.hpp](#).

24.171.3.5 `template<typename ContainerType > void swift::SReadline::GetHistory (ContainerType & Container) [inline]`

Fills the given container with the current history list.

Does not clear the given container

Definition at line 550 of file [SReadline.hpp](#).

24.171.3.6 `bool swift::SReadline::SaveHistory (std::ostream & OS) [inline]`

Saves the history to the given file stream.

Parameters

<i>OS</i>	output file stream
-----------	--------------------

Returns

true if success

Definition at line 562 of file [SReadline.hpp](#).

Referenced by [~SReadline\(\)](#), and [SaveHistory\(\)](#).

24.171.3.7 `bool swift::SReadline::SaveHistory (const std::string & FileName) [inline]`

Saves the history to the given file.

Parameters

<i>FileName</i>	File name to save the history to
-----------------	----------------------------------

Returns

true if success

Definition at line 579 of file [SReadline.hpp](#).

References [SaveHistory\(\)](#).

24.171.3.8 `void swift::SReadline::ClearHistory () [inline]`

Clears the history. Does not affect the file where the previous session history is saved.

Definition at line 592 of file [SReadline.hpp](#).

Referenced by [LoadHistory\(\)](#).

24.171.3.9 `bool swift::SReadline::LoadHistory (std::istream & IS) [inline]`

Loads a history from a file stream.

Parameters

<i>IS</i>	Input file stream
-----------	-------------------

Returns

true if success

Definition at line 602 of file [SReadline.hpp](#).

References [ClearHistory\(\)](#).

Referenced by [SReadline\(\)](#), and [LoadHistory\(\)](#).

24.171.3.10 `bool swift::SReadline::LoadHistory (const std::string & FileName) [inline]`

Loads a history from the given file.

Parameters

<i>FileName</i>	File name to be load from
-----------------	---------------------------

Returns

true if success

Definition at line 627 of file [SReadline.hpp](#).

References [LoadHistory\(\)](#).

24.171.3.11 `template<typename ContainerType > void swift::SReadline::RegisterCompletions (const ContainerType & Container) [inline]`

Allows to register custom completers.

Supports a special keyword: file. It means to use the standard file name completer.

For example the given container elements could be as follows:

- command1 opt1
- command1 opt2 file
- command2
- command2 opt1

Each container element must describe a single possible command line. The container element must have a conversion to [std::string](#) operator.

Parameters

<i>Container</i>	A container which has all the user possible commands.
------------------	---

Definition at line 656 of file [SReadline.hpp](#).

24.171.3.12 `void swift::SReadline::SetKeymap (SKeymap & NewKeymap) [inline]`

Sets the given keymap.

Parameters

<i>NewKeymap</i>	The keymap that should be used from now.
------------------	--

Definition at line 673 of file [SReadline.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/ui/cmdline/SReadline.hpp](#)

24.172 std::stack Class Reference

STL class.

24.172.1 Detailed Description

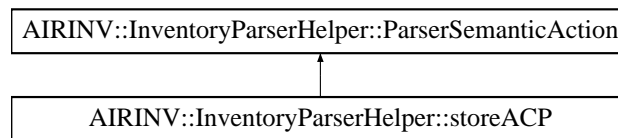
STL class.

The documentation for this class was generated from the following files:

24.173 AIRINV::InventoryParserHelper::storeACP Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeACP:



Public Member Functions

- [storeACP](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.173.1 Detailed Description

Store the parsed Average Cancellation Percentage (ACP).

24.173.2 Constructor & Destructor Documentation

24.173.2.1 AIRINV::InventoryParserHelper::storeACP::storeACP ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 318 of file [InventoryParserHelper.cpp](#).

24.173.3 Member Function Documentation

24.173.3.1 void AIRINV::InventoryParserHelper::storeACP::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 323 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_acp](#).

24.173.4 Member Data Documentation

24.173.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::store](#)

24.174 AIRINV::DCPParserHelper::storeAdvancePurchase Struct Reference 334

[RevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

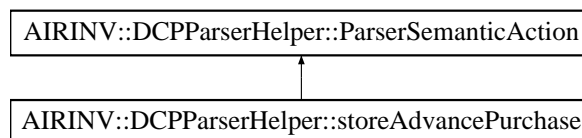
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.174 AIRINV::DCPParserHelper::storeAdvancePurchase Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeAdvancePurchase:



Public Member Functions

- [storeAdvancePurchase](#) (DCPRuleStruct &)
- void [operator\(\)](#) (unsigned int, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.174.1 Detailed Description

Store the parsed advance purchase days.

24.174.2 Constructor & Destructor Documentation

24.174.2.1 AIRINV::DCPParserHelper::storeAdvancePurchase::storeAdvancePurchase (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line [208](#) of file [DCPParserHelper.cpp](#).

24.174.3 Member Function Documentation

24.174.3.1 void AIRINV::DCPParserHelper::storeAdvancePurchase::operator() (unsigned int *iAdvancePurchase*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 213 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.174.4 Member Data Documentation

24.174.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

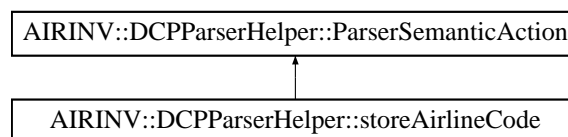
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.175 AIRINV::DCPParserHelper::storeAirlineCode Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeAirlineCode:



Public Member Functions

- [storeAirlineCode](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.175.1 Detailed Description

Store the parsed airline code.

24.175.2 Constructor & Destructor Documentation

24.175.2.1 AIRINV::DCPParserHelper::storeAirlineCode::storeAirlineCode (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 329 of file [DCPParserHelper.cpp](#).

24.175.3 Member Function Documentation

24.175.3.1 void AIRINV::DCPParserHelper::storeAirlineCode::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 334 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.175.4 Member Data Documentation

24.175.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParser-](#)

Helper::storeCabinCode::operator>(), AIRINV::DCPParserHelper::storeChannel::operator(), AIRINV::DCPParserHelper::storeAdvancePurchase::operator(), AIRINV::DCPParserHelper::storeSaturdayStay::operator(), AIRINV::DCPParserHelper::storeChangeFees::operator(), AIRINV::DCPParserHelper::storeNonRefundable::operator(), AIRINV::DCPParserHelper::storeMinimumStay::operator(), AIRINV::DCPParserHelper::storeDCP::operator(), operator(), AIRINV::DCPParserHelper::storeClass::operator(), and AIRINV::DCPParserHelper::doEndDCP::operator()).

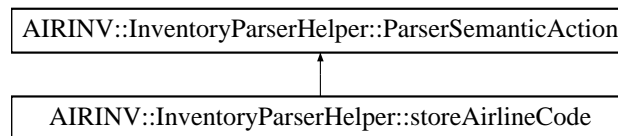
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.176 AIRINV::InventoryParserHelper::storeAirlineCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeAirlineCode:



Public Member Functions

- [storeAirlineCode](#) ([FlightDateStruct](#) &)
- void [operator](#)() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.176.1 Detailed Description

Store the parsed airline code.

24.176.2 Constructor & Destructor Documentation

24.176.2.1 AIRINV::InventoryParserHelper::storeAirlineCode::storeAirlineCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 44 of file [InventoryParserHelper.cpp](#).

Actor Function (functor).

References AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate, AIRINV::FlightDateStruct::_airlineCode, AIRINV::FlightDateStruct::_legList, AIRINV::FlightDateStruct::_itLeg, AIRINV::LegStruct::_cabinList, AIRINV::FlightDateStruct::_itLegCabin, AIRINV::LegCabinStruct::_bucketList, AIRINV::FlightDateStruct::_itBucket, AIRINV::BucketStruct::_yieldRangeUpperValue, AIRINV::FlightDateStruct::_segmentList, AIRINV::FlightDateStruct::_itSegment, AIRINV::SegmentStruct::_cabinList, AIRINV::FlightDateStruct::_itSegmentCabin, AIRINV::SegmentCabinStruct::_itFareFamily, AIRINV::FareFamilyStruct::_classList, AIRINV::SegmentCabinStruct::_fareFamilies, AIRINV::FlightDateStruct::_itBookingClass, and AIRINV::BookingClassStruct::_classCode.

24.176.4 Member Data Documentation

Actor Context.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator(), operator(), AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::

[::storeClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

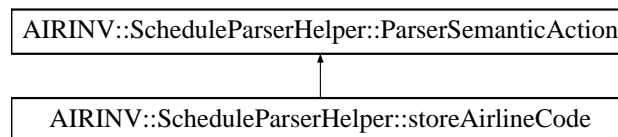
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.177 AIRINV::ScheduleParserHelper::storeAirlineCode Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeAirlineCode:



Public Member Functions

- [storeAirlineCode](#) ([FlightPeriodStruct](#) &)
- [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.177.1 Detailed Description

Store the parsed airline code.

24.177 AIRINV::ScheduleParserHelper::storeAirlineCode Struct Reference 340

24.177.2 Constructor & Destructor Documentation

24.177.2.1 AIRINV::ScheduleParserHelper::storeAirlineCode::storeAirlineCode (FlightPeriodStruct & ioFlightPeriod)

Actor Constructor.

Definition at line 33 of file [ScheduleParserHelper.cpp](#).

24.177.3 Member Function Documentation

24.177.3.1 void AIRINV::ScheduleParserHelper::storeAirlineCode::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 38 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_airlineCode](#), and [AIRINV::FlightPeriodStruct::_legList](#).

24.177.4 Member Data Documentation

24.177.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemantic- Action::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

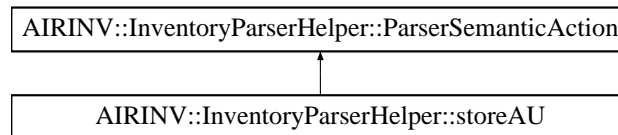
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.178 AIRINV::InventoryParserHelper::storeAU Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeAU:



Public Member Functions

- [storeAU](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.178.1 Detailed Description

Store the parsed Authorisation Level (AU).

24.178.2 Constructor & Destructor Documentation

24.178.2.1 AIRINV::InventoryParserHelper::storeAU::storeAU ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 263 of file [InventoryParserHelper.cpp](#).

24.178.3 Member Function Documentation

24.178.3.1 void AIRINV::InventoryParserHelper::storeAU::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 268 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_au](#).

24.178.4 Member Data Documentation

24.178.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

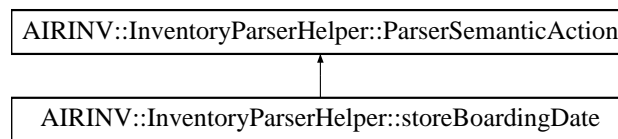
24.179 AIRINV::InventoryParserHelper::storeBoardingDate Struct Reference 343

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.179 AIRINV::InventoryParserHelper::storeBoardingDate Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeBoardingDate:



Public Member Functions

- [storeBoardingDate](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.179.1 Detailed Description

Store the boarding date.

24.179.2 Constructor & Destructor Documentation

24.179.2.1 AIRINV::InventoryParserHelper::storeBoardingDate::storeBoardingDate ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 172 of file [InventoryParserHelper.cpp](#).

24.179.3 Member Function Documentation

24.179.3.1 void AIRINV::InventoryParserHelper::storeBoardingDate::operator() ([iterator_t](#) *iStr*, [iterator_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 177 of file [InventoryParserHelper.cpp](#).

24.179 AIRINV::InventoryParserHelper::storeBoardingDate Struct Reference 344

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLeg](#), [AIRINV::LegStruct::_boardingDate](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

24.179.4 Member Data Documentation

24.179.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#),

24.180 AIRINV::InventoryParserHelper::storeBoardingTime Struct Reference 345

[AIRINV::InventoryParserHelper::storeFClasses::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#).

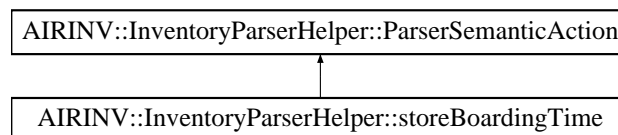
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.180 AIRINV::InventoryParserHelper::storeBoardingTime Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeBoardingTime:



Public Member Functions

- [storeBoardingTime](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.180.1 Detailed Description

Store the boarding time.

24.180.2 Constructor & Destructor Documentation

24.180.2.1 AIRINV::InventoryParserHelper::storeBoardingTime::storeBoardingTime ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line [183](#) of file [InventoryParserHelper.cpp](#).

24.180.3 Member Function Documentation

24.180.3.1 `void AIRINV::InventoryParserHelper::storeBoardingTime::operator() (iterator_t iStr, iterator_t iStrEnd) const`

Actor Function (functor).

Definition at line 188 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLeg](#), [AIRINV::LegStruct::_boardingTime](#), [AIRINV::FlightDateStruct::getTime\(\)](#), [AIRINV::FlightDateStruct::_itSeconds](#), and [AIRINV::FlightDateStruct::_dateOffSet](#).

24.180.4 Member Data Documentation

24.180.4.1 **FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate** `[inherited]`

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::store](#)

24.181 AIRINV::ScheduleParserHelper::storeBoardingTime Struct Reference 347

[NbOfGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

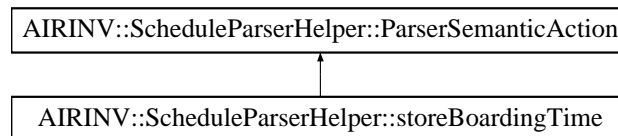
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.181 AIRINV::ScheduleParserHelper::storeBoardingTime Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeBoardingTime:



Public Member Functions

- [storeBoardingTime](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.181.1 Detailed Description

Store the boarding time.

24.181.2 Constructor & Destructor Documentation

24.181.2.1 AIRINV::ScheduleParserHelper::storeBoardingTime::storeBoardingTime ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

24.182 AIRINV::InventoryParserHelper::storeBookingCounter Struct Reference 348

Definition at line 156 of file [ScheduleParserHelper.cpp](#).

24.181.3 Member Function Documentation

24.181.3.1 `void AIRINV::ScheduleParserHelper::storeBoardingTime::operator()(iterator_t iStr, iterator_t iStrEnd) const`

Actor Function (functor).

Definition at line 161 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itLeg](#), [AIRINV::LegStruct::_boardingTime](#), [AIRINV::FlightPeriodStruct::getTime\(\)](#), [AIRINV::FlightPeriodStruct::_itSeconds](#), and [AIRINV::FlightPeriodStruct::_dateOffset](#).

24.181.4 Member Data Documentation

24.181.4.1 `FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod` [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

The documentation for this struct was generated from the following files:

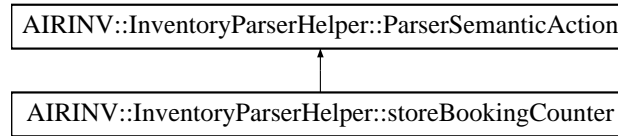
- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.182 AIRINV::InventoryParserHelper::storeBookingCounter Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

24.182 AIRINV::InventoryParserHelper::storeBookingCounter Struct Reference 349

Inheritance diagram for AIRINV::InventoryParserHelper::storeBookingCounter:



Public Member Functions

- [storeBookingCounter](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.182.1 Detailed Description

Store the parsed booking counter.

24.182.2 Constructor & Destructor Documentation

24.182.2.1 **AIRINV::InventoryParserHelper::storeBookingCounter::storeBookingCounter** ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 285 of file [InventoryParserHelper.cpp](#).

24.182.3 Member Function Documentation

24.182.3.1 **void AIRINV::InventoryParserHelper::storeBookingCounter::operator()** (double *iReal*) const

Actor Function (functor).

Definition at line 290 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_nbOfBookings](#).

24.182.4 Member Data Documentation

24.182.4.1 FlightDateStruct & AIRINV::InventoryParserHelper::ParserSemantic-Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

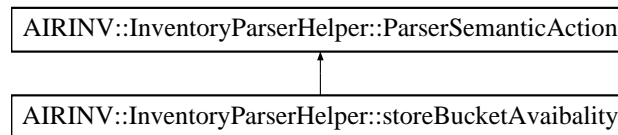
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.183 AIRINV::InventoryParserHelper::storeBucketAvaibility Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeBucketAvaibility:



Public Member Functions

- [storeBucketAvaibility](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.183.1 Detailed Description

Store the parsed bucket availability.

24.183.2 Constructor & Destructor Documentation

24.183.2.1 AIRINV::InventoryParserHelper::storeBucketAvaibility::storeBucketAvaibility ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 360 of file [InventoryParserHelper.cpp](#).

24.183.3 Member Function Documentation

24.183.3.1 void AIRINV::InventoryParserHelper::storeBucketAvaibility::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 365 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBucket](#), and [AIRINV::BucketStruct::_availability](#).

24.183.4 Member Data Documentation

24.183.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

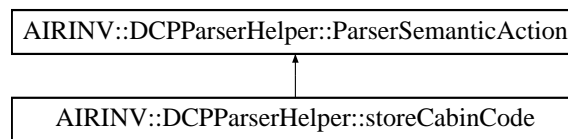
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.184 AIRINV::DCPParserHelper::storeCabinCode Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeCabinCode:



Public Member Functions

- [storeCabinCode](#) (DCPRuleStruct &)
- void [operator\(\)](#) (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.184.1 Detailed Description

Store the cabin code.

24.184.2 Constructor & Destructor Documentation

24.184.2.1 AIRINV::DCPParserHelper::storeCabinCode::storeCabinCode (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line [166](#) of file [DCPParserHelper.cpp](#).

24.184.3 Member Function Documentation

24.184.3.1 void AIRINV::DCPParserHelper::storeCabinCode::operator() (char *iChar*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line [171](#) of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.184.4 Member Data Documentation

24.184.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

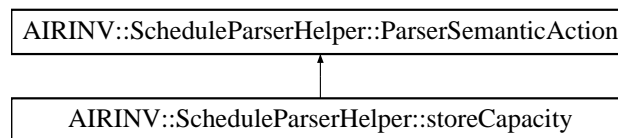
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.185 AIRINV::ScheduleParserHelper::storeCapacity Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeCapacity:



Public Member Functions

- [storeCapacity](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) (double iReal) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.185.1 Detailed Description

Store the parsed capacity.

24.185.2 Constructor & Destructor Documentation

24.185.2.1 AIRINV::ScheduleParserHelper::storeCapacity::storeCapacity ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 228 of file [ScheduleParserHelper.cpp](#).

24.185.3 Member Function Documentation

24.185.3.1 void AIRINV::ScheduleParserHelper::storeCapacity::operator() (*double iReal*) const

Actor Function (functor).

Definition at line 233 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itLegCabin](#), [AIRINV::LegCabinStruct::_saleableCapacity](#), [AIRINV::FlightPeriodStruct::_itLeg](#), and [AIRINV::LegStruct::_cabinList](#).

24.185.4 Member Data Documentation

24.185.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [\[inherited\]](#)

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::store-](#)

[SegmentCabinCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeFCClasses::operator\(\)](#)(), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

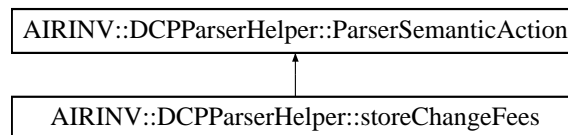
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.186 AIRINV::DCPParserHelper::storeChangeFees Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeChangeFees:



Public Member Functions

- [storeChangeFees](#) (DCPRuleStruct &)
- void [operator\(\)](#) (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.186.1 Detailed Description

Store the parsed change fees.

24.186.2 Constructor & Destructor Documentation

24.186.2.1 AIRINV::DCPParserHelper::storeChangeFees::storeChangeFees (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line [248](#) of file [DCPParserHelper.cpp](#).

24.186.3 Member Function Documentation

24.186.3.1 void AIRINV::DCPParserHelper::storeChangeFees::operator() (char *iChangefees*, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 253 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.186.4 Member Data Documentation

24.186.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

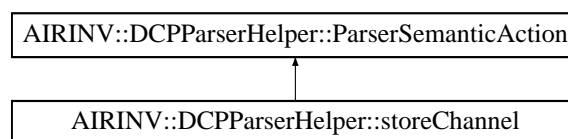
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.187 AIRINV::DCPParserHelper::storeChannel Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeChannel:



Public Member Functions

- [storeChannel](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.187.1 Detailed Description

Store the channel distribution.

24.187.2 Constructor & Destructor Documentation

24.187.2.1 AIRINV::DCPParserHelper::storeChannel::storeChannel (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 187 of file [DCPParserHelper.cpp](#).

24.187.3 Member Function Documentation

24.187.3.1 void AIRINV::DCPParserHelper::storeChannel::operator() (std::vector< char > iChar, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 192 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.187.4 Member Data Documentation

24.187.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DC-](#)

[PParserHelper::storeCabinCode::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

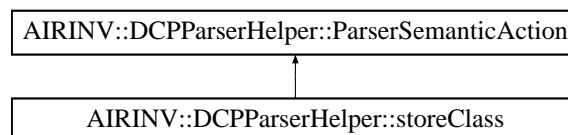
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.188 AIRINV::DCPParserHelper::storeClass Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeClass:



Public Member Functions

- [storeClass](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.188.1 Detailed Description

Store the parsed class.

24.188.2 Constructor & Destructor Documentation

24.188.2.1 AIRINV::DCPParserHelper::storeClass::storeClass (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line [376](#) of file [DCPParserHelper.cpp](#).

24.189 AIRINV::InventoryParserHelper::storeClassAvailability Struct Reference

24.188.3 Member Function Documentation

24.188.3.1 void AIRINV::DCPParserHelper::storeClass::operator() (std::vector< char > iChar, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 381 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.188.4 Member Data Documentation

24.188.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPLd::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

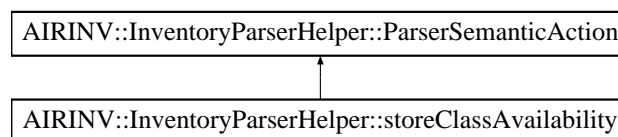
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.189 AIRINV::InventoryParserHelper::storeClassAvailability Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeClassAvailability:



24.189 AIRINV::InventoryParserHelper::storeClassAvailability Struct Reference

Public Member Functions

- [storeClassAvailability](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.189.1 Detailed Description

Store the parsed number of net class availability (at booking class level).

24.189.2 Constructor & Destructor Documentation

24.189.2.1 AIRINV::InventoryParserHelper::storeClassAvailability::storeClassAvailability ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 670 of file [InventoryParserHelper.cpp](#).

24.189.3 Member Function Documentation

24.189.3.1 void AIRINV::InventoryParserHelper::storeClassAvailability::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 675 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_netClassAvailability](#).

24.189.4 Member Data Documentation

24.189.4.1 [FlightDateStruct&](#) [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#) [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [A-](#)

AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

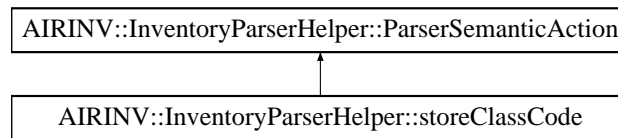
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.190 AIRINV::InventoryParserHelper::storeClassCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeClassCode:



Public Member Functions

- [storeClassCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (char iChar) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.190.1 Detailed Description

Store the parsed booking class code.

24.190.2 Constructor & Destructor Documentation

24.190.2.1 AIRINV::InventoryParserHelper::storeClassCode::storeClassCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 492 of file [InventoryParserHelper.cpp](#).

24.190.3 Member Function Documentation

24.190.3.1 void AIRINV::InventoryParserHelper::storeClassCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 497 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), [AIRINV::BookingClassStruct::_classCode](#), [AIRINV::FlightDateStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), and [AIRINV::FareFamilyStruct::_classList](#).

24.190.4 Member Data Documentation

24.190.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

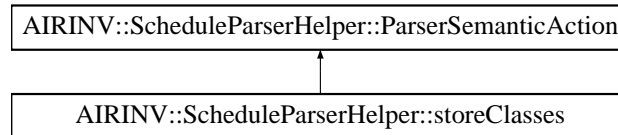
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.191 AIRINV::ScheduleParserHelper::storeClasses Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeClasses:



Public Member Functions

- [storeClasses](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.191.1 Detailed Description

Store the parsed list of class codes.

24.191.2 Constructor & Destructor Documentation

24.191.2.1 AIRINV::ScheduleParserHelper::storeClasses::storeClasses ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 310 of file [ScheduleParserHelper.cpp](#).

24.191.3 Member Function Documentation

24.191.3.1 void AIRINV::ScheduleParserHelper::storeClasses::operator() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 315 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), [AIRINV::FareFamilyStruct::_classes](#), [AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), and [AIRINV::FlightPeriodStruct::_itSegment](#).

24.191.4 Member Data Documentation

24.191.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

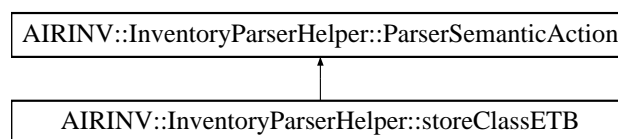
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.192 AIRINV::InventoryParserHelper::storeClassETB Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeClassETB:



Public Member Functions

- [storeClassETB](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.192.1 Detailed Description

Store the parsed expected to board number (at booking class level).

24.192.2 Constructor & Destructor Documentation

24.192.2.1 AIRINV::InventoryParserHelper::storeClassETB::storeClassETB ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 658 of file [InventoryParserHelper.cpp](#).

24.192.3 Member Function Documentation

24.192.3.1 void AIRINV::InventoryParserHelper::storeClassETB::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 663 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_etb](#).

24.192.4 Member Data Documentation

24.192.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::](#)

[InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

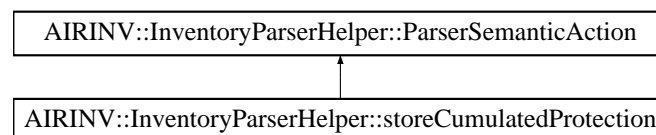
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.193 AIRINV::InventoryParserHelper::storeCumulatedProtection Struct - Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeCumulatedProtection:



Public Member Functions

- [storeCumulatedProtection](#) ([FlightDateStruct](#) &)

- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.193.1 Detailed Description

Store the parsed cumulated protection (at booking class level).

24.193.2 Constructor & Destructor Documentation

24.193.2.1 AIRINV::InventoryParserHelper::storeCumulatedProtection-
::storeCumulatedProtection ([FlightDateStruct](#) & *ioFlightDate*
)

Actor Constructor.

Definition at line 547 of file [InventoryParserHelper.cpp](#).

24.193.3 Member Function Documentation

24.193.3.1 void AIRINV::InventoryParserHelper::storeCumulatedProtection::operator() (double
iReal) const

Actor Function (functor).

Definition at line 552 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_cumulatedProtection](#).

24.193.4 Member Data Documentation

24.193.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::store-](#)

24.194 AIRINV::ScheduleParserHelper::storeDateRangeEnd Struct Reference

BoardingDate::operator>(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

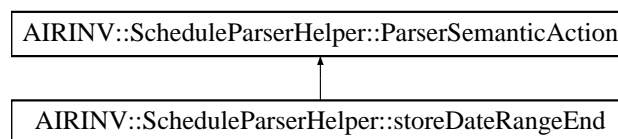
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.194 AIRINV::ScheduleParserHelper::storeDateRangeEnd Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeDateRangeEnd:



24.194 AIRINV::ScheduleParserHelper::storeDateRangeEnd Struct Reference 871

Public Member Functions

- [storeDateRangeEnd](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.194.1 Detailed Description

Store the end of the date range.

24.194.2 Constructor & Destructor Documentation

24.194.2.1 AIRINV::ScheduleParserHelper::storeDateRangeEnd::storeDateRangeEnd ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 76 of file [ScheduleParserHelper.cpp](#).

24.194.3 Member Function Documentation

24.194.3.1 void AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator() ([iterator_t](#) *iStr*, [iterator_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 81 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_dateRangeEnd](#), [AIRINV::FlightPeriodStruct::getDate\(\)](#), [AIRINV::FlightPeriodStruct::_dateRange](#), [AIRINV::FlightPeriodStruct::_dateRangeStart](#), and [AIRINV::FlightPeriodStruct::_itSeconds](#).

24.194.4 Member Data Documentation

24.194.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoarding-](#)

[Point::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#)).

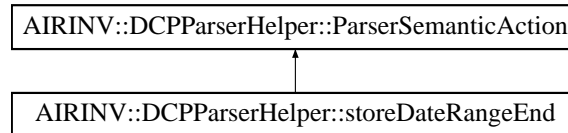
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.195 AIRINV::DCPParserHelper::storeDateRangeEnd Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeDateRangeEnd:



Public Member Functions

- [storeDateRangeEnd](#) (DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.195.1 Detailed Description

Store the parsed end of the date range.

24.195.2 Constructor & Destructor Documentation

24.195.2.1 AIRINV::DCPParserHelper::storeDateRangeEnd::storeDateRangeEnd (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 101 of file [DCPParserHelper.cpp](#).

24.195.3 Member Function Documentation

24.195.3.1 void AIRINV::DCPParserHelper::storeDateRangeEnd::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 106 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.195.4 Member Data Documentation

24.195.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

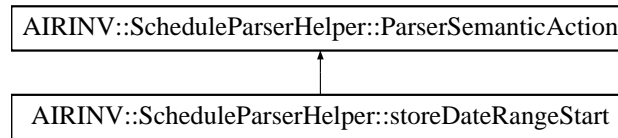
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.196 AIRINV::ScheduleParserHelper::storeDateRangeStart Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeDateRangeStart:



Public Member Functions

- [storeDateRangeStart](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.196.1 Detailed Description

Store the start of the date range.

24.196.2 Constructor & Destructor Documentation

24.196.2.1 AIRINV::ScheduleParserHelper::storeDateRangeStart::storeDateRangeStart ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 61 of file [ScheduleParserHelper.cpp](#).

24.196.3 Member Function Documentation

24.196.3.1 void AIRINV::ScheduleParserHelper::storeDateRangeStart::operator() ([iterator_t](#) *iStr*, [iterator_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 66 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_dateRangeStart](#), [AIRINV::FlightPeriodStruct::getDate\(\)](#), and [AIRINV::FlightPeriodStruct::_itSeconds](#).

24.196.4 Member Data Documentation

24.196.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

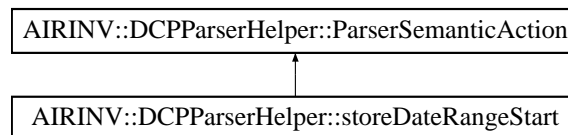
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.197 AIRINV::DCPParserHelper::storeDateRangeStart Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeDateRangeStart:



Public Member Functions

- [storeDateRangeStart](#) (DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- [DCPRuleStruct](#) & [_DCPRule](#)

24.197.1 Detailed Description

Store the parsed start of the date range.

24.197.2 Constructor & Destructor Documentation

24.197.2.1 AIRINV::DCPParserHelper::storeDateRangeStart::storeDateRangeStart ([DCPRuleStruct](#) & *ioDCPRule*)

Actor Constructor.

Definition at line [86](#) of file [DCPParserHelper.cpp](#).

24.197.3 Member Function Documentation

24.197.3.1 void AIRINV::DCPParserHelper::storeDateRangeStart::operator() ([boost::spirit::qi::unused_type](#) , [boost::spirit::qi::unused_type](#) , [boost::spirit::qi::unused_type](#)) const

Actor Function (functor).

Definition at line [91](#) of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.197.4 Member Data Documentation

24.197.4.1 [DCPRuleStruct](#)& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [\[inherited\]](#)

Actor Context.

Definition at line [34](#) of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#),

[AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#)(), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#)(), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#)).

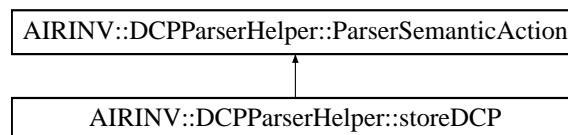
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.198 AIRINV::DCPParserHelper::storeDCP Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeDCP:



Public Member Functions

- [storeDCP](#) (DCPRuleStruct &)
- void [operator\(\)](#) (double, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.198.1 Detailed Description

Store the parsed DCP value.

24.198.2 Constructor & Destructor Documentation

24.198.2.1 AIRINV::DCPParserHelper::storeDCP::storeDCP (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line [314](#) of file [DCPParserHelper.cpp](#).

24.198.3 Member Function Documentation

24.198.3.1 void AIRINV::DCPParserHelper::storeDCP::operator() (double *iDCP*,
boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 319 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.198.4 Member Data Documentation

24.198.4.1 **DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule** [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPIId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

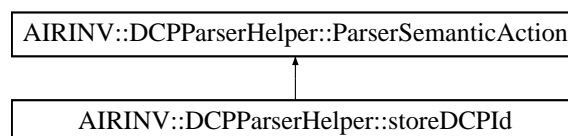
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.199 AIRINV::DCPParserHelper::storeDCPIId Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeDCPIId:



Public Member Functions

- [storeDCPId](#) (DCPRuleStruct &)
- void [operator\(\)](#) (unsigned int, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.199.1 Detailed Description

Store the parsed DCP Id.

24.199.2 Constructor & Destructor Documentation

24.199.2.1 AIRINV::DCPParserHelper::storeDCPId::storeDCPId (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 30 of file [DCPParserHelper.cpp](#).

24.199.3 Member Function Documentation

24.199.3.1 void AIRINV::DCPParserHelper::storeDCPId::operator() (unsigned int *iDCPId*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 35 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.199.4 Member Data Documentation

24.199.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#),

[AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

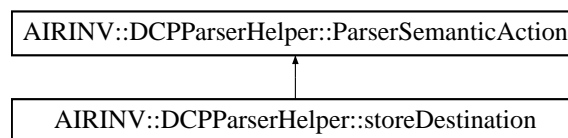
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.200 AIRINV::DCPParserHelper::storeDestination Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeDestination:



Public Member Functions

- [storeDestination](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.200.1 Detailed Description

Store the parsed destination.

24.200.2 Constructor & Destructor Documentation

24.200.2.1 AIRINV::DCPParserHelper::storeDestination::storeDestination (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 70 of file [DCPParserHelper.cpp](#).

24.200.3 Member Function Documentation

24.200.3.1 void AIRINV::DCPParserHelper::storeDestination::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 75 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.200.4 Member Data Documentation

24.200.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

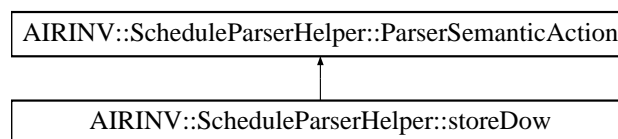
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.201 AIRINV::ScheduleParserHelper::storeDow Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeDow:



Public Member Functions

- [storeDow](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.201.1 Detailed Description

Store the DOW (day of the Week).

24.201.2 Constructor & Destructor Documentation

24.201.2.1 AIRINV::ScheduleParserHelper::storeDow::storeDow ([FlightPeriodStruct](#) & [ioFlightPeriod](#))

Actor Constructor.

Definition at line 99 of file [ScheduleParserHelper.cpp](#).

24.201.3 Member Function Documentation

24.201.3.1 void AIRINV::ScheduleParserHelper::storeDow::operator() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 104 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), and [AIRINV::FlightPeriodStruct::_dow](#).

24.201.4 Member Data Documentation

24.201.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [\[inherited\]](#)

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRIN-](#)

24.202 AIRINV::ScheduleParserHelper::storeElapsedTime Struct Reference 383

V::ScheduleParserHelper::storeOffTime::operator(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator(), AIRINV::ScheduleParserHelper::storeCapacity::operator(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator(), AIRINV::ScheduleParserHelper::storeClasses::operator(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator(), AIRINV::ScheduleParserHelper::storeFClasses::operator(), and AIRINV::ScheduleParserHelper::doEndFlight::operator().

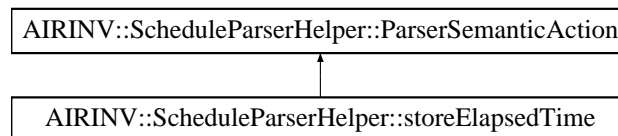
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.202 AIRINV::ScheduleParserHelper::storeElapsedTime Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeElapsedTime:



Public Member Functions

- [storeElapsedTime](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.202.1 Detailed Description

Store the elapsed time.

24.202.2 Constructor & Destructor Documentation

24.202.2.1 AIRINV::ScheduleParserHelper::storeElapsedTime::storeElapsedTime ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 195 of file [ScheduleParserHelper.cpp](#).

24.202.3 Member Function Documentation

24.202.3.1 void AIRINV::ScheduleParserHelper::storeElapsedTime::operator()(iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 200 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itLeg](#), [AIRINV::LegStruct::_elapsed](#), [AIRINV::FlightPeriodStruct::getTime\(\)](#), [AIRINV::FlightPeriodStruct::_itSeconds](#), [AIRINV::FlightPeriodStruct::_dateOffset](#), and [AIRINV::LegStruct::_offDateOffset](#).

24.202.4 Member Data Documentation

24.202.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

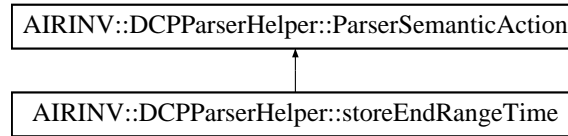
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.203 AIRINV::DCPParserHelper::storeEndRangeTime Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeEndRangeTime:



Public Member Functions

- [storeEndRangeTime](#) (DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.203.1 Detailed Description

Store the parsed end start range time.

24.203.2 Constructor & Destructor Documentation

24.203.2.1 AIRINV::DCPParserHelper::storeEndRangeTime::storeEndRangeTime (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 133 of file [DCPParserHelper.cpp](#).

24.203.3 Member Function Documentation

24.203.3.1 void AIRINV::DCPParserHelper::storeEndRangeTime::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 138 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.203.4 Member Data Documentation

24.203.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DC-PRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

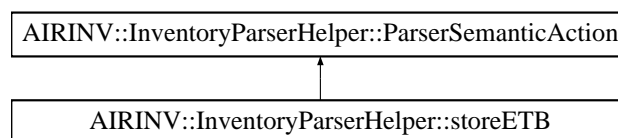
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.204 AIRINV::InventoryParserHelper::storeETB Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeETB:



Public Member Functions

- [storeETB](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)


```

::storeBucketAvailability::operator>(), AIRINV::InventoryParserHelper::storeSeat-
Index::operator>(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint-
::operator>(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator>(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator>(), AIRINV::-
InventoryParserHelper::storeSegmentCabinBookingCounter::operator>(), AIRIN-
V::InventoryParserHelper::storeClassCode::operator>(), AIRINV::InventoryParser-
Helper::storeSubclassCode::operator>(), AIRINV::InventoryParserHelper::storeParent-
ClassCode::operator>(), AIRINV::InventoryParserHelper::storeParentSubclassCode-
::operator>(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator>(),
AIRINV::InventoryParserHelper::storeProtection::operator>(), AIRINV::Inventory-
ParserHelper::storeNego::operator>(), AIRINV::InventoryParserHelper::storeNo-
Show::operator>(), AIRINV::InventoryParserHelper::storeOverbooking::operator>(),
AIRINV::InventoryParserHelper::storeNbOfBkgs::operator>(), AIRINV::Inventory-
ParserHelper::storeNbOfGroupBkgs::operator>(), AIRINV::InventoryParserHelper-
::storeNbOfPendingGroupBkgs::operator>(), AIRINV::InventoryParserHelper::store-
NbOfStaffBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs-
::operator>(), AIRINV::InventoryParserHelper::storeClassETB::operator>(), AIRINV-
::InventoryParserHelper::storeClassAvailability::operator>(), AIRINV::InventoryParser-
Helper::storeSegmentAvailability::operator>(), AIRINV::InventoryParserHelper::store-
RevenueAvailability::operator>(), AIRINV::InventoryParserHelper::storeFamilyCode-
::operator>(), AIRINV::InventoryParserHelper::storeFCClasses::operator>(), and AIRIN-
V::InventoryParserHelper::doEndFlightDate::operator()).

```

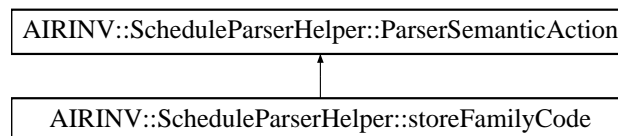
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.205 AIRINV::ScheduleParserHelper::storeFamilyCode Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeFamilyCode:



Public Member Functions

- [storeFamilyCode](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) (int iCode) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.205.1 Detailed Description

Store the parsed family code.

24.205.2 Constructor & Destructor Documentation**24.205.2.1 AIRINV::ScheduleParserHelper::storeFamilyCode::storeFamilyCode (
FlightPeriodStruct & ioFlightPeriod)**

Actor Constructor.

Definition at line 335 of file [ScheduleParserHelper.cpp](#).

24.205.3 Member Function Documentation**24.205.3.1 void AIRINV::ScheduleParserHelper::storeFamilyCode::operator() (int iCode) const**

Actor Function (functor).

Definition at line 340 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), and [AIRINV::FareFamilyStruct::_familyCode](#).

24.205.4 Member Data Documentation**24.205.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemantic-
Action::_flightPeriod [inherited]**

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

24.206 AIRINV::InventoryParserHelper::storeFamilyCode Struct Reference 390

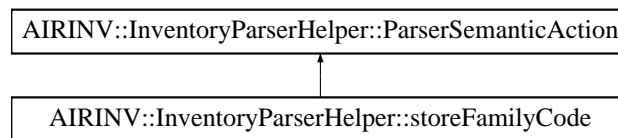
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.206 AIRINV::InventoryParserHelper::storeFamilyCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeFamilyCode:



Public Member Functions

- [storeFamilyCode](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (int iCode) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.206.1 Detailed Description

Store the parsed family code.

24.206.2 Constructor & Destructor Documentation

24.206.2.1 AIRINV::InventoryParserHelper::storeFamilyCode::storeFamilyCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 705 of file [InventoryParserHelper.cpp](#).

24.206.3 Member Function Documentation

24.206.3.1 void AIRINV::InventoryParserHelper::storeFamilyCode::operator() (int *iCode*) const

Actor Function (functor).

Definition at line 710 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), and [AIRINV::FareFamilyStruct::_familyCode](#).

24.206.4 Member Data Documentation

24.206.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses](#)

[::operator\(\)](#)), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#)).

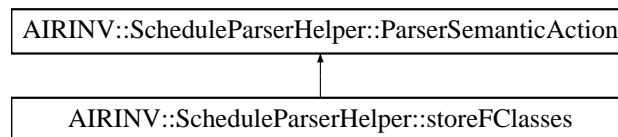
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.207 AIRINV::ScheduleParserHelper::storeFClasses Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeFClasses:



Public Member Functions

- [storeFClasses](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.207.1 Detailed Description

Store the parsed list of class codes (for families).

24.207.2 Constructor & Destructor Documentation

24.207.2.1 AIRINV::ScheduleParserHelper::storeFClasses::storeFClasses ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 348 of file [ScheduleParserHelper.cpp](#).

24.207.3 Member Function Documentation

24.207.3.1 void AIRINV::ScheduleParserHelper::storeFClasses::operator() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 353 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), [AIRINV::FareFamilyStruct::_familyCode](#), [AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific](#), [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), and [AIRINV::FlightPeriodStruct::_itSegment](#).

24.207.4 Member Data Documentation

24.207.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

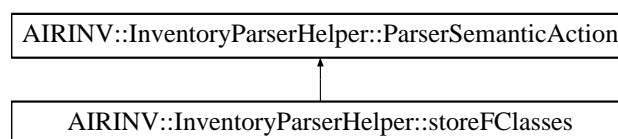
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.208 AIRINV::InventoryParserHelper::storeFClasses Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeFClasses:



Public Member Functions

- [storeFClasses](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.208.1 Detailed Description

Store the parsed list of class codes (for families).

24.208.2 Constructor & Destructor Documentation

24.208.2.1 AIRINV::InventoryParserHelper::storeFClasses::storeFClasses ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 717 of file [InventoryParserHelper.cpp](#).

24.208.3 Member Function Documentation

24.208.3.1 void AIRINV::InventoryParserHelper::storeFClasses::operator() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 722 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), [AIRINV::FareFamilyStruct::_classes](#), [AIRINV::FareFamilyStruct::_classList](#), [AIRINV::FlightDateStruct::_itBookingClass](#), [AIRINV::SegmentCabinStruct::_fareFamilies](#), [AIRINV::FlightDateStruct::_itSegment](#), [AIRINV::SegmentStruct::_cabinList](#), and [AIRINV::BookingClassStruct::_classCode](#).

24.208.4 Member Data Documentation

24.208.4.1 [FlightDateStruct](#)& [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#) [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

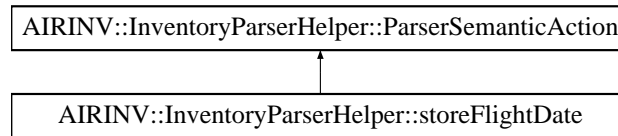
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.209 AIRINV::InventoryParserHelper::storeFlightDate Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightDate:



Public Member Functions

- [storeFlightDate](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.209.1 Detailed Description

Store the flight date.

24.209.2 Constructor & Destructor Documentation

24.209.2.1 AIRINV::InventoryParserHelper::storeFlightDate::storeFlightDate ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 80 of file [InventoryParserHelper.cpp](#).

24.209.3 Member Function Documentation

24.209.3.1 void AIRINV::InventoryParserHelper::storeFlightDate::operator() ([iterator_t](#) *iStr*, [iterator_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 85 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_flightDate](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

24.209.4 Member Data Documentation

24.209.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

24.210 AIRINV::ScheduleParserHelper::storeFlightNumber Struct Reference 397

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

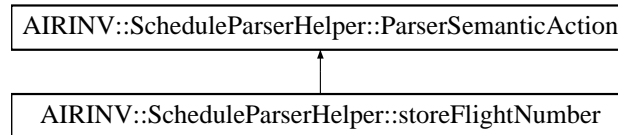
- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.210 AIRINV::ScheduleParserHelper::storeFlightNumber Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

24.210 AIRINV::ScheduleParserHelper::storeFlightNumber Struct Reference 398

Inheritance diagram for AIRINV::ScheduleParserHelper::storeFlightNumber:



Public Member Functions

- [storeFlightNumber](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) (unsigned int *iNumber*) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.210.1 Detailed Description

Store the parsed flight number.

24.210.2 Constructor & Destructor Documentation

24.210.2.1 AIRINV::ScheduleParserHelper::storeFlightNumber::storeFlightNumber ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 50 of file [ScheduleParserHelper.cpp](#).

24.210.3 Member Function Documentation

24.210.3.1 void AIRINV::ScheduleParserHelper::storeFlightNumber::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 55 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), and [AIRINV::FlightPeriodStruct::_flightNumber](#).

24.210.4 Member Data Documentation

24.211 AIRINV::InventoryParserHelper::storeFlightNumber Struct Reference 399

24.210.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

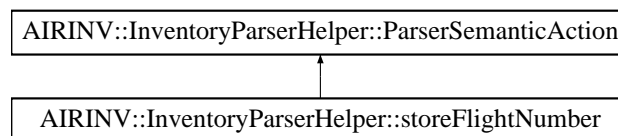
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.211 AIRINV::InventoryParserHelper::storeFlightNumber Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightNumber:



Public Member Functions

- [storeFlightNumber](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (unsigned int iNumber) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.212 AIRINV::InventoryParserHelper::storeFlightTypeCode Struct Reference

[::storeYieldUpperRange::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#)).

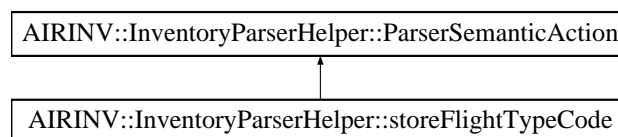
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.212 AIRINV::InventoryParserHelper::storeFlightTypeCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightTypeCode:



Public Member Functions

- [storeFlightTypeCode](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

- FlightDateStruct & _flightDate

Store the flight type code.

24.212.2.1 AIRINV::InventoryParserHelper::storeFlightTypeCode::storeFlightTypeCode (FlightDateStruct & ioFlightDate)

Definition at line 91 of file [InventoryParserHelper.cpp](#).

```
24.212.3.1 void AIRINV::InventoryParserHelper::storeFlightTypeCode::operator() ( iterator_t
iStr, iterator_t iStrEnd ) const
```

Definition at line 96 of file [InventoryParserHelper.cpp](#).

References `AIRINV::InventoryParserHelper::ParserSemanticAction::flightDate`, `AIRINV::FlightDateStruct::flightTypeCode`, and `AIRINV::FlightTypeCode::getCode()`.

24.212.4.1 **FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction:: flightDate** [inherited]

Definition at line 33 of file InventoryParserHelper.hpp.

Referenced by AIRINV::InventoryParserHelper::storeSnapshotDate::operator(), -
AIRINV::InventoryParserHelper::storeAirlineCode::operator(), AIRINV::Inventory-
ParserHelper::storeFlightNumber::operator(), AIRINV::InventoryParserHelper::store-
FlightDate::operator(), operator(), AIRINV::InventoryParserHelper::storeFlight-
VisibilityCode::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint-
::operator(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV-
::InventoryParserHelper::storeBoardingDate::operator(), AIRINV::InventoryParser-
Helper::storeBoardingTime::operator(), AIRINV::InventoryParserHelper::storeOff-
Date::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AI-
RINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::Inventory-
ParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper-
::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AI-

AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

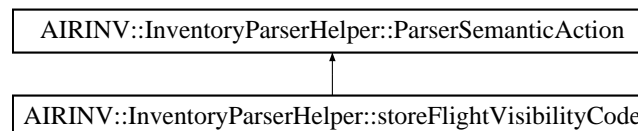
The documentation for this struct was generated from the following files:

- airinv/command/InventoryParserHelper.hpp
- airinv/command/InventoryParserHelper.cpp

24.213 AIRINV::InventoryParserHelper::storeFlightVisibilityCode Struct - Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightVisibilityCode:



Public Member Functions

- [storeFlightVisibilityCode](#) ([FlightDateStruct](#) &)

- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.213.1 Detailed Description

Store the flight visibility code.

24.213.2 Constructor & Destructor Documentation

24.213.2.1 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::storeFlightVisibilityCode ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 106 of file [InventoryParserHelper.cpp](#).

24.213.3 Member Function Documentation

24.213.3.1 void AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 111 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_flightVisibilityCode](#), and [AIRINV::FlightVisibilityCode::getCode\(\)](#).

24.213.4 Member Data Documentation

24.213.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#),

AIRINV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

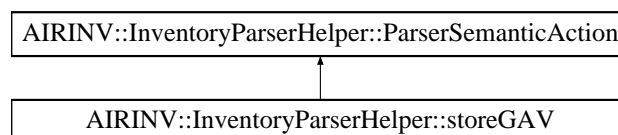
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.214 AIRINV::InventoryParserHelper::storeGAV Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeGAV:



Public Member Functions

- [storeGAV](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.214.1 Detailed Description

Store the parsed Gross Availability (GAV).

24.214.2 Constructor & Destructor Documentation

24.214.2.1 AIRINV::InventoryParserHelper::storeGAV::storeGAV ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 307 of file [InventoryParserHelper.cpp](#).

24.214.3 Member Function Documentation

24.214.3.1 void AIRINV::InventoryParserHelper::storeGAV::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 312 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_gav](#).

24.214.4 Member Data Documentation

24.214.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::store-](#)

BoardingDate::operator>(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

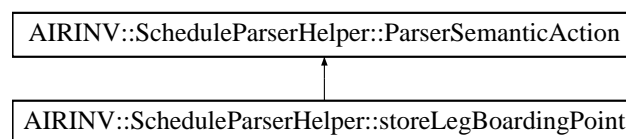
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.215 AIRINV::ScheduleParserHelper::storeLegBoardingPoint Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegBoardingPoint:



Public Member Functions

- [storeLegBoardingPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.215.1 Detailed Description

Store the parsed leg boarding point.

24.215.2 Constructor & Destructor Documentation

24.215.2.1 AIRINV::ScheduleParserHelper::storeLegBoardingPoint::storeLegBoardingPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 111 of file [ScheduleParserHelper.cpp](#).

24.215.3 Member Function Documentation

24.215.3.1 void AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator() ([iterator_t](#) *iStr*, [iterator_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 116 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_legAlreadyDefined](#), [AIRINV::FlightPeriodStruct::_legList](#), [AIRINV::FlightPeriodStruct::_itLeg](#), [AIRINV::LegStruct::_boardingPoint](#), [AIRINV::LegStruct::_cabinList](#), and [AIRINV::FlightPeriodStruct::addAirport\(\)](#).

24.215.4 Member Data Documentation

24.215.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [\[inherited\]](#)

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [op](#)

erator(), AIRINV::ScheduleParserHelper::storeLegOffPoint::operator(), AIRINV::ScheduleParserHelper::storeBoardingTime::operator(), AIRINV::ScheduleParserHelper::storeOffTime::operator(), AIRINV::ScheduleParserHelper::storeElapsedTime::operator(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator(), AIRINV::ScheduleParserHelper::storeCapacity::operator(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator(), AIRINV::ScheduleParserHelper::storeClasses::operator(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator(), AIRINV::ScheduleParserHelper::storeFClasses::operator(), and AIRINV::ScheduleParserHelper::doEndFlight::operator().

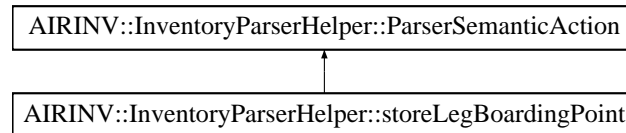
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.216 AIRINV::InventoryParserHelper::storeLegBoardingPoint Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeLegBoardingPoint:



Public Member Functions

- [storeLegBoardingPoint](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.216.1 Detailed Description

Store the parsed leg boarding point.

24.216.2 Constructor & Destructor Documentation

24.217 AIRINV::InventoryParserHelper::storeLegCabinCode Struct Reference

`::storeSegmentOffPoint::operator()()`, `AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()()`, `AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()()`, `AIRINV::InventoryParserHelper::storeClassCode::operator()()`, `AIRINV::InventoryParserHelper::storeSubclassCode::operator()()`, `AIRINV::InventoryParserHelper::storeParentClassCode::operator()()`, `AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()()`, `AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()()`, `AIRINV::InventoryParserHelper::storeProtection::operator()()`, `AIRINV::InventoryParserHelper::storeNego::operator()()`, `AIRINV::InventoryParserHelper::storeNoShow::operator()()`, `AIRINV::InventoryParserHelper::storeOverbooking::operator()()`, `AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()()`, `AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()()`, `AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()()`, `AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator()()`, `AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()()`, `AIRINV::InventoryParserHelper::storeClassETB::operator()()`, `AIRINV::InventoryParserHelper::storeClassAvailability::operator()()`, `AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()()`, `AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()()`, `AIRINV::InventoryParserHelper::storeFamilyCode::operator()()`, `AIRINV::InventoryParserHelper::storeFClasses::operator()()`, and `AIRINV::InventoryParserHelper::doEndFlightDate::operator()()`.

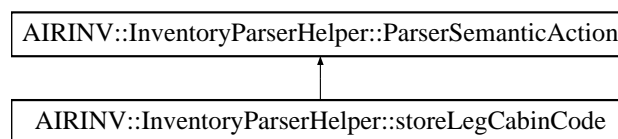
The documentation for this struct was generated from the following files:

- `airinv/command/InventoryParserHelper.hpp`
- `airinv/command/InventoryParserHelper.cpp`

24.217 AIRINV::InventoryParserHelper::storeLegCabinCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for `AIRINV::InventoryParserHelper::storeLegCabinCode`:



Public Member Functions

- `storeLegCabinCode` (`FlightDateStruct` &)
- `void operator()` (`char iChar`) `const`

Public Attributes

- `FlightDateStruct` & `_flightDate`

24.217 AIRINV::InventoryParserHelper::storeLegCabinCode Struct Reference 12

24.217.1 Detailed Description

Store the parsed leg cabin code.

24.217.2 Constructor & Destructor Documentation

24.217.2.1 AIRINV::InventoryParserHelper::storeLegCabinCode::storeLegCabinCode (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 223 of file [InventoryParserHelper.cpp](#).

24.217.3 Member Function Documentation

24.217.3.1 void AIRINV::InventoryParserHelper::storeLegCabinCode::operator() (char iChar) const

Actor Function (functor).

Definition at line 228 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), [AIRINV::LegCabinStruct::_cabinCode](#), [AIRINV::LegCabinStruct::_bucketList](#), [AIRINV::FlightDateStruct::_itBucket](#), [AIRINV::FlightDateStruct::_itLeg](#), [AIRINV::LegStruct::_cabinList](#), and [AIRINV::BucketStruct::_yieldRangeUpperValue](#).

24.217.4 Member Data Documentation

24.217.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic- Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), and [AIRINV::InventoryParserHelper::store-](#)

24.218 AIRINV::ScheduleParserHelper::storeLegCabinCode Struct Reference

NAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

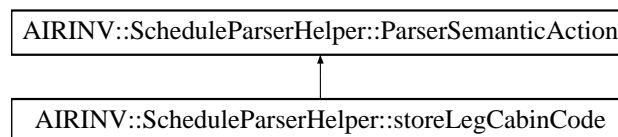
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.218 AIRINV::ScheduleParserHelper::storeLegCabinCode Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegCabinCode:



Public Member Functions

- [storeLegCabinCode](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) (char iChar) const

24.218 AIRINV::ScheduleParserHelper::storeLegCabinCode Struct Reference 14

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.218.1 Detailed Description

Store the parsed leg cabin code.

24.218.2 Constructor & Destructor Documentation

24.218.2.1 AIRINV::ScheduleParserHelper::storeLegCabinCode::storeLegCabinCode ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 216 of file [ScheduleParserHelper.cpp](#).

24.218.3 Member Function Documentation

24.218.3.1 void AIRINV::ScheduleParserHelper::storeLegCabinCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 221 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_cabinCode](#).

24.218.4 Member Data Documentation

24.218.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::store-](#)

24.219 AIRINV::InventoryParserHelper::storeLegOffPoint Struct Reference 415

[SegmentCabinCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#)).

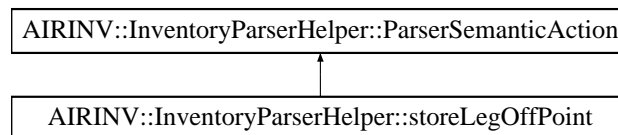
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.219 AIRINV::InventoryParserHelper::storeLegOffPoint Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeLegOffPoint:



Public Member Functions

- [storeLegOffPoint](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.219.1 Detailed Description

Store the parsed leg off point.

24.219.2 Constructor & Destructor Documentation

24.219.2.1 AIRINV::InventoryParserHelper::storeLegOffPoint::storeLegOffPoint ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 157 of file [InventoryParserHelper.cpp](#).

24.219.3 Member Function Documentation

24.219.3.1 void AIRINV::InventoryParserHelper::storeLegOffPoint::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 162 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLeg](#), [AIRINV::LegStruct::_offPoint](#), and [AIRINV::FlightDateStruct::addAirport\(\)](#).

24.219.4 Member Data Documentation

24.219.4.1 **FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate** [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::Inventory](#)

24.220 AIRINV::ScheduleParserHelper::storeLegOffPoint Struct Reference 417

[ParserHelper::storeNbOfBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#)).

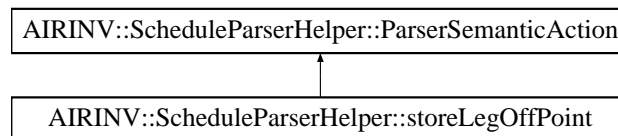
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.220 AIRINV::ScheduleParserHelper::storeLegOffPoint Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegOffPoint:



Public Member Functions

- [storeLegOffPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.220.1 Detailed Description

Store the parsed leg off point.

24.220.2 Constructor & Destructor Documentation

24.220.2.1 AIRINV::ScheduleParserHelper::storeLegOffPoint::storeLegOffPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 140 of file [ScheduleParserHelper.cpp](#).

24.220.3 Member Function Documentation

24.220.3.1 void AIRINV::ScheduleParserHelper::storeLegOffPoint::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 145 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itLeg](#), [AIRINV::LegStruct::_offPoint](#), and [AIRINV::FlightPeriodStruct::addAirport\(\)](#).

24.220.4 Member Data Documentation

24.220.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

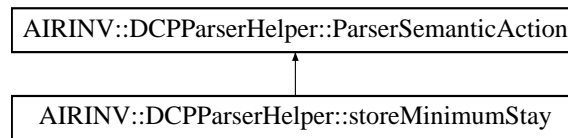
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.221 AIRINV::DCPParserHelper::storeMinimumStay Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeMinimumStay:



Public Member Functions

- [storeMinimumStay](#) (DCPRuleStruct &)
- void [operator\(\)](#) (unsigned int, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.221.1 Detailed Description

Store the parsed minimum stay.

24.221.2 Constructor & Destructor Documentation

24.221.2.1 [AIRINV::DCPParserHelper::storeMinimumStay::storeMinimumStay](#) (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 299 of file [DCPParserHelper.cpp](#).

24.221.3 Member Function Documentation

24.221.3.1 void [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#) (unsigned int *iMinStay*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 304 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.221.4 Member Data Documentation

24.221.4.1 DCPRuleStruct& [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#) [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

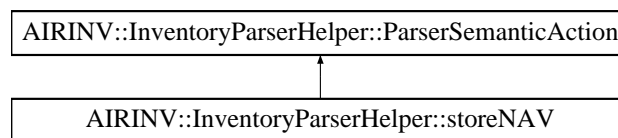
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.222 AIRINV::InventoryParserHelper::storeNAV Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNAV:



Public Member Functions

- [storeNAV](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.222.1 Detailed Description

Store the parsed Net Availability (NAV).

24.222.2 Constructor & Destructor Documentation

24.222.2.1 AIRINV::InventoryParserHelper::storeNAV::storeNAV ([FlightDateStruct & ioFlightDate](#))

Actor Constructor.

Definition at line 296 of file [InventoryParserHelper.cpp](#).

24.222.3 Member Function Documentation

24.222.3.1 void AIRINV::InventoryParserHelper::storeNAV::operator() ([double iReal](#)) const

Actor Function (functor).

Definition at line 301 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_nav](#).

24.222.4 Member Data Documentation

24.222.4.1 [FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#) [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailality::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::](#)

[::storeClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#)().

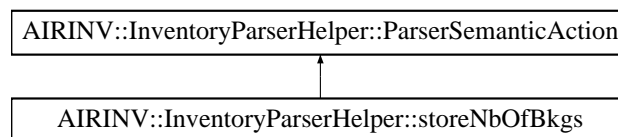
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.223 AIRINV::InventoryParserHelper::storeNbOfBkgs Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfBkgs:



Public Member Functions

- [storeNbOfBkgs](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.223.1 Detailed Description

Store the parsed number of bookings (at booking class level).

24.223.2 Constructor & Destructor Documentation

24.223.2.1 AIRINV::InventoryParserHelper::storeNbOfBkgs::storeNbOfBkgs (
FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 602 of file [InventoryParserHelper.cpp](#).

24.223.3 Member Function Documentation

24.223.3.1 void AIRINV::InventoryParserHelper::storeNbOfBkgs::operator() (double iReal)
const

Actor Function (functor).

Definition at line 607 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_nbOfBookings](#).

24.223.4 Member Data Documentation

24.223.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint](#)

[::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#),
[AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#),
[AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

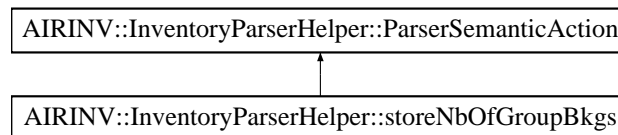
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.224 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfGroupBkgs:



Public Member Functions

- [storeNbOfGroupBkgs](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.224 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs Struct Reference 25

24.224.1 Detailed Description

Store the parsed number of group bookings (at booking class level).

24.224.2 Constructor & Destructor Documentation

24.224.2.1 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::storeNbOfGroupBkgs (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 613 of file [InventoryParserHelper.cpp](#).

24.224.3 Member Function Documentation

24.224.3.1 void AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator() (double iReal) const

Actor Function (functor).

Definition at line 618 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_nbOfGroupBookings](#).

24.224.4 Member Data Documentation

24.224.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParser](#)

[Helper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

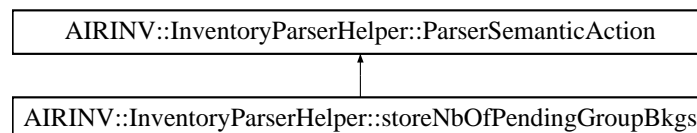
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.225 AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs Struct - Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs:



Public Member Functions

- [storeNbOfPendingGroupBkgs](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

24.226 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs Struct Reference

[::storeLegCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#).

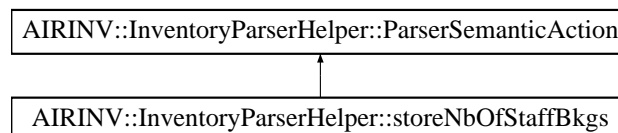
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.226 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfStaffBkgs:



Public Member Functions

- [storeNbOfStaffBkgs \(FlightDateStruct &\)](#)

24.226 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs Struct Reference 429

- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.226.1 Detailed Description

Store the parsed number of staff bookings (at booking class level).

24.226.2 Constructor & Destructor Documentation

24.226.2.1 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::storeNbOfStaffBkgs ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 636 of file [InventoryParserHelper.cpp](#).

24.226.3 Member Function Documentation

24.226.3.1 void AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 641 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_nbOfStaffBookings](#).

24.226.4 Member Data Documentation

24.226.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeBoardingTime-](#)

24.227 AIRINV::InventoryParserHelper::storeNbOfWLBkgs Struct Reference 430

`::operator()`, `AIRINV::InventoryParserHelper::storeOffDate::operator()`, `AIRINV::InventoryParserHelper::storeOffTime::operator()`, `AIRINV::InventoryParserHelper::storeLegCabinCode::operator()`, `AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()`, `AIRINV::InventoryParserHelper::storeAU::operator()`, `AIRINV::InventoryParserHelper::storeUPR::operator()`, `AIRINV::InventoryParserHelper::storeBookingCounter::operator()`, `AIRINV::InventoryParserHelper::storeNAV::operator()`, `AIRINV::InventoryParserHelper::storeGAV::operator()`, `AIRINV::InventoryParserHelper::storeACP::operator()`, `AIRINV::InventoryParserHelper::storeETB::operator()`, `AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()`, `AIRINV::InventoryParserHelper::storeBucketAvailability::operator()`, `AIRINV::InventoryParserHelper::storeSeatIndex::operator()`, `AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()`, `AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator()`, `AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()`, `AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()`, `AIRINV::InventoryParserHelper::storeClassCode::operator()`, `AIRINV::InventoryParserHelper::storeSubclassCode::operator()`, `AIRINV::InventoryParserHelper::storeParentClassCode::operator()`, `AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()`, `AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()`, `AIRINV::InventoryParserHelper::storeProtection::operator()`, `AIRINV::InventoryParserHelper::storeNego::operator()`, `AIRINV::InventoryParserHelper::storeNoShow::operator()`, `AIRINV::InventoryParserHelper::storeOverbooking::operator()`, `AIRINV::InventoryParserHelper::storeNbOfBkgs::operator()`, `AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()`, `AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()`, `operator()`, `AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()`, `AIRINV::InventoryParserHelper::storeClassETB::operator()`, `AIRINV::InventoryParserHelper::storeClassAvailability::operator()`, `AIRINV::InventoryParserHelper::storeSegmentAvailability::operator()`, `AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()`, `AIRINV::InventoryParserHelper::storeFamilyCode::operator()`, `AIRINV::InventoryParserHelper::storeFClasses::operator()`, and `AIRINV::InventoryParserHelper::doEndFlightDate::operator()`.

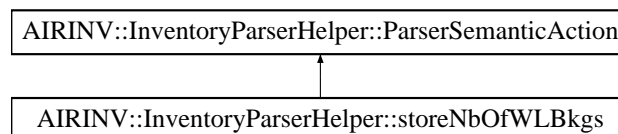
The documentation for this struct was generated from the following files:

- `airinv/command/InventoryParserHelper.hpp`
- `airinv/command/InventoryParserHelper.cpp`

24.227 AIRINV::InventoryParserHelper::storeNbOfWLBkgs Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for `AIRINV::InventoryParserHelper::storeNbOfWLBkgs`:



24.227 AIRINV::InventoryParserHelper::storeNbOfWLBkgs Struct Reference 431

Public Member Functions

- [storeNbOfWLBkgs](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.227.1 Detailed Description

Store the parsed number of wait-list bookings (at booking class level).

24.227.2 Constructor & Destructor Documentation

24.227.2.1 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::storeNbOfWLBkgs ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 647 of file [InventoryParserHelper.cpp](#).

24.227.3 Member Function Documentation

24.227.3.1 void AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 652 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_nbOfWLBookings](#).

24.227.4 Member Data Documentation

24.227.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [A-](#)

[AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

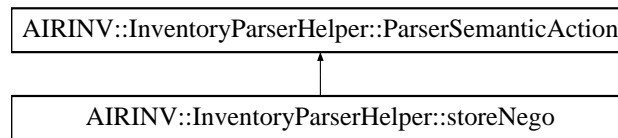
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.228 AIRINV::InventoryParserHelper::storeNego Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNego:



Public Member Functions

- [storeNego](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.228.1 Detailed Description

Store the negotiated allotment (at booking class level).

24.228.2 Constructor & Destructor Documentation

24.228.2.1 AIRINV::InventoryParserHelper::storeNego::storeNego ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 569 of file [InventoryParserHelper.cpp](#).

24.228.3 Member Function Documentation

24.228.3.1 void AIRINV::InventoryParserHelper::storeNego::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 574 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_nego](#).

24.228.4 Member Data Documentation

24.228.4.1 [FlightDateStruct&](#) [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#) [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

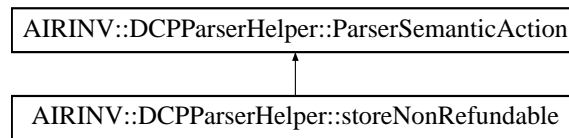
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.229 AIRINV::DCPParserHelper::storeNonRefundable Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeNonRefundable:



Public Member Functions

- [storeNonRefundable](#) (DCPRuleStruct &)
- void [operator\(\)](#) (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.229.1 Detailed Description

Store the parsed refundable option

24.229.2 Constructor & Destructor Documentation

24.229.2.1 AIRINV::DCPParserHelper::storeNonRefundable::storeNonRefundable (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 274 of file [DCPParserHelper.cpp](#).

24.229.3 Member Function Documentation

24.229.3.1 void AIRINV::DCPParserHelper::storeNonRefundable::operator() (char *iNonRefundable*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 279 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.229.4 Member Data Documentation

24.229.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPid::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

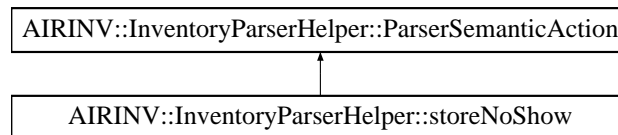
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.230 AIRINV::InventoryParserHelper::storeNoShow Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeNoShow:



Public Member Functions

- [storeNoShow](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.230.1 Detailed Description

Store the parsed No-Show percentage (at booking class level).

24.230.2 Constructor & Destructor Documentation

24.230.2.1 AIRINV::InventoryParserHelper::storeNoShow::storeNoShow (*FlightDateStruct* & *ioFlightDate*)

Actor Constructor.

Definition at line 580 of file [InventoryParserHelper.cpp](#).

24.230.3 Member Function Documentation

24.230.3.1 void AIRINV::InventoryParserHelper::storeNoShow::operator() (*double iReal*) const

Actor Function (functor).

Definition at line 585 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_noShowPercentage](#).

24.230.4 Member Data Documentation

24.230.4.1 *FlightDateStruct*& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#),

AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), - AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

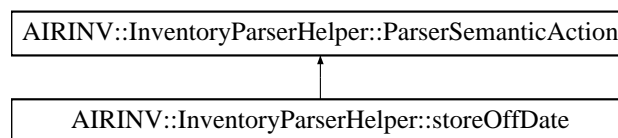
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.231 AIRINV::InventoryParserHelper::storeOffDate Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeOffDate:



Public Member Functions

- [storeOffDate](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

[::InventoryParserHelper::storeETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#)(), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#)(), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#)().

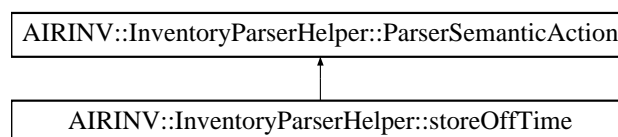
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.232 AIRINV::InventoryParserHelper::storeOffTime Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeOffTime:



Public Member Functions

- [storeOffTime](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.232.1 Detailed Description

Store the off time.

24.232.2 Constructor & Destructor Documentation

24.232.2.1 AIRINV::InventoryParserHelper::storeOffTime::storeOffTime ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 210 of file [InventoryParserHelper.cpp](#).

24.232.3 Member Function Documentation

24.232.3.1 void AIRINV::InventoryParserHelper::storeOffTime::operator() ([iterator_t](#) *iStr*, [iterator_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 215 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLeg](#), [AIRINV::LegStruct::_offTime](#), [AIRINV::FlightDateStruct::getTime\(\)](#), and [AIRINV::FlightDateStruct::_itSeconds](#).

24.232.4 Member Data Documentation

24.232.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::store-](#)

AU::operator>(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

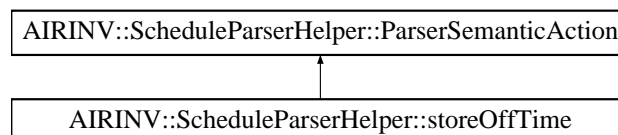
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.233 AIRINV::ScheduleParserHelper::storeOffTime Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeOffTime:



Public Member Functions

- [storeOffTime](#) ([FlightPeriodStruct](#) &)

- void [operator\(\)](#) (iterator_t iStr, iterator_t iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.233.1 Detailed Description

Store the off time.

24.233.2 Constructor & Destructor Documentation

24.233.2.1 AIRINV::ScheduleParserHelper::storeOffTime::storeOffTime ([FlightPeriodStruct](#) & [ioFlightPeriod](#))

Actor Constructor.

Definition at line 174 of file [ScheduleParserHelper.cpp](#).

24.233.3 Member Function Documentation

24.233.3.1 void AIRINV::ScheduleParserHelper::storeOffTime::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 179 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itLeg](#), [AIRINV::LegStruct::_offTime](#), [AIRINV::FlightPeriodStruct::getTime\(\)](#), [AIRINV::FlightPeriodStruct::_itSeconds](#), [AIRINV::FlightPeriodStruct::_dateOffset](#), and [AIRINV::LegStruct::_boardingDateOffset](#).

24.233.4 Member Data Documentation

24.233.4.1 [FlightPeriodStruct](#)& [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#) [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::store-](#)

ElapsedTime::operator>(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator(), AIRINV::ScheduleParserHelper::storeCapacity::operator(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator(), AIRINV::ScheduleParserHelper::storeClasses::operator(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator(), AIRINV::ScheduleParserHelper::storeFClasses::operator(), and AIRINV::ScheduleParserHelper::doEndFlight::operator()).

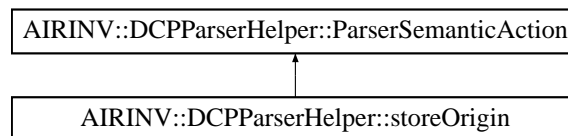
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.234 AIRINV::DCPParserHelper::storeOrigin Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeOrigin:



Public Member Functions

- [storeOrigin](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.234.1 Detailed Description

Store the parsed origin.

24.234.2 Constructor & Destructor Documentation

24.234.2.1 AIRINV::DCPParserHelper::storeOrigin::storeOrigin (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

24.235 AIRINV::InventoryParserHelper::storeOverbooking Struct Reference 445

Definition at line 54 of file [DCPParserHelper.cpp](#).

24.234.3 Member Function Documentation

24.234.3.1 void AIRINV::DCPParserHelper::storeOrigin::operator() (std::vector< char > iChar, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 59 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.234.4 Member Data Documentation

24.234.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)\(\)](#), [operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

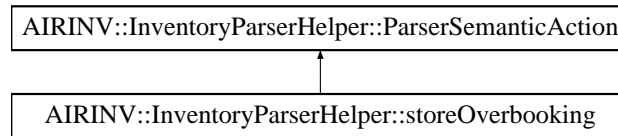
- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.235 AIRINV::InventoryParserHelper::storeOverbooking Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeOverbooking:

24.235 AIRINV::InventoryParserHelper::storeOverbooking Struct Reference 446



Public Member Functions

- [storeOverbooking](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.235.1 Detailed Description

Store the parsed Overbooking percentage (at booking class level).

24.235.2 Constructor & Destructor Documentation

24.235.2.1 AIRINV::InventoryParserHelper::storeOverbooking::storeOverbooking ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 591 of file [InventoryParserHelper.cpp](#).

24.235.3 Member Function Documentation

24.235.3.1 void AIRINV::InventoryParserHelper::storeOverbooking::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 596 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_overbookingPercentage](#).

24.235.4 Member Data Documentation

24.235.4.1 [FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#) [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

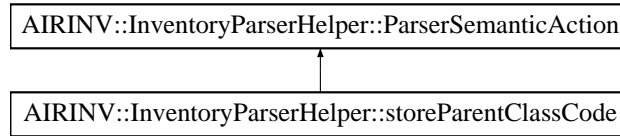
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.236 AIRINV::InventoryParserHelper::storeParentClassCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```


Inheritance diagram for AIRINV::InventoryParserHelper::storeParentClassCode:



Public Member Functions

- [storeParentClassCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (char iChar) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.236.1 Detailed Description

Store the parsed class code of the parent sub-class.

24.236.2 Constructor & Destructor Documentation

24.236.2.1 AIRINV::InventoryParserHelper::storeParentClassCode::storeParentClassCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line [523](#) of file [InventoryParserHelper.cpp](#).

24.236.3 Member Function Documentation

24.236.3.1 void AIRINV::InventoryParserHelper::storeParentClassCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line [528](#) of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_parentClassCode](#).

24.236.4 Member Data Documentation

24.236.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), -
[AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::Inventory-
ParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode-
::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), A-
IRINV::InventoryParserHelper::storeLegBoardingPoint::operator(), [AIRINV::Inventory-
ParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::store-
BoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime-
::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::-
InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleable-
Capacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), A-
IRINV::InventoryParserHelper::storeUPR::operator(), [AIRINV::InventoryParser-
Helper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::store-
NAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRIN-
V::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange-
::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailality::operator\(\)](#), A-
IRINV::InventoryParserHelper::storeSeatIndex::operator(), [AIRINV::InventoryParser-
Helper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegment-
CabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBooking-
Counter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#),
[AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [operator\(\)](#), [AIRIN-
V::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::Inventory-
ParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#),
[AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParser-
Helper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOf-
Bkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#),
[AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRI-
NV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::Inventory-
ParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability-
::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#),
[AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::-
InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper-
::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate-
::operator\(\)](#).

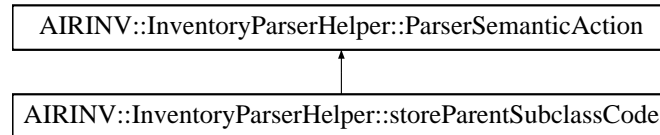
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.237 AIRINV::InventoryParserHelper::storeParentSubclassCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeParentSubclassCode:



Public Member Functions

- [storeParentSubclassCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (unsigned int iNumber) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.237.1 Detailed Description

Store the parsed sub-class code of the parent sub-class.

24.237.2 Constructor & Destructor Documentation

24.237.2.1 AIRINV::InventoryParserHelper::storeParentSubclassCode-
::storeParentSubclassCode ([FlightDateStruct](#) & *ioFlightDate*
)

Actor Constructor.

Definition at line [535](#) of file [InventoryParserHelper.cpp](#).

24.237.3 Member Function Documentation

24.237.3.1 void AIRINV::InventoryParserHelper::storeParentSubclassCode::operator() (
 unsigned int *iNumber*) const

Actor Function (functor).

Definition at line [540](#) of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_parentSubclassCode](#).

24.237.4 Member Data Documentation

24.237.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [-AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWL-Bkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

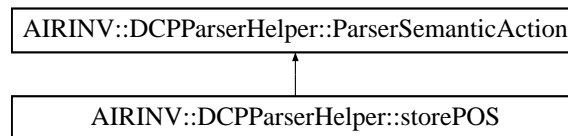
- [airinv/command/InventoryParserHelper.hpp](#)

- [airinv/command/InventoryParserHelper.cpp](#)

24.238 AIRINV::DCPParserHelper::storePOS Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storePOS:



Public Member Functions

- [storePOS](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- DCPRuleStruct & [_DCPRule](#)

24.238.1 Detailed Description

Store the parsed customer position.

24.238.2 Constructor & Destructor Documentation

24.238.2.1 AIRINV::DCPParserHelper::storePOS::storePOS (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 150 of file [DCPParserHelper.cpp](#).

24.238.3 Member Function Documentation

24.238.3.1 void AIRINV::DCPParserHelper::storePOS::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 155 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.238.4 Member Data Documentation

24.238.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DC-PRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

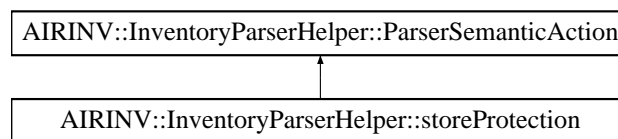
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.239 AIRINV::InventoryParserHelper::storeProtection Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeProtection:



Public Member Functions

- [storeProtection](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.239.1 Detailed Description

Store the parsed protection (at booking class level).

24.239.2 Constructor & Destructor Documentation

24.239.2.1 AIRINV::InventoryParserHelper::storeProtection::storeProtection (
FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 558 of file [InventoryParserHelper.cpp](#).

24.239.3 Member Function Documentation

24.239.3.1 void AIRINV::InventoryParserHelper::storeProtection::operator() (double iReal)
const

Actor Function (functor).

Definition at line 563 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_protection](#).

24.239.4 Member Data Documentation

24.239.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#),

AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

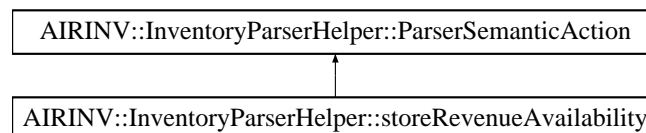
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.240 AIRINV::InventoryParserHelper::storeRevenueAvailability Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeRevenueAvailability:



Public Member Functions

- [storeRevenueAvailability](#) (FlightDateStruct &)
- [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.240.1 Detailed Description

Store the parsed number of net revenue availability (at booking class level).

24.240.2 Constructor & Destructor Documentation

24.240.2.1 AIRINV::InventoryParserHelper::storeRevenueAvailability::storeRevenueAvailability ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line [694](#) of file [InventoryParserHelper.cpp](#).

24.240.3 Member Function Documentation

24.240.3.1 void AIRINV::InventoryParserHelper::storeRevenueAvailability::operator() (double [iReal](#)) const

Actor Function (functor).

Definition at line [699](#) of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_netRevenueAvailability](#).

24.240.4 Member Data Documentation

24.240.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line [33](#) of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleable](#)

24.241 AIRINV::InventoryParserHelper::storeSaleableCapacity Struct Reference

Capacity::operator>(), AIRINV::InventoryParserHelper::storeAU::operator>(), AIRINV::InventoryParserHelper::storeUPR::operator>(), AIRINV::InventoryParserHelper::storeBookingCounter::operator>(), AIRINV::InventoryParserHelper::storeNAV::operator>(), AIRINV::InventoryParserHelper::storeGAV::operator>(), AIRINV::InventoryParserHelper::storeACP::operator>(), AIRINV::InventoryParserHelper::storeETB::operator>(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator>(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator>(), AIRINV::InventoryParserHelper::storeSeatIndex::operator>(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator>(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator>(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator>(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator>(), AIRINV::InventoryParserHelper::storeClassCode::operator>(), AIRINV::InventoryParserHelper::storeSubclassCode::operator>(), AIRINV::InventoryParserHelper::storeParentClassCode::operator>(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator>(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator>(), AIRINV::InventoryParserHelper::storeProtection::operator>(), AIRINV::InventoryParserHelper::storeNego::operator>(), AIRINV::InventoryParserHelper::storeNoShow::operator>(), AIRINV::InventoryParserHelper::storeOverbooking::operator>(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator>(), AIRINV::InventoryParserHelper::storeClassETB::operator>(), AIRINV::InventoryParserHelper::storeClassAvailability::operator>(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

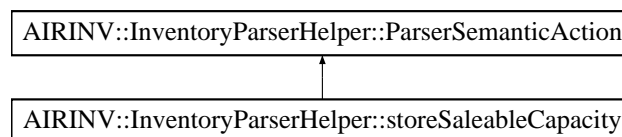
The documentation for this struct was generated from the following files:

- `airinv/command/InventoryParserHelper.hpp`
- `airinv/command/InventoryParserHelper.cpp`

24.241 AIRINV::InventoryParserHelper::storeSaleableCapacity Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSaleableCapacity:



Public Member Functions

- `storeSaleableCapacity` (`FlightDateStruct &`)
- `void operator()` (`double iReal`) `const`

24.241 AIRINV::InventoryParserHelper::storeSaleableCapacity Struct Reference 456

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.241.1 Detailed Description

Store the parsed saleable capacity.

24.241.2 Constructor & Destructor Documentation

24.241.2.1 AIRINV::InventoryParserHelper::storeSaleableCapacity::storeSaleableCapacity ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 252 of file [InventoryParserHelper.cpp](#).

24.241.3 Member Function Documentation

24.241.3.1 void AIRINV::InventoryParserHelper::storeSaleableCapacity::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 257 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_saleableCapacity](#).

24.241.4 Member Data Documentation

24.241.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#),

AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

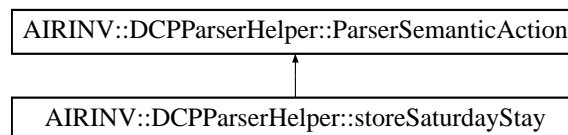
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.242 AIRINV::DCPParserHelper::storeSaturdayStay Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeSaturdayStay:



Public Member Functions

- [storeSaturdayStay](#) (DCPRuleStruct &)

- void [operator\(\)](#) (char, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- [DCPRuleStruct](#) & [_DCPRule](#)

24.242.1 Detailed Description

Store the parsed saturday night.

24.242.2 Constructor & Destructor Documentation

24.242.2.1 AIRINV::DCPParserHelper::storeSaturdayStay::storeSaturdayStay (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 223 of file [DCPParserHelper.cpp](#).

24.242.3 Member Function Documentation

24.242.3.1 void AIRINV::DCPParserHelper::storeSaturdayStay::operator() (char iSaturdayStay, boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 228 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.242.4 Member Data Documentation

24.242.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DC-](#)

[PParserHelper::storeNonRefundable::operator\(\)](#)(), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#)(), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#)(), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#)(), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#)(), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#)).

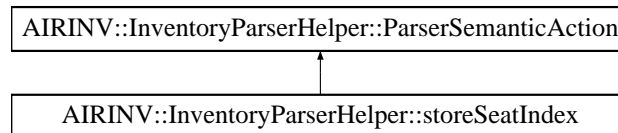
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.243 AIRINV::InventoryParserHelper::storeSeatIndex Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSeatIndex:



Public Member Functions

- [storeSeatIndex](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.243.1 Detailed Description

Store the parsed leg-cabin seat index.

24.243.2 Constructor & Destructor Documentation

24.243.2.1 AIRINV::InventoryParserHelper::storeSeatIndex::storeSeatIndex ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 371 of file [InventoryParserHelper.cpp](#).

24.243.3 Member Function Documentation

24.243.3.1 void AIRINV::InventoryParserHelper::storeSeatIndex::operator() (double *iReal*)
const

Actor Function (functor).

Definition at line 376 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBucket](#), and [AIRINV::BucketStruct::_seatIndex](#).

24.243.4 Member Data Documentation

24.243.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#),

AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

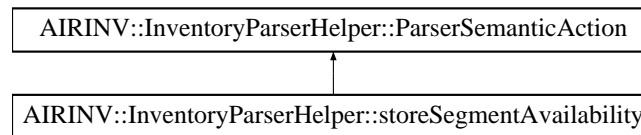
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.244 AIRINV::InventoryParserHelper::storeSegmentAvailability Struct - Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentAvailability:



Public Member Functions

- [storeSegmentAvailability](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.244.1 Detailed Description

Store the parsed number of segment availability (at booking class level).

24.244.2 Constructor & Destructor Documentation

24.244.2.1 AIRINV::InventoryParserHelper::storeSegmentAvailability::storeSegmentAvailability ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 682 of file [InventoryParserHelper.cpp](#).

24.244.3 Member Function Documentation

24.244.3.1 void AIRINV::InventoryParserHelper::storeSegmentAvailability::operator() (double
iReal) const

Actor Function (functor).

Definition at line 687 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_segmentAvailability](#).

24.244.4 Member Data Documentation

24.244.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#),

AIRINV::InventoryParserHelper::storeProtection::operator>(), AIRINV::InventoryParserHelper::storeNego::operator>(), AIRINV::InventoryParserHelper::storeNoShow::operator>(), AIRINV::InventoryParserHelper::storeOverbooking::operator>(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator>(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator>(), AIRINV::InventoryParserHelper::storeClassETB::operator>(), AIRINV::InventoryParserHelper::storeClassAvailability::operator>(), operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator>(), AIRINV::InventoryParserHelper::storeFamilyCode::operator>(), AIRINV::InventoryParserHelper::storeFClasses::operator>(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()).

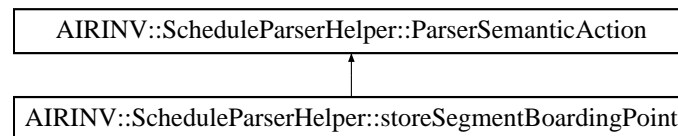
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.245 AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint Struct - Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint:



Public Member Functions

- [storeSegmentBoardingPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.245.1 Detailed Description

Store the parsed segment boarding point.

24.245.2 Constructor & Destructor Documentation

24.245.2.1 AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::storeSegmentBoardingPoint (FlightPeriodStruct & ioFlightPeriod)

Actor Constructor.

Definition at line 273 of file [ScheduleParserHelper.cpp](#).

24.245.3 Member Function Documentation

24.245.3.1 void AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 278 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itSegment](#), and [AIRINV::SegmentStruct::_boardingPoint](#).

24.245.4 Member Data Documentation

24.245.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

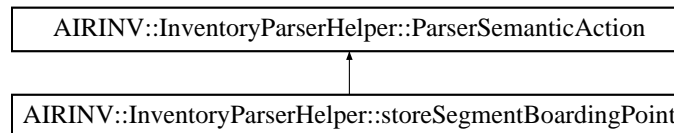
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.246 AIRINV::InventoryParserHelper::storeSegmentBoardingPoint Struct - Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentBoardingPoint:



Public Member Functions

- [storeSegmentBoardingPoint](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.246.1 Detailed Description

Store the parsed segment boarding point.

24.246.2 Constructor & Destructor Documentation

24.246.2.1 AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::storeSegmentBoardingPoint ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 383 of file [InventoryParserHelper.cpp](#).

24.246.3 Member Function Documentation

24.246.3.1 void AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator() ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 388 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLeg](#), [AIRINV::LegStruct::_cabinList](#), [AIRINV::FlightDateStruct::_itLegCabin](#), [AIRINV::LegCabinStruct::_bucketList](#), [AIRINV::FlightDateStruct::_itBucket](#), [AIRINV::FlightDateStruct::_legList](#), [AIRINV::LegCabinStruct::_cabinCode](#), [AIRINV::FlightDateStruct::_itSegment](#), [AIRINV::SegmentStruct::_cabinList](#), [AIRINV::FlightDateStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), [AIRINV::FareFamilyStruct::_classList](#), [AIRINV::FlightDateStruct::_itBookingClass](#), [AIRINV::SegmentCabinStruct::_fareFamilies](#), [AIRINV::FlightDateStruct::_segmentList](#), [AIRINV::BookingClassStruct::_classCode](#), and [AIRINV::SegmentStruct::_boardingPoint](#).

24.246.4 Member Data Documentation

24.246.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), -

AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

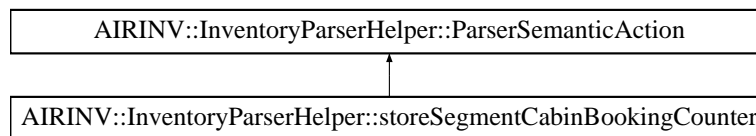
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.247 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter - Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter:



Public Member Functions

- [storeSegmentCabinBookingCounter](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.247.1 Detailed Description

Store the parsed segment cabin number of bookings.

24.247.2 Constructor & Destructor Documentation

24.247.2.1 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::store-
SegmentCabinBookingCounter (FlightDateStruct & ioFlightDate
)

Actor Constructor.

Definition at line 481 of file [InventoryParserHelper.cpp](#).

24.247.3 Member Function Documentation

24.247.3.1 void AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator()
(double iReal) const

Actor Function (functor).

Definition at line 486 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itSegmentCabin](#), and [AIRINV::SegmentCabinStruct::_nbOfBookings](#).

24.247.4 Member Data Documentation

24.247.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemantic-
Action::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#),

[operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

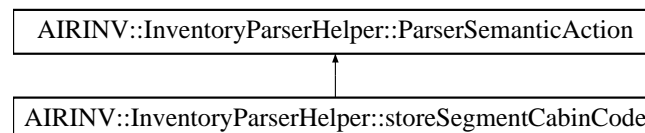
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.248 AIRINV::InventoryParserHelper::storeSegmentCabinCode Struct - Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentCabinCode:



Public Member Functions

- [storeSegmentCabinCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (char iChar) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.248.1 Detailed Description

Store the parsed segment cabin code.

24.248.2 Constructor & Destructor Documentation

24.248.2.1 AIRINV::InventoryParserHelper::storeSegmentCabinCode::storeSegmentCabinCode (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 446 of file [InventoryParserHelper.cpp](#).

24.248.3 Member Function Documentation

24.248.3.1 void AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator() (char iChar) const

Actor Function (functor).

Definition at line 451 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itSegmentCabin](#), [AIRINV::SegmentCabinStruct::_fareFamilies](#), [AIRINV::SegmentCabinStruct::_itFareFamily](#), [AIRINV::FareFamilyStruct::_classList](#), [AIRINV::FlightDateStruct::_itBookingClass](#), [AIRINV::FlightDateStruct::_itSegment](#), [AIRINV::SegmentStruct::_cabinList](#), [AIRINV::BookingClassStruct::_classCode](#), and [AIRINV::SegmentCabinStruct::_cabinCode](#).

24.248.4 Member Data Documentation

24.248.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::](#)

InventoryParserHelper::storeUPR::operator>(), AIRINV::InventoryParserHelper::storeBookingCounter::operator>(), AIRINV::InventoryParserHelper::storeNAV::operator>(), AIRINV::InventoryParserHelper::storeGAV::operator>(), AIRINV::InventoryParserHelper::storeACP::operator>(), AIRINV::InventoryParserHelper::storeETB::operator>(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator>(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator>(), AIRINV::InventoryParserHelper::storeSeatIndex::operator>(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator>(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator()).

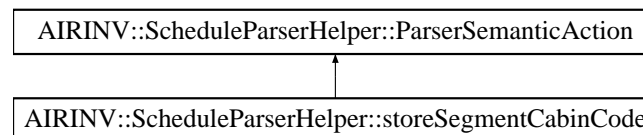
The documentation for this struct was generated from the following files:

- `airinv/command/InventoryParserHelper.hpp`
- `airinv/command/InventoryParserHelper.cpp`

24.249 AIRINV::ScheduleParserHelper::storeSegmentCabinCode Struct - Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentCabinCode:



Public Member Functions

- `storeSegmentCabinCode` (`FlightPeriodStruct &`)

- void [operator\(\)](#) (char iChar) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.249.1 Detailed Description

Store the parsed segment cabin code.

24.249.2 Constructor & Destructor Documentation

24.249.2.1 AIRINV::ScheduleParserHelper::storeSegmentCabinCode::storeSegmentCabinCode ([FlightPeriodStruct](#) & [ioFlightPeriod](#))

Actor Constructor.

Definition at line 299 of file [ScheduleParserHelper.cpp](#).

24.249.3 Member Function Documentation

24.249.3.1 void AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator() (char [iChar](#)) const

Actor Function (functor).

Definition at line 304 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itSegmentCabin](#), and [AIRINV::SegmentCabinStruct::_cabinCode](#).

24.249.4 Member Data Documentation

24.249.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#),

24.250 AIRINV::InventoryParserHelper::storeSegmentOffPoint Struct Reference 475

AIRINV::ScheduleParserHelper::storeLegCabinCode::operator(), AIRINV::ScheduleParserHelper::storeCapacity::operator(), AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator(), operator(), AIRINV::ScheduleParserHelper::storeClasses::operator(), AIRINV::ScheduleParserHelper::storeFamilyCode::operator(), AIRINV::ScheduleParserHelper::storeFClasses::operator(), and AIRINV::ScheduleParserHelper::doEndFlight::operator().

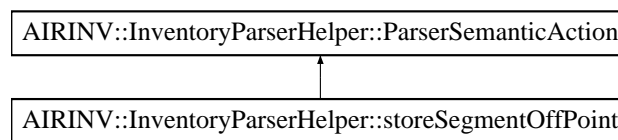
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.250 AIRINV::InventoryParserHelper::storeSegmentOffPoint Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentOffPoint:



Public Member Functions

- [storeSegmentOffPoint](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.250.1 Detailed Description

Store the parsed segment off point.

24.250.2 Constructor & Destructor Documentation

24.250.2.1 AIRINV::InventoryParserHelper::storeSegmentOffPoint::storeSegmentOffPoint ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 432 of file [InventoryParserHelper.cpp](#).

24.250.3 Member Function Documentation

24.250.3.1 void AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 437 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itSegment](#), and [AIRINV::SegmentStruct::_offPoint](#).

24.250.4 Member Data Documentation

24.250.4.1 **FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate** [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#),

24.251 AIRINV::ScheduleParserHelper::storeSegmentOffPoint Struct Reference 477

AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

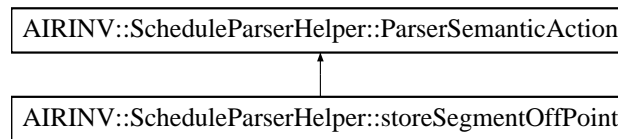
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.251 AIRINV::ScheduleParserHelper::storeSegmentOffPoint Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentOffPoint:



Public Member Functions

- [storeSegmentOffPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.251.1 Detailed Description

Store the parsed segment off point.

24.251.2 Constructor & Destructor Documentation

24.251.2.1 AIRINV::ScheduleParserHelper::storeSegmentOffPoint::storeSegmentOffPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 286 of file [ScheduleParserHelper.cpp](#).

24.251.3 Member Function Documentation

24.251.3.1 void AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator() (iterator_t iStr, iterator_t iStrEnd) const

Actor Function (functor).

Definition at line 291 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_itSegment](#), and [AIRINV::SegmentStruct::_offPoint](#).

24.251.4 Member Data Documentation

24.251.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

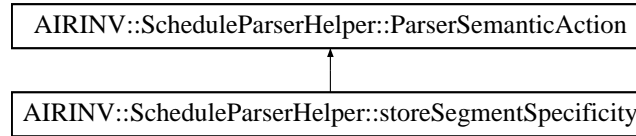
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.252 AIRINV::ScheduleParserHelper::storeSegmentSpecificity Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentSpecificity:



Public Member Functions

- [storeSegmentSpecificity](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) (char iChar) const

Public Attributes

- [FlightPeriodStruct](#) & [_flightPeriod](#)

24.252.1 Detailed Description

Store whether or not the segment definitions are specific. Specific means that there is a definition for each segment. General (not specific) means that a single definition defines all the segments.

24.252.2 Constructor & Destructor Documentation

24.252.2.1 AIRINV::ScheduleParserHelper::storeSegmentSpecificity::storeSegmentSpecificity ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 247 of file [ScheduleParserHelper.cpp](#).

24.252.3 Member Function Documentation

24.252.3.1 void AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 252 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod](#), [AIRINV::FlightPeriodStruct::_areSegmentDefinitionsSpecific](#), [AIRINV::FlightPeriodStruct::_airportList](#), [AIRINV::FlightPeriodStruct::_airportOrderedList](#), and [AIRINV::FlightPeriodStruct::buildSegments\(\)](#).

24.253 AIRINV::InventoryParserHelper::storeSnapshotDate Struct Reference 480

24.252.4 Member Data Documentation

24.252.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#).

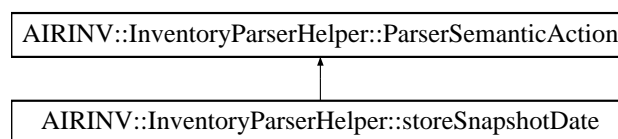
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

24.253 AIRINV::InventoryParserHelper::storeSnapshotDate Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSnapshotDate:



Public Member Functions

- [storeSnapshotDate](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) ([iterator_t](#) iStr, [iterator_t](#) iStrEnd) const

24.253 AIRINV::InventoryParserHelper::storeSnapshotDate Struct Reference 481

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.253.1 Detailed Description

Store the snapshot date.

24.253.2 Constructor & Destructor Documentation

24.253.2.1 AIRINV::InventoryParserHelper::storeSnapshotDate::storeSnapshotDate ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 32 of file [InventoryParserHelper.cpp](#).

24.253.3 Member Function Documentation

24.253.3.1 void AIRINV::InventoryParserHelper::storeSnapshotDate::operator() (*iterator_t iStr*, *iterator_t iStrEnd*) const

Actor Function (functor).

Definition at line 37 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_flightDate](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

24.253.4 Member Data Documentation

24.253.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AI-](#)

[RINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailality::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#).

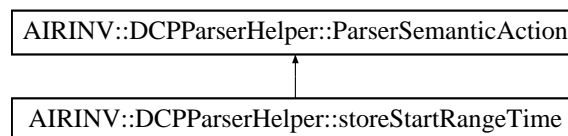
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.254 AIRINV::DCPParserHelper::storeStartRangeTime Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
```

Inheritance diagram for AIRINV::DCPParserHelper::storeStartRangeTime:



Public Member Functions

- [storeStartRangeTime](#) (DCPRuleStruct &)

- void [operator\(\)](#) (boost::spirit::qi::unused_type, boost::spirit::qi::unused_type, boost::spirit::qi::unused_type) const

Public Attributes

- [DCPRuleStruct](#) & [_DCPRule](#)

24.254.1 Detailed Description

Store the parsed start range time.

24.254.2 Constructor & Destructor Documentation

24.254.2.1 AIRINV::DCPParserHelper::storeStartRangeTime::storeStartRangeTime (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 116 of file [DCPParserHelper.cpp](#).

24.254.3 Member Function Documentation

24.254.3.1 void AIRINV::DCPParserHelper::storeStartRangeTime::operator() (boost::spirit::qi::unused_type , boost::spirit::qi::unused_type , boost::spirit::qi::unused_type) const

Actor Function (functor).

Definition at line 121 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule](#).

24.254.4 Member Data Documentation

24.254.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storePOSS::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#),

24.255 AIRINV::InventoryParserHelper::storeSubclassCode Struct Reference 484

[AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), and [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#).

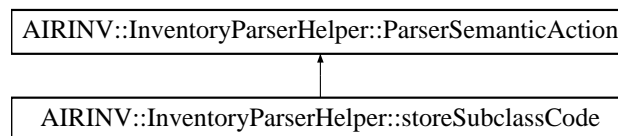
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

24.255 AIRINV::InventoryParserHelper::storeSubclassCode Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeSubclassCode:



Public Member Functions

- [storeSubclassCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (unsigned int iNumber) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.255.1 Detailed Description

Store the parsed sub-class code.

24.255.2 Constructor & Destructor Documentation

24.255.2.1 AIRINV::InventoryParserHelper::storeSubclassCode::storeSubclassCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line [511](#) of file [InventoryParserHelper.cpp](#).

24.255.3 Member Function Documentation

24.255.3.1 void AIRINV::InventoryParserHelper::storeSubclassCode::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 516 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBookingClass](#), and [AIRINV::BookingClassStruct::_subclassCode](#).

24.255.4 Member Data Documentation

24.255.4.1 **FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate** [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfBkgs-](#)

::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), - AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

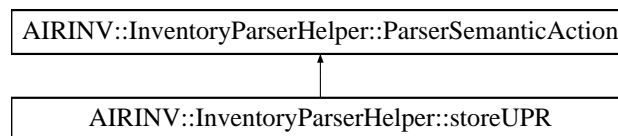
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.256 AIRINV::InventoryParserHelper::storeUPR Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeUPR:



Public Member Functions

- [storeUPR](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.256.1 Detailed Description

Store the parsed Unsold Protected (UPR).

24.256.2 Constructor & Destructor Documentation

24.256.2.1 AIRINV::InventoryParserHelper::storeUPR::storeUPR ([FlightDateStruct](#) & [ioFlightDate](#))

Actor Constructor.

Definition at line 274 of file [InventoryParserHelper.cpp](#).

24.256.3 Member Function Documentation

24.256.3.1 void AIRINV::InventoryParserHelper::storeUPR::operator()(double *iReal*) const

Actor Function (functor).

Definition at line 279 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_upr](#).

24.256.4 Member Data Documentation

24.256.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvaibility::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [A-](#)

AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

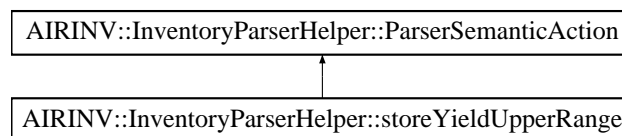
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.257 AIRINV::InventoryParserHelper::storeYieldUpperRange Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

Inheritance diagram for AIRINV::InventoryParserHelper::storeYieldUpperRange:



Public Member Functions

- [storeYieldUpperRange](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

Public Attributes

- [FlightDateStruct](#) & [_flightDate](#)

24.257.1 Detailed Description

Store the parsed Yield Upper Range value.

24.257.2 Constructor & Destructor Documentation

24.257.2.1 AIRINV::InventoryParserHelper::storeYieldUpperRange::storeYieldUpperRange (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 340 of file [InventoryParserHelper.cpp](#).

24.257.3 Member Function Documentation

24.257.3.1 void AIRINV::InventoryParserHelper::storeYieldUpperRange::operator() (double iReal) const

Actor Function (functor).

Definition at line 345 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate](#), [AIRINV::FlightDateStruct::_itBucket](#), [AIRINV::BucketStruct::_yieldRangeUpperValue](#), [AIRINV::FlightDateStruct::_itLegCabin](#), and [AIRINV::LegCabinStruct::_bucketList](#).

24.257.4 Member Data Documentation

24.257.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#).

AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), - AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeFCClasses::operator(), and AIRINV::InventoryParserHelper::doEndFlightDate::operator().

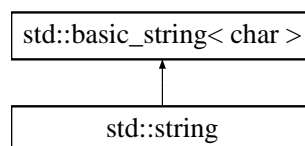
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

24.258 std::string Class Reference

STL class.

Inheritance diagram for std::string:



Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.258.1 Detailed Description

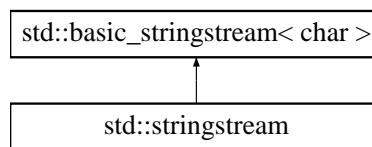
STL class.

The documentation for this class was generated from the following file:

24.259 std::stringstream Class Reference

STL class.

Inheritance diagram for std::stringstream:

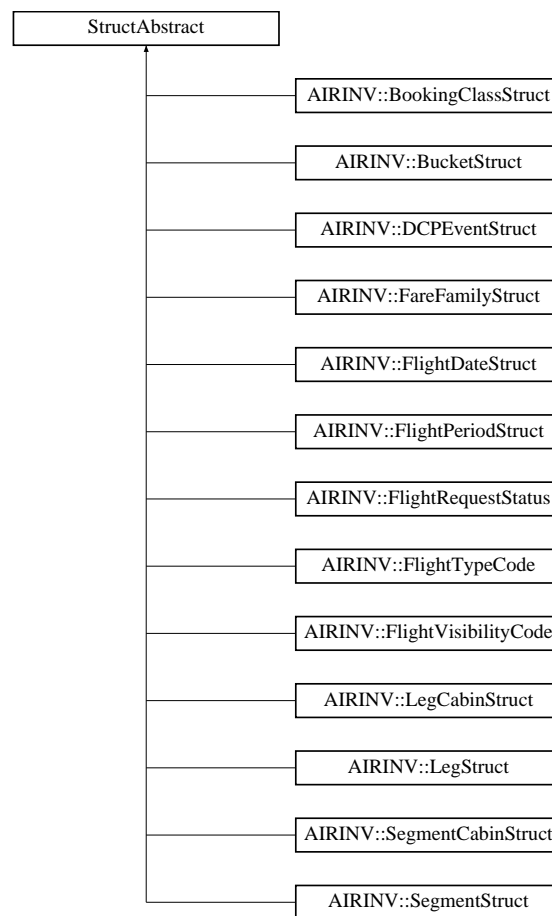
**24.259.1 Detailed Description**

STL class.

The documentation for this class was generated from the following file:

24.260 StructAbstract Class Reference

Inheritance diagram for StructAbstract:

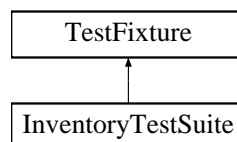


The documentation for this class was generated from the following file:

- [airinv/bom/SegmentStruct.hpp](#)

24.261 TestFixture Class Reference

Inheritance diagram for TestFixture:



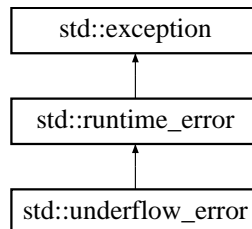
The documentation for this class was generated from the following file:

- [test/airinv/InventoryTestSuite.hpp](#)

24.262 `std::underflow_error` Class Reference

STL class.

Inheritance diagram for `std::underflow_error`:



24.262.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

24.263 `std::valarray` Class Reference

STL class.

24.263.1 Detailed Description

STL class.

The documentation for this class was generated from the following files:

24.264 `std::vector` Class Reference

STL class.

Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.264.1 Detailed Description

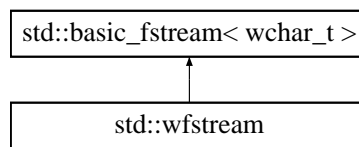
STL class.

The documentation for this class was generated from the following files:

24.265 std::wfstream Class Reference

STL class.

Inheritance diagram for std::wfstream:



24.265.1 Detailed Description

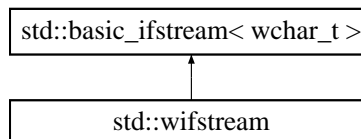
STL class.

The documentation for this class was generated from the following file:

24.266 std::wifstream Class Reference

STL class.

Inheritance diagram for std::wifstream:



24.266.1 Detailed Description

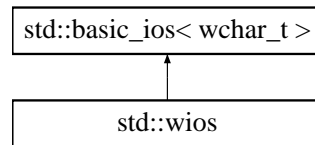
STL class.

The documentation for this class was generated from the following file:

24.267 std::wios Class Reference

STL class.

Inheritance diagram for std::wios:



24.267.1 Detailed Description

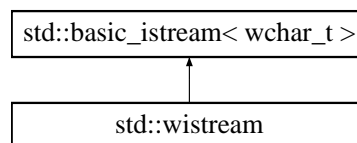
STL class.

The documentation for this class was generated from the following file:

24.268 std::wistream Class Reference

STL class.

Inheritance diagram for `std::wistream`:



24.268.1 Detailed Description

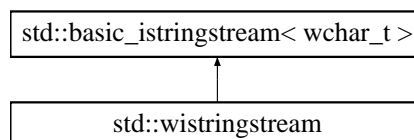
STL class.

The documentation for this class was generated from the following file:

24.269 std::wstringstream Class Reference

STL class.

Inheritance diagram for `std::wstringstream`:



24.269.1 Detailed Description

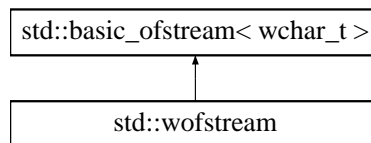
STL class.

The documentation for this class was generated from the following file:

24.270 **std::wofstream Class Reference**

STL class.

Inheritance diagram for std::wofstream:



24.270.1 Detailed Description

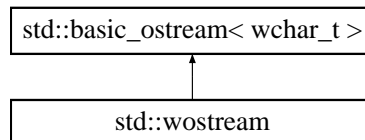
STL class.

The documentation for this class was generated from the following file:

24.271 **std::wostream Class Reference**

STL class.

Inheritance diagram for std::wostream:



24.271.1 Detailed Description

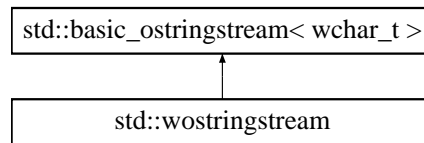
STL class.

The documentation for this class was generated from the following file:

24.272 **std::wostream Class Reference**

STL class.

Inheritance diagram for std::wostream:



24.272.1 Detailed Description

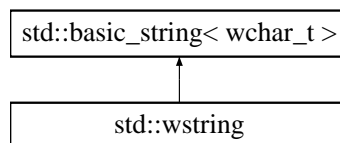
STL class.

The documentation for this class was generated from the following file:

24.273 std::wstring Class Reference

STL class.

Inheritance diagram for std::wstring:



Classes

- class [const_iterator](#)
STL iterator class.
- class [const_reverse_iterator](#)
STL iterator class.
- class [iterator](#)
STL iterator class.
- class [reverse_iterator](#)
STL iterator class.

24.273.1 Detailed Description

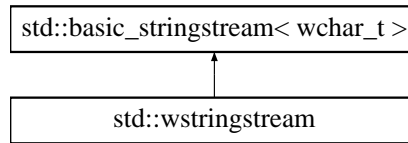
STL class.

The documentation for this class was generated from the following file:

24.274 std::wstringstream Class Reference

STL class.

Inheritance diagram for `std::wstringstream`:



24.274.1 Detailed Description

STL class.

The documentation for this class was generated from the following file:

25 File Documentation

25.1 `airinv/AIRINV_Master_Service.hpp` File Reference

```

#include <string>    #include <stdair/stdair_basic_types.-
hpp> #include <stdair/stdair_service_types.hpp> #include
<stdair/stdair_inventory_types.hpp> #include <stdair/stdair-
_maths_types.hpp>    #include <stdair/basic/Forecasting-
Method.hpp> #include <stdair/basic/PartnershipTechnique.-
hpp> #include <airrac/AIRRAC_Types.hpp>
  
```

Classes

- class [AIRINV::AIRINV_Master_Service](#)
Interface for the [AIRINV](#) Services.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.2 `AIRINV_Master_Service.hpp`

```

00001 #ifndef __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
00002 #define __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
  
```

```

00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/stdair_service_types.hpp>
00012 #include <stdair/stdair_inventory_types.hpp>
00013 #include <stdair/stdair_maths_types.hpp>
00014 #include <stdair/basic/ForecastingMethod.hpp>
00015 #include <stdair/basic/PartnershipTechnique.hpp>
00016 // AirRAC
00017 #include <airrac/AIRRAC_Types.hpp>
00018
00019
00021 namespace stdair {
00022     class AirlineFeatureSet;
00023     class Inventory;
00024     class STDAIR_Service;
00025     struct BasLogParams;
00026     struct BasDBParams;
00027     struct SnapshotStruct;
00028     struct RMEventStruct;
00029     struct TravelSolutionStruct;
00030 }
00031
00032 namespace AIRINV {
00033
00035     class AIRINV_Master_ServiceContext;
00036
00037
00041     class AIRINV_Master_Service {
00042     public:
00043         // ////////// Constructors and destructors //////////
00059         AIRINV_Master_Service (const stdair::BasLogParams&,
00060                               const stdair::BasDBParams&);
00061
00073         AIRINV_Master_Service (const stdair::BasLogParams&);
00074
00090         AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T);
00091
00100         void parseAndLoad (const stdair::Filename_T& iInventoryFilename);
00101
00112         void parseAndLoad (const stdair::Filename_T& iScheduleFilename,
00113                             const stdair::Filename_T& iODInputFilename,
00114                             const AIRRAC::YieldFilePath& iYieldFilename);
00115
00119         ~AIRINV_Master_Service();
00120
00125         void initSnapshotAndRMEvents (const stdair::Date_T&, const stdair::Date_T&)
00126     ;
00127
00128     public:
00129         // ////////// Business Methods //////////
00137         void buildSampleBom();
00138
00142         void calculateAvailability (stdair::TravelSolutionStruct&,
00143                                     const stdair::PartnershipTechnique&);
00144
00153         bool sell (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00154                   const stdair::PartySize_T&);
00164         bool cancel (const std::string& iSegmentDateKey, const stdair::ClassCode_T&
00165                     ,
00166                     const stdair::PartySize_T&);
00170         void takeSnapshots (const stdair::SnapshotStruct&);
00171
00175         void optimise (const stdair::RMEventStruct&,
00176                       const stdair::ForecastingMethod&,
00177                       const stdair::PartnershipTechnique&);
00178
00179     public:
00181         // ////////// Export support methods //////////
00192         std::string jsonExport (const stdair::AirlineCode_T&,
00193                                 const stdair::FlightNumber_T&,
00194                                 const stdair::Date_T& iDepartureDate) const;
00195

```

```

00196
00197 public:
00198     // //////////// Display support methods ////////////
00212     std::string list (const stdair::AirlineCode_T& iAirlineCode = "all",
00213                     const stdair::FlightNumber_T& iFlightNumber = 0) const;
00214
00224     bool check (const stdair::AirlineCode_T&, const stdair::FlightNumber_T&,
00225               const stdair::Date_T& iDepartureDate) const;
00226
00234     std::string csvDisplay() const;
00235
00247     std::string csvDisplay (const stdair::AirlineCode_T&,
00248                           const stdair::FlightNumber_T&,
00249                           const stdair::Date_T& iDepartureDate) const;
00250
00251 private:
00252     // ////////// Construction and Destruction helper methods //////////
00253     AIRINV_Master_Service();
00258
00262     AIRINV_Master_Service (const AIRINV_Master_Service&);
00263
00273     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00274                                                    const stdair::BasDBParams&);
00275
00284     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&
00285 );
00286
00294     void addStdAirService (stdair::STDAIR_ServicePtr_T,
00295                           const bool iOwnStdairService);
00296
00301     void initServiceContext();
00302
00309     void initSlaveAirinvService();
00310
00314     void finalise();
00315
00316 private:
00317     // ////////// Service Context //////////
00322     AIRINV_Master_ServiceContext* _airinvMasterServiceContext;
00323 };
00324 }
00325 #endif // __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP

```

25.3 airinv/AIRINV_Service.hpp File Reference

```

#include <string>    #include <stdair/stdair_basic_types.-
hpp> #include <stdair/stdair_service_types.hpp> #include
<stdair/basic/ForecastingMethod.hpp> #include <stdair/basic/-
PartnershipTechnique.hpp> #include <stdair/bom/RMEvent-
Types.hpp> #include <airrac/AIRAC_Types.hpp>

```

Classes

- class [AIRINV::AIRINV_Service](#)
Interface for the [AIRINV](#) Services.

Namespaces

- namespace [stdair](#)

Forward declarations.

- namespace **AIRINV**

25.4 AIRINV_Service.hpp

```

00001 #ifndef __AIRINV_SVC_AIRINV_SERVICE_HPP
00002 #define __AIRINV_SVC_AIRINV_SERVICE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/stdair_service_types.hpp>
00012 #include <stdair/basic/ForecastingMethod.hpp>
00013 #include <stdair/basic/PartnershipTechnique.hpp>
00014 #include <stdair/bom/RMEventTypes.hpp>
00015 // AirRAC
00016 #include <airrac/AIRRAC_Types.hpp>
00017
00018 namespace stdair {
00019     class AirlineFeatureSet;
00020     class STDAIR_Service;
00021     class Inventory;
00022     struct TravelSolutionStruct;
00023     struct BasLogParams;
00024     struct BasDBParams;
00025 }
00026
00027 namespace AIRINV {
00028     class AIRINV_ServiceContext;
00029
00030     class AIRINV_Service {
00031     public:
00032         // ////////////////////////////////// Constructors and destructors //////////////////////////////////
00033         AIRINV_Service (const stdair::BasLogParams&, const stdair::BasDBParams&);
00034
00035         AIRINV_Service (const stdair::BasLogParams&);
00036
00037         AIRINV_Service (stdair::STDAIR_ServicePtr_T);
00038
00039         void parseAndLoad (const stdair::Filename_T& iInventoryFilename);
00040
00041         void parseAndLoad (const stdair::Filename_T& iScheduleFilename,
00042                             const stdair::Filename_T& iODInputFilename,
00043                             const AIRRAC::YieldFilePath& iYieldFilename);
00044
00045         ~AIRINV_Service();
00046
00047     public:
00048         // ////////////////////////////////// Business Methods //////////////////////////////////
00049         void buildSampleBom();
00050
00051         stdair::RMEventList_T initRMEvents (const stdair::Date_T& iStartDate,
00052                                             const stdair::Date_T& iEndDate);
00053
00054         void calculateAvailability (stdair::TravelSolutionStruct&,
00055                                    const stdair::PartnershipTechnique&);
00056
00057         bool sell (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00058                  const stdair::PartySize_T&);
00059
00060         bool cancel (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00061                    const stdair::PartySize_T&);
00062     };
00063
00064     const stdair::PartySize_T&
00065 
```

```

00169     void takeSnapshots (const stdair::AirlineCode_T&,
00170                        const stdair::DateTime_T&);
00171
00175     void optimise (const stdair::AirlineCode_T&,
00176                  const stdair::KeyDescription_T&,
00177                  const stdair::DateTime_T&,
00178                  const stdair::ForecastingMethod&,
00179                  const stdair::PartnershipTechnique&);
00180
00181 public:
00182     // //////////// Export support methods ////////////
00193     std::string jsonExport (const stdair::AirlineCode_T&,
00194                           const stdair::FlightNumber_T&,
00195                           const stdair::Date_T& iDepartureDate) const;
00196
00197 public:
00198     // //////////// Display support methods ////////////
00212     std::string list (const stdair::AirlineCode_T& iAirlineCode = "all",
00213                    const stdair::FlightNumber_T& iFlightNumber = 0) const;
00214
00224     bool check (const stdair::AirlineCode_T&, const stdair::FlightNumber_T&,
00225               const stdair::Date_T& iDepartureDate) const;
00226
00234     std::string csvDisplay() const;
00235
00247     std::string csvDisplay (const stdair::AirlineCode_T&,
00248                          const stdair::FlightNumber_T&,
00249                          const stdair::Date_T& iDepartureDate) const;
00250
00251 private:
00252     // ////////// Construction and Destruction helper methods //////////
00253     AIRINV_Service ();
00257
00258     AIRINV_Service (const AIRINV_Service&);
00262
00263     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00273                                                const stdair::BasDBParams&);
00274
00275     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&)
00284 ;
00285
00289     void initRMOLService();
00290
00294     void initAIRRACService();
00295
00304     void addStdAirService (stdair::STDAIR_ServicePtr_T,
00305                          const bool iOwnStdairService);
00306
00311     void initServiceContext();
00312
00319     void initAirinvService();
00320
00324     void finalise();
00325
00326 private:
00327     // ////////// Service Context //////////
00328     AIRINV_ServiceContext* _airinvServiceContext;
00332 };
00333
00334 }
00335 #endif // __AIRINV_SVC_AIRINV_SERVICE_HPP

```

25.5 airinv/AIRINV_Types.hpp File Reference

```

#include <map> #include <boost/shared_ptr.hpp> #include
<stdair/stdair_exceptions.hpp> #include <stdair/stdair_-
inventory_types.hpp>

```

Classes

- class [AIRINV::InventoryFileParsingFailedException](#)
- class [AIRINV::ScheduleFileParsingFailedException](#)
- class [AIRINV::SegmentDateNotFoundException](#)
- class [AIRINV::InventoryInputFileNotFoundException](#)
- class [AIRINV::ScheduleInputFileNotFoundException](#)
- class [AIRINV::FlightDateDuplicationException](#)
- class [AIRINV::BookingException](#)

Namespaces

- namespace [AIRINV](#)

Typedefs

- typedef `boost::shared_ptr < AIRINV_Service >` [AIRINV::AIRINV_ServicePtr_T](#)
- typedef `boost::shared_ptr < AIRINV_Master_Service >` [AIRINV::AIRINV_Master_ServicePtr_T](#)
- typedef `std::map< const stdair::AirlineCode_T, AIRINV_ServicePtr_T >` [AIRINV::AIRINV_ServicePtr_Map_T](#)
- typedef `std::map< const stdair::DTD_T, double >` [AIRINV::FRAT5Curve_T](#)

25.6 AIRINV_Types.hpp

```

00001 #ifndef __AIRINV_AIRINV_TYPES_HPP
00002 #define __AIRINV_AIRINV_TYPES_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <map>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_exceptions.hpp>
00013 #include <stdair/stdair_inventory_types.hpp>
00014
00015 namespace AIRINV {
00016
00017     // Forward declarations
00018     class AIRINV_Service;
00019     class AIRINV_Master_Service;
00020
00021
00022     // /////////// Exceptions ///////////
00023
00024     class InventoryFileParsingFailedException
00025     : public stdair::ParsingFileFailedException {
00026     public:
00027         InventoryFileParsingFailedException (const std::string& iWhat)
00028         : stdair::ParsingFileFailedException (iWhat) {}
00029     };
00030
00031     class ScheduleFileParsingFailedException
00032     : public stdair::ParsingFileFailedException {
00033     public:

```



```

00046     ScheduleFileParsingFailedException (const std::string& iWhat)
00047     : stdair::ParsingFileFailedException (iWhat) {}
00048 };
00049
00054     class SegmentDateNotFoundException : public stdair::ParserException {
00055     public:
00059         SegmentDateNotFoundException (const std::string& iWhat)
00060         : stdair::ParserException (iWhat) {}
00061     };
00062
00066     class InventoryInputFileNotFoundException : public stdair::
FileNotFoundException {
00067     public:
00071         InventoryInputFileNotFoundException (const std::string& iWhat)
00072         : stdair::FileNotFoundException (iWhat) {}
00073     };
00074
00078     class ScheduleInputFileNotFoundException : public stdair::
FileNotFoundException {
00079     public:
00083         ScheduleInputFileNotFoundException (const std::string& iWhat)
00084         : stdair::FileNotFoundException (iWhat) {}
00085     };
00086
00090     class FlightDateDuplicationException : public stdair::
ObjectCreationDuplicationException {
00091     public:
00095         FlightDateDuplicationException (const std::string& iWhat)
00096         : stdair::ObjectCreationDuplicationException (iWhat) {}
00097     };
00098
00102     class BookingException : public stdair::RootException {
00103     };
00104
00105
00106 // ////////// Type definitions //////////
00110 typedef boost::shared_ptr<AIRINV_Service> AIRINV_ServicePtr_T;
00111
00115 typedef boost::shared_ptr<AIRINV_Master_Service> AIRINV_Master_ServicePtr_T;
00116
00121 typedef std::map<const stdair::AirlineCode_T,
00122                 AIRINV_ServicePtr_T> AIRINV_ServicePtr_Map_T;
00123
00127 typedef std::map<const stdair::DTD_T, double> FRAT5Curve_T;
00128
00129 }
00130 #endif // __AIRINV_AIRINV_TYPES_HPP
00131

```

25.7 airinv/basic/BasConst.cpp File Reference

```

#include <airinv/basic/BasConst_General.hpp>      #include
<airinv/basic/BasConst_Curves.hpp> #include <airinv/basic/-
BasConst_AIRINV_Service.hpp>

```

Namespaces

- namespace [AIRINV](#)

Variables

- const [std::string AIRINV::DEFAULT_AIRLINE_CODE](#) = "BA"
- const [FRAT5Curve_T AIRINV::DEFAULT_PICKUP_FRAT5_CURVE](#)

25.8 BasConst.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 #include <airinv/basic/BasConst_General.hpp>
00005 #include <airinv/basic/BasConst_Curves.hpp>
00006 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00007
00008 namespace AIRINV {
00009
00011     const std::string DEFAULT_AIRLINE_CODE = "BA";
00012
00014     const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE =
00015         DefaultMap::createPickupFRAT5Curve();
00016     FRAT5Curve_T DefaultMap::createPickupFRAT5Curve() {
00017         FRAT5Curve_T oCurve;
00018         // oCurve[365] = 1.1; oCurve[63] = 1.4; oCurve[56] = 1.45;
00019         // oCurve[49] = 1.5; oCurve[42] = 1.55; oCurve[35] = 1.6;
00020         // oCurve[31] = 1.7; oCurve[27] = 1.8; oCurve[23] = 2.0;
00021         // oCurve[19] = 2.3; oCurve[16] = 2.6; oCurve[13] = 3.0;
00022         // oCurve[10] = 3.3; oCurve[7] = 3.4; oCurve[5] = 3.44;
00023         // oCurve[3] = 3.47; oCurve[1] = 3.5; oCurve[0] = 3.5;
00024         // oCurve[365] = 1.0; oCurve[63] = 1.1; oCurve[56] = 1.13;
00025         // oCurve[49] = 1.17; oCurve[42] = 1.22; oCurve[35] = 1.28;
00026         // oCurve[31] = 1.32; oCurve[27] = 1.37; oCurve[23] = 1.43;
00027         // oCurve[19] = 1.51; oCurve[16] = 1.6; oCurve[13] = 1.7;
00028         // oCurve[10] = 1.8; oCurve[7] = 1.9; oCurve[5] = 1.93;
00029         // oCurve[3] = 1.96; oCurve[1] = 2.0; oCurve[0] = 2.0;
00030         // oCurve[365] = 1.0; oCurve[63] = 1.05; oCurve[56] = 1.07;
00031         // oCurve[49] = 1.09; oCurve[42] = 1.11; oCurve[35] = 1.14;
00032         // oCurve[31] = 1.16; oCurve[27] = 1.18; oCurve[23] = 1.21;
00033         // oCurve[19] = 1.24; oCurve[16] = 1.27; oCurve[13] = 1.3;
00034         // oCurve[10] = 1.33; oCurve[7] = 1.37; oCurve[5] = 1.4;
00035         // oCurve[3] = 1.45; oCurve[1] = 1.5; oCurve[0] = 1.5;
00036         // oCurve[365] = 1.1; oCurve[63] = 1.4;
00037         // oCurve[49] = 1.5; oCurve[35] = 1.6;
00038         // oCurve[23] = 2.0; oCurve[16] = 2.6;
00039         // oCurve[10] = 3.3; oCurve[5] = 3.44;
00040         // oCurve[1] = 3.5; oCurve[0] = 3.5;
00041         // oCurve[365] = 1.1; oCurve[63] = 1.4;
00042         // oCurve[49] = 1.7; oCurve[48] = 3.6; oCurve[35] = 3.6; oCurve[24] = 3.6;
00043         // oCurve[23] = 2.6; oCurve[16] = 2.7;
00044         // oCurve[10] = 3.2; oCurve[5] = 3.24; oCurve[4] = 2.8;
00045         // oCurve[1] = 2.4; oCurve[0] = 2.4;
00046
00047         oCurve[365] = 1.1; oCurve[63] = 1.4;
00048         /*1*/oCurve[62] = 1.4; oCurve[56] = 1.45;
00049         /*2*/oCurve[55] = 1.45; oCurve[49] = 1.5;
00050         /*3*/oCurve[48] = 1.5; oCurve[42] = 1.55;
00051         /*4*/oCurve[41] = 1.95; oCurve[35] = 2.2;
00052         /*5*/oCurve[34] = 2.2; oCurve[31] = 2.4;
00053         /*6*/oCurve[30] = 2.4; oCurve[27] = 2.8;
00054         /*7*/oCurve[26] = 2.9; oCurve[23] = 3.1;
00055         /*8*/oCurve[22] = 3.1; oCurve[19] = 3.3;
00056         /*9*/oCurve[18] = 3.3; oCurve[16] = 3.3;
00057         /*10*/oCurve[15] = 3.3; oCurve[13] = 3.3;
00058         /*11*/oCurve[12] = 3.0; oCurve[10] = 3.1;
00059         /*12*/oCurve[9] = 3.1; oCurve[7] = 3.1;
00060         /*13*/oCurve[6] = 3.1; oCurve[5] = 3.0;
00061         /*14*/oCurve[4] = 3.1; oCurve[3] = 3.0;
00062         /*15*/oCurve[2] = 3.0; oCurve[1] = 2.8;
00063         /*16*/oCurve[0] = 2.8;
00064
00065
00066         // oCurve[365] = 1.1; oCurve[63] = 1.4;
00067         // /*1*/oCurve[62] = 1.4; oCurve[56] = 1.55;
00068         // /*2*/oCurve[55] = 1.55; oCurve[49] = 1.7;
00069         // /*3*/oCurve[48] = 3.6; oCurve[42] = 3.6;
00070         // /*4*/oCurve[41] = 3.6; oCurve[35] = 3.6;
00071         // /*5*/oCurve[34] = 3.6; oCurve[31] = 3.6;
00072         // /*6*/oCurve[30] = 3.6; oCurve[27] = 3.6;
00073         // /*7*/oCurve[26] = 3.6; oCurve[23] = 3.6;

```

```

00074      // /*8*/oCurve[22] = 3.5;  oCurve[19] = 3.3;
00075      // /*9*/oCurve[18] = 3.3;  oCurve[16] = 3.0;
00076      // /*10*/oCurve[15] = 2.8; oCurve[13] = 2.5;
00077      // /*11*/oCurve[12] = 2.9; oCurve[10] = 3.2;
00078      // /*12*/oCurve[9] = 3.2;  oCurve[7] = 3.22;
00079      // /*13*/oCurve[6] = 3.25; oCurve[5] = 3.3;
00080      // /*14*/oCurve[4] = 3.0;  oCurve[3] = 2.8;
00081      // /*15*/oCurve[2] = 2.7;  oCurve[1] = 2.5;
00082      // /*16*/oCurve[0] = 2.5;
00083
00084
00085      // oCurve[365] = 1.1; oCurve[63] = 1.4;
00086      // /*1*/oCurve[62] = 1.4;  oCurve[49] = 1.7;
00087      // /*2*/oCurve[48] = 3.6;  oCurve[35] = 3.6;
00088      // /*3*/oCurve[34] = 3.5;  oCurve[23] = 3.4;
00089      // /*4*/oCurve[22] = 3.3;  oCurve[16] = 3.1;
00090      // /*5*/oCurve[15] = 2.7;  oCurve[10] = 3.1;
00091      // /*6*/oCurve[9] = 3.0;   oCurve[5] = 2.8;
00092      // /*7*/oCurve[4] = 2.3;  oCurve[1] = 2.5;
00093      // /*8*/oCurve[0] = 2.5;
00094      return oCurve;
00095  };
00096
00097 }
```

25.9 airinv/basic/BasConst_AIRINV_Service.hpp File Reference

```
#include <string>
```

Namespaces

- namespace [AIRINV](#)

25.10 BasConst_AIRINV_Service.hpp

```

00001 #ifndef __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
00002 #define __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 #include <string>
00008
00009 namespace AIRINV {
00010
00012     extern const std::string DEFAULT_AIRLINE_CODE;
00013
00014 }
00015 #endif // __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
```

25.11 airinv/basic/BasConst_Curves.hpp File Reference

```
#include <airinv/AIRINV_Types.hpp>
```

Classes

- struct [AIRINV::DefaultMap](#)

Namespaces

- namespace [AIRINV](#)

25.12 BasConst_Curves.hpp

```

00001 #ifndef __AIRINV_BAS_BASCONST_CURVES_HPP
00002 #define __AIRINV_BAS_BASCONST_CURVES_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // AIRINV
00008 #include <airinv/AIRINV_Types.hpp>
00009
00010 namespace AIRINV {
00011
00012     extern const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE;
00013
00014     struct DefaultMap {
00015         static FRAT5Curve_T createPickupFRAT5Curve();
00016     };
00017 }
00018
00019 #endif // __AIRINV_BAS_BASCONST_CURVES_HPP

```

25.13 airinv/basic/BasConst_General.hpp File Reference

Namespaces

- namespace [AIRINV](#)

25.14 BasConst_General.hpp

```

00001 #ifndef __AIRINV_BAS_BASCONST_GENERAL_HPP
00002 #define __AIRINV_BAS_BASCONST_GENERAL_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 namespace AIRINV {
00009
00010 }
00011 #endif // __AIRINV_BAS_BASCONST_GENERAL_HPP

```

25.15 airinv/basic/BasParserTypes.hpp File Reference

```

#include <string> #include <boost/spirit/home/classic/core.-
hpp> #include <boost/spirit/home/classic/attribute.hpp>
#include <boost/spirit/home/classic/utility/functor_-
parser.hpp> #include <boost/spirit/home/classic/utility/loops.-
hpp> #include <boost/spirit/home/classic/utility/chset.-
hpp> #include <boost/spirit/home/classic/utility/config.-
hpp> #include <boost/spirit/home/classic/iterator/file_-
iterator.hpp> #include <boost/spirit/home/classic/actor/push-

```

```
_back_actor.hpp> #include <boost/spirit/home/classic/actor/assign-
_actor.hpp>
```

Namespaces

- namespace [AIRINV](#)

Typedefs

- typedef char [AIRINV::char_t](#)
- typedef boost::spirit::classic::file_iterator < char_t > [AIRINV::iterator_t](#)
- typedef boost::spirit::classic::scanner < iterator_t > [AIRINV::scanner_t](#)
- typedef boost::spirit::classic::rule < scanner_t > [AIRINV::rule_t](#)
- typedef boost::spirit::classic::int_parser < unsigned int, 10, 1, 1 > [AIRINV::int1-_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 2, 2 > [AIRINV::uint2_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 2 > [AIRINV::uint1_2_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 3 > [AIRINV::uint1_3_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 4, 4 > [AIRINV::uint4_p_t](#)
- typedef boost::spirit::classic::uint_parser < unsigned int, 10, 1, 4 > [AIRINV::uint1_4_p_t](#)
- typedef boost::spirit::classic::chset < char_t > [AIRINV::chset_t](#)
- typedef boost::spirit::classic::impl::loop_traits < chset_t, unsigned int, unsigned int >::type [AIRINV::repeat_p_t](#)
- typedef boost::spirit::classic::bounded < uint2_p_t, unsigned int > [AIRINV::bounded2_p_t](#)
- typedef boost::spirit::classic::bounded < uint1_2_p_t, unsigned int > [AIRINV::bounded1_2_p_t](#)
- typedef boost::spirit::classic::bounded < uint1_3_p_t, unsigned int > [AIRINV::bounded1_3_p_t](#)
- typedef boost::spirit::classic::bounded < uint4_p_t, unsigned int > [AIRINV::bounded4_p_t](#)
- typedef boost::spirit::classic::bounded < uint1_4_p_t, unsigned int > [AIRINV::bounded1_4_p_t](#)

25.16 BasParserTypes.hpp

```
00001 #ifndef __AIRINV_BAS_BASCOMPARSERTYPES_HPP
00002 #define __AIRINV_BAS_BASCOMPARSERTYPES_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
```

```

00009 // Boost
00010 // #define BOOST_SPIRIT_DEBUG
00011 #include <boost/spirit/home/classic/core.hpp>
00012 #include <boost/spirit/home/classic/attribute.hpp>
00013 #include <boost/spirit/home/classic/utility/functor_parser.hpp>
00014 #include <boost/spirit/home/classic/utility/loops.hpp>
00015 #include <boost/spirit/home/classic/utility/chset.hpp>
00016 #include <boost/spirit/home/classic/utility/config.hpp>
00017 #include <boost/spirit/home/classic/iterator/file_iterator.hpp>
00018 #include <boost/spirit/home/classic/actor/push_back_actor.hpp>
00019 #include <boost/spirit/home/classic/actor/assign_actor.hpp>
00020
00021 namespace AIRINV {
00022
00023 // //////////////////////////////////////
00024 //
00025 //   Definition of Basic Types
00026 //
00027 // //////////////////////////////////////
00028 // For a file, the parsing unit is the character (char). For a string,
00029 // it is a "char const *".
00030 // typedef char const* iterator_t;
00031 typedef char char_t;
00032
00033 // The types of iterator, scanner and rule are then derived from
00034 // the parsing unit.
00035 typedef boost::spirit::classic::file_iterator<char_t> iterator_t;
00036 typedef boost::spirit::classic::scanner<iterator_t> scanner_t;
00037 typedef boost::spirit::classic::rule<scanner_t> rule_t;
00038
00039 // //////////////////////////////////////
00040 //
00041 //   Parser related types
00042 //
00043 // //////////////////////////////////////
00045 typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> int1_p_t;
00046
00048 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2> uint2_p_t;
00049 ;
00051 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2>
uint1_2_p_t;
00052
00054 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3>
uint1_3_p_t;
00055
00057 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4> uint4_p_t;
00058 ;
00060 typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 4>
uint1_4_p_t;
00061
00063 typedef boost::spirit::classic::chset<char_t> chset_t;
00064
00066 typedef boost::spirit::classic::impl::loop_traits<chset_t,
unsigned int,
unsigned int>::type repeat_p_t;
00070
00072 typedef boost::spirit::classic::bounded<uint2_p_t, unsigned int> bounded2_p_t;
00073 ;
00075 typedef boost::spirit::classic::bounded<uint1_2_p_t, unsigned int>
bounded1_2_p_t;
00076 typedef boost::spirit::classic::bounded<uint1_3_p_t, unsigned int>
bounded1_3_p_t;
00077 typedef boost::spirit::classic::bounded<uint4_p_t, unsigned int> bounded4_p_t;
00078 ;
00080 typedef boost::spirit::classic::bounded<uint1_4_p_t, unsigned int>
bounded1_4_p_t;
00081 }
00082 #endif // __AIRINV_BAS_BASCOMPARSERTYPES_HPP

```

25.17 airinv/basic/FlightRequestStatus.cpp File Reference

```
#include <cassert> #include <sstream> #include <stdair/service/-
Logger.hpp> #include <airinv/AIRINV_Types.hpp> #include
<airinv/FlightRequestStatus.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.18 FlightRequestStatus.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/FlightRequestStatus.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 const std::string FlightRequestStatus::_labels[LAST_VALUE] =
00017     { "OK", "Not Found", "Internal Error" };
00018
00019 const std::string FlightRequestStatus::_codeLabels[LAST_VALUE] =
00020     { "OK", "NF", "IE" };
00021
00022 // //////////////////////////////////////
00023 FlightRequestStatus::
00024 FlightRequestStatus (const EN_FlightRequestStatus& iFlightRequestStatus)
00025 : _code (iFlightRequestStatus) {
00026 }
00027
00028 // //////////////////////////////////////
00029 FlightRequestStatus::FlightRequestStatus (const std::string& iCode) {
00030     _code = LAST_VALUE;
00031
00032     if (iCode == "OK") {
00033         _code = OK;
00034
00035     } else if (iCode == "NF") {
00036         _code = NOT_FOUND;
00037
00038     } else if (iCode == "IE") {
00039         _code = INTERNAL_ERROR;
00040
00041     }
00042
00043     if (_code == LAST_VALUE) {
00044         const std::string& lLabels = describeLabels();
00045         STDAIR_LOG_ERROR ("The flight request status '" << iCode
00046             << "' is not known. Known flight request status: "
00047             << lLabels);
00048         throw stdair::CodeConversionException ("The flight request status '"
00049             + iCode
00050             + "' is not known. Known flight
00051             request status: "
00052             + lLabels);
00053     }
00054 }
```

```

00054     }
00055
00056     // //////////////////////////////////////
00057     const std::string& FlightRequestStatus::
00058     getLabel (const EN_FlightRequestStatus& iCode) {
00059         return _labels[iCode];
00060     }
00061
00062     // //////////////////////////////////////
00063     const std::string& FlightRequestStatus::
00064     getCodeLabel (const EN_FlightRequestStatus& iCode) {
00065         return _codeLabels[iCode];
00066     }
00067
00068     // //////////////////////////////////////
00069     std::string FlightRequestStatus::describeLabels() {
00070         std::ostringstream ostr;
00071         for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00072             if (idx != 0) {
00073                 ostr << ", ";
00074             }
00075             ostr << _labels[idx];
00076         }
00077         return ostr.str();
00078     }
00079
00080     // //////////////////////////////////////
00081     FlightRequestStatus::EN_FlightRequestStatus FlightRequestStatus::
00082     getCode() const {
00083         return _code;
00084     }
00085
00086     // //////////////////////////////////////
00087     const std::string FlightRequestStatus::describe() const {
00088         std::ostringstream ostr;
00089         ostr << _labels[_code];
00090         return ostr.str();
00091     }
00092
00093 }

```

25.19 airinv/basic/FlightTypeCode.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/service/-
Logger.hpp> #include <airinv/AIRINV_Types.hpp> #include
<airinv/basic/FlightTypeCode.hpp>

```

Namespaces

- namespace `AIRINV`

25.20 FlightTypeCode.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/basic/FlightTypeCode.hpp>

```



```

00012
00013 namespace AIRINV {
00014
00015 // ////////////////////////////////////////
00016 const std::string FlightTypeCode::_labels[LAST_VALUE] =
00017     { "Domestic", "International", "Ground Handling" };
00018
00019 const std::string FlightTypeCode::_codeLabels[LAST_VALUE] =
00020     { "DOM", "INT", "GRD" };
00021
00022 // ////////////////////////////////////////
00023 FlightTypeCode::FlightTypeCode (const EN_FlightTypeCode& iFlightTypeCode)
00024     : _code (iFlightTypeCode) {
00025 }
00026
00027 // ////////////////////////////////////////
00028 FlightTypeCode::FlightTypeCode (const std::string& iCode) {
00029     _code = LAST_VALUE;
00030
00031     if (iCode == "DOM") {
00032         _code = DOMESTIC;
00033     } else if (iCode == "INT") {
00034         _code = INTERNATIONAL;
00035     } else if (iCode == "GRD") {
00036         _code = GROUND_HANDLING;
00037     }
00038
00039     if (_code == LAST_VALUE) {
00040         const std::string& lLabels = describeLabels();
00041         STDAIR_LOG_ERROR ("The flight type code '" << iCode
00042             << "' is not known. Known flight type codes: "
00043             << lLabels);
00044         throw stdair::CodeConversionException ("The flight type code '" + iCode
00045             + "' is not known. Known flight
00046             type codes: "
00047             + lLabels);
00048     }
00049 }
00050
00051 // ////////////////////////////////////////
00052 const std::string& FlightTypeCode::getLabel (const EN_FlightTypeCode& iCode)
00053 {
00054     return _labels[iCode];
00055 }
00056
00057 // ////////////////////////////////////////
00058 const std::string& FlightTypeCode::
00059 getCodeLabel (const EN_FlightTypeCode& iCode) {
00060     return _codeLabels[iCode];
00061 }
00062
00063 // ////////////////////////////////////////
00064 std::string FlightTypeCode::describeLabels() {
00065     std::ostringstream ostr;
00066     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00067         if (idx != 0) {
00068             ostr << ", ";
00069         }
00070         ostr << _labels[idx];
00071     }
00072     return ostr.str();
00073 }
00074
00075 // ////////////////////////////////////////
00076 FlightTypeCode::EN_FlightTypeCode FlightTypeCode::getCode() const {
00077     return _code;
00078 }
00079
00080 // ////////////////////////////////////////
00081 const std::string FlightTypeCode::describe() const {
00082     std::ostringstream ostr;

```

```

00084     ostr << _labels[_code];
00085     return ostr.str();
00086 }
00087
00088 }
```

25.21 airinv/basic/FlightTypeCode.hpp File Reference

```
#include <string> #include <stdair/basic/StructAbstract.-
hpp>
```

Classes

- struct [AIRINV::FlightTypeCode](#)

Namespaces

- namespace [AIRINV](#)

25.22 FlightTypeCode.hpp

```

00001 #ifndef __AIRINV_BAS_FLIGHTTYPECODE_HPP
00002 #define __AIRINV_BAS_FLIGHTTYPECODE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FlightTypeCode : public stdair::StructAbstract {
00015     public:
00016         typedef enum {
00017             DOMESTIC = 0,
00018             INTERNATIONAL,
00019             GROUND_HANDLING,
00020             LAST_VALUE
00021         } EN_FlightTypeCode;
00022
00023         static const std::string& getLabel (const EN_FlightTypeCode&);
00024
00025         static const std::string& getCodeLabel (const EN_FlightTypeCode&);
00026
00027         static std::string describeLabels();
00028
00029         EN_FlightTypeCode getCode() const;
00030
00031         const std::string describe() const;
00032
00033     public:
00034         FlightTypeCode (const EN_FlightTypeCode&);
00035         FlightTypeCode (const std::string& iCode);
00036
00037     private:
00038         static const std::string _labels[LAST_VALUE];
00039 }
```

```

00051     static const std::string _codeLabels[LAST\_VALUE];
00052
00053
00054 private:
00055     // ////////// Attributes //////////
00057     EN\_FlightTypeCode _code;
00058 };
00059
00060 }
00061 #endif // __AIRINV_BAS_FLIGHTTYPECODE_HPP

```

25.23 airinv/basic/FlightVisibilityCode.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/service/-
Logger.hpp> #include <airinv/AIRINV_Types.hpp> #include
<airinv/basic/FlightVisibilityCode.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.24 FlightVisibilityCode.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/basic/FlightVisibilityCode.hpp>
00012
00013 namespace AIRINV {
00014
00015     // //////////////////////////////////////
00016     const std::string FlightVisibilityCode::_labels[LAST\_VALUE] =
00017         { "Normal", "Hidden", "Pseudo" };
00018
00019     const std::string FlightVisibilityCode::_codeLabels[LAST\_VALUE] =
00020         { "NOR", "HID", "PSD" };
00021
00022
00023     // //////////////////////////////////////
00024     FlightVisibilityCode::
00025     FlightVisibilityCode (const EN\_FlightVisibilityCode& iFlightVisibilityCode)
00026         : _code (iFlightVisibilityCode) {
00027     }
00028
00029     // //////////////////////////////////////
00030     FlightVisibilityCode::FlightVisibilityCode (const std::string& iCode) {
00031         _code = LAST\_VALUE;
00032
00033         if (iCode == "NOR") {
00034             _code = NORMAL;
00035
00036         } else if (iCode == "HID") {
00037             _code = HIDDEN;
00038
00039         } else if (iCode == "PSD") {
00040             _code = PSEUDO;
00041         }
00042     }
00043 }

```

```

00042
00043     if (_code == LAST_VALUE) {
00044         const std::string& lLabels = describeLabels();
00045         STDAIR_LOG_ERROR ("The flight visibility code '" << iCode
00046                         << "' is not known. Known flight visibility codes: "
00047                         << lLabels);
00048         throw stdair::CodeConversionException ("The flight visibility code '"
00049                                               + iCode
00050                                               + "' is not known. Known flight
visibility codes: "
00051                                               + lLabels);
00052     }
00053 }
00054
00055 // //////////////////////////////////////
00056 const std::string& FlightVisibilityCode::
00057 getLabel (const EN_FlightVisibilityCode& iCode) {
00058     return _labels[iCode];
00059 }
00060
00061 // //////////////////////////////////////
00062 const std::string& FlightVisibilityCode::
00063 getCodeLabel (const EN_FlightVisibilityCode& iCode) {
00064     return _codeLabels[iCode];
00065 }
00066
00067 // //////////////////////////////////////
00068 std::string FlightVisibilityCode::describeLabels() {
00069     std::ostringstream ostr;
00070     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00071         if (idx != 0) {
00072             ostr << ", ";
00073         }
00074         ostr << _labels[idx];
00075     }
00076     return ostr.str();
00077 }
00078
00079 // //////////////////////////////////////
00080 FlightVisibilityCode::EN_FlightVisibilityCode FlightVisibilityCode::
00081 getCode() const {
00082     return _code;
00083 }
00084
00085 // //////////////////////////////////////
00086 const std::string FlightVisibilityCode::describe() const {
00087     std::ostringstream ostr;
00088     ostr << _labels[_code];
00089     return ostr.str();
00090 }
00091
00092 }

```

25.25 airinv/basic/FlightVisibilityCode.hpp File Reference

```
#include <string> #include <stdair/basic/StructAbstract.-
hpp>
```

Classes

- struct [AIRINV::FlightVisibilityCode](#)

Namespaces

- namespace [AIRINV](#)

25.26 FlightVisibilityCode.hpp

```

00001 #ifndef __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
00002 #define __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00015 struct FlightVisibilityCode : public stdair::StructAbstract {
00016 public:
00017     typedef enum {
00018         NORMAL = 0,
00019         HIDDEN,
00020         PSEUDO,
00021         LAST_VALUE
00022     } EN_FlightVisibilityCode;
00023
00025     static const std::string& getLabel (const EN_FlightVisibilityCode&);
00026
00028     static const std::string& getCodeLabel (const EN_FlightVisibilityCode&);
00029
00031     static std::string describeLabels();
00032
00034     EN_FlightVisibilityCode getCode() const;
00035
00037     const std::string describe() const;
00038
00039 public:
00042     FlightVisibilityCode (const EN_FlightVisibilityCode&);
00044     FlightVisibilityCode (const std::string& iCode);
00045
00046 private:
00049     static const std::string _labels[LAST_VALUE];
00051     static const std::string _codeLabels[LAST_VALUE];
00052
00053 private:
00055     // ////////// Attributes //////////
00057     EN_FlightVisibilityCode _code;
00058 };
00059
00060 }
00061 #endif // __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP

```

25.27 airinv/batches/airinv_parseInventory.cpp File Reference

25.28 airinv_parseInventory.cpp

```

00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 // StdAir
00015 #include <stdair/basic/BasLogParams.hpp>

```

```

00016 #include <stdair/basic/BasDBParams.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Master_Service.hpp>
00020 #include <airinv/config/airinv-paths.hpp>
00021
00022 // ////////// Constants //////////
00026 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinv_parseInventory.log");
00027
00031 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00032                                                         "/invdump01.csv");
00036 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00037                                                         "/schedule01.csv");
00041 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00042                                                    "/ond01.csv");
00043
00047 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00048                                                      "/yieldstore01.csv");
00049
00053 const std::string K_AIRINV_DEFAULT_SEGMENT_DATE_KEY ("SV,5,2010-03-11,KBP,JFK")
;
00054
00058 const stdair::ClassCode_T K_AIRINV_DEFAULT_CLASS_CODE ("Y");
00059
00063 const stdair::PartySize_T K_AIRINV_DEFAULT_PARTY_SIZE (2);
00064
00069 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00070
00075 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00076
00080 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00081
00082 // ////////// Parsing of Options & Configuration //////////
00083 // A helper function to simplify the main part.
00084 template<class T> std::ostream& operator<< (std::ostream& os,
00085                                           const std::vector<T>& v) {
00086     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00087     return os;
00088 }
00089
00093 int readConfiguration (int argc, char* argv[],
00094                       bool& ioIsBuiltin, bool& ioIsForSchedule,
00095                       stdair::Filename_T& ioInventoryFilename,
00096                       stdair::Filename_T& ioScheduleInputFilename,
00097                       stdair::Filename_T& ioODInputFilename,
00098                       stdair::Filename_T& ioYieldInputFilename,
00099                       std::string& ioSegmentDateKey,
00100                       stdair::ClassCode_T& ioClassCode,
00101                       stdair::PartySize_T& ioPartySize,
00102                       std::string& ioLogFilename) {
00103     // Default for the built-in input
00104     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00105
00106     // Default for the inventory or schedule option
00107     ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00108
00109     // Declare a group of options that will be allowed only on command line
00110     boost::program_options::options_description generic ("Generic options");
00111     generic.add_options()
00112         ("prefix", "print installation prefix")
00113         ("version,v", "print version string")
00114         ("help,h", "produce help message");
00115
00116     // Declare a group of options that will be allowed both on command
00117     // line and in config file
00118
00119     boost::program_options::options_description config ("Configuration");
00120     config.add_options()
00121         ("builtin,b",
00122          "The sample BOM tree can be either built-in or parsed from an input file.
That latter must then be given with the -i/--inventory or -s/--schedule option")
00123         ("for_schedule,f",
00124          "The BOM tree should be built from a schedule file (instead of from an
inventory dump)")

```

```

00125     ("inventory,i",
00126      boost::program_options::value< std::string >(&ioInventoryFilename)->
default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00127      "(CSV) input file for the inventory")
00128     ("schedule,s",
00129      boost::program_options::value< std::string >(&ioScheduleInputFilename)->
default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00130      "(CSV) input file for the schedule")
00131     ("ond,o",
00132      boost::program_options::value< std::string >(&ioODInputFilename)->
default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00133      "(CSV) input file for the O&D")
00134     ("yield,y",
00135      boost::program_options::value< std::string >(&ioYieldInputFilename)->
default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00136      "(CSV) input file for the yield")
00137     ("segment_date_key,k",
00138      boost::program_options::value< std::string >(&ioSegmentDateKey)->
default_value(K_AIRINV_DEFAULT_SEGMENT_DATE_KEY),
00139      "Segment-date key")
00140     ("class_code,c",
00141      boost::program_options::value< stdair::ClassCode_T >(&ioClassCode)->
default_value(K_AIRINV_DEFAULT_CLASS_CODE),
00142      "Class code")
00143     ("party_size,p",
00144      boost::program_options::value< stdair::PartySize_T >(&ioPartySize)->
default_value(K_AIRINV_DEFAULT_PARTY_SIZE),
00145      "Party size")
00146     ("log,l",
00147      boost::program_options::value< std::string >(&ioLogFilename)->
default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00148      "Filename for the logs")
00149     ;
00150
00151     // Hidden options, will be allowed both on command line and
00152     // in config file, but will not be shown to the user.
00153     boost::program_options::options_description hidden ("Hidden options");
00154     hidden.add_options()
00155         ("copyright",
00156          boost::program_options::value< std::vector<std::string> >(),
00157          "Show the copyright (license)");
00158
00159     boost::program_options::options_description cmdline_options;
00160     cmdline_options.add(generic).add(config).add(hidden);
00161
00162     boost::program_options::options_description config_file_options;
00163     config_file_options.add(config).add(hidden);
00164     boost::program_options::options_description visible ("Allowed options");
00165     visible.add(generic).add(config);
00166
00167     boost::program_options::positional_options_description p;
00168     p.add ("copyright", -1);
00169
00170     boost::program_options::variables_map vm;
00171     boost::program_options::
00172         store (boost::program_options::command_line_parser (argc, argv).
00173               options (cmdline_options).positional(p).run(), vm);
00174
00175     std::ifstream ifs ("airinv.cfg");
00176     boost::program_options::store (parse_config_file (ifs, config_file_options),
00177                                   vm);
00178     boost::program_options::notify (vm);
00179
00180     if (vm.count ("help")) {
00181         std::cout << visible << std::endl;
00182         return K_AIRINV_EARLY_RETURN_STATUS;
00183     }
00184
00185     if (vm.count ("version")) {
00186         std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00187         return K_AIRINV_EARLY_RETURN_STATUS;
00188     }
00189
00190     if (vm.count ("prefix")) {

```

```

00191     std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192     return K_AIRINV_EARLY_RETURN_STATUS;
00193 }
00194
00195 if (vm.count ("builtin")) {
00196     ioIsBuiltin = true;
00197 }
00198 const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00199 std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00200
00201 if (vm.count ("for_schedule")) {
00202     ioIsForSchedule = true;
00203 }
00204 const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00205 std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206     << std::endl;
00207
00208 if (ioIsBuiltin == false) {
00209
00210     if (ioIsForSchedule == false) {
00211         // The BOM tree should be built from parsing an inventory dump
00212         if (vm.count ("inventory")) {
00213             ioInventoryFilename = vm["inventory"].as< std::string >();
00214             std::cout << "Input inventory filename is: " << ioInventoryFilename
00215                 << std::endl;
00216         }
00217         else {
00218             // The built-in option is not selected. However, no inventory dump
00219             // file is specified
00220             std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00221                 << " -f/--for_schedule and -s/--schedule options "
00222                 << "must be specified" << std::endl;
00223         }
00224     }
00225     else {
00226         // The BOM tree should be built from parsing a schedule (and O&D) file
00227         if (vm.count ("schedule")) {
00228             ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229             std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230                 << std::endl;
00231         }
00232         else {
00233             // The built-in option is not selected. However, no schedule file
00234             // is specified
00235             std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236                 << " -f/--for_schedule and -s/--schedule options "
00237                 << "must be specified" << std::endl;
00238         }
00239     }
00240     if (vm.count ("ond")) {
00241         ioODInputFilename = vm["ond"].as< std::string >();
00242         std::cout << "Input O&D filename is: " << ioODInputFilename << std
00243     ::endl;
00244     }
00245     if (vm.count ("yield")) {
00246         ioYieldInputFilename = vm["yield"].as< std::string >();
00247         std::cout << "Input yield filename is: "
00248             << ioYieldInputFilename << std::endl;
00249     }
00250 }
00251 }
00252
00253 if (vm.count ("log")) {
00254     ioLogFilename = vm["log"].as< std::string >();
00255     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00256 }
00257
00258 return 0;
00259 }
00260
00261
00262 // //////////// M A I N ////////////
00263 int main (int argc, char* argv[]) {

```



```

00264
00265 // State whether the BOM tree should be built-in or parsed from an
00266 // input file
00267 bool isBuiltin;
00268 bool isForSchedule;
00269
00270 // Input file names
00271 stdair::Filename_T lInventoryFilename;
00272 stdair::Filename_T lScheduleInputFilename;
00273 stdair::Filename_T lODInputFilename;
00274 stdair::Filename_T lYieldInputFilename;
00275
00276 // Parameters for the sale
00277 std::string lSegmentDateKey;
00278 stdair::ClassCode_T lClassCode;
00279 stdair::PartySize_T lPartySize;
00280
00281 // Output log File
00282 stdair::Filename_T lLogFilename;
00283
00284 // Call the command-line option parser
00285 const int lOptionParserStatus =
00286     readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename
,
                                lScheduleInputFilename, lODInputFilename,
00287                                lYieldInputFilename, lSegmentDateKey, lClassCode,
00288                                lPartySize, lLogFilename);
00289
00290 if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00291     return 0;
00292 }
00293
00294 // Set the log parameters
00295 std::ofstream logOutputFile;
00296 // Open and clean the log outputfile
00297 logOutputFile.open (lLogFilename.c_str());
00298 logOutputFile.clear();
00299
00300 // Initialise the inventory service
00301 const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00302 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00303
00304 // DEBUG
00305 STDAIR_LOG_DEBUG ("Welcome to AirInv");
00306
00307 // Check wether or not a (CSV) input file should be read
00308 if (isBuiltin == true) {
00309     // Build the sample BOM tree for RMOL
00310     airinvService.buildSampleBom();
00311
00312     // Define a specific segment-date key for the sample BOM tree
00313     lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00314 } else {
00315     if (isForSchedule == true) {
00316         // Build the BOM tree from parsing a schedule file (and O&D list)
00317         AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00318         airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00319                                     lYieldFilePath);
00320
00321         if (lSegmentDateKey == K_AIRINV_DEFAULT_SEGMENT_DATE_KEY) {
00322             // Define a specific segment-date key for the schedule-based inventory
00323             lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00324         }
00325     } else {
00326         // Build the BOM tree from parsing an inventory dump file
00327         airinvService.parseAndLoad (lInventoryFilename);
00328     }
00329 }
00330
00331 // Make a booking
00332 const bool isSellSuccessful =

```

```

00337     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00338
00339     // DEBUG
00340     STDAIR_LOG_DEBUG ("Sale ('" << lSegmentDateKey << "\", " << lClassCode << ": "
00341                     << lPartySize << ") successful? " << isSellSuccessful);
00342
00343     // DEBUG: Display the whole BOM tree
00344     const std::string& lCSVDump = airinvService.csvDisplay();
00345     STDAIR_LOG_DEBUG (lCSVDump);
00346
00347     // Close the Log outputFile
00348     logOutputFile.close();
00349
00350     /*
00351     Note: as that program is not intended to be run on a server in
00352     production, it is better not to catch the exceptions. When it
00353     happens (that an exception is throwned), that way we get the
00354     call stack.
00355     */
00356
00357     return 0;
00358 }

```

25.29 airinv/batches/parseInventory.cpp File Reference

25.30 parseInventory.cpp

```

00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 // StdAir
00015 #include <stdair/basic/BasLogParams.hpp>
00016 #include <stdair/basic/BasDBParams.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Master_Service.hpp>
00020 #include <airinv/config/airinv-paths.hpp>
00021
00022 // ////////// Constants //////////
00026 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("parseInventory.log");
00027
00031 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00032                                                         "/invdump01.csv");
00036 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00037                                                         "/schedule01.csv");
00041 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00042                                                    "/ond01.csv");
00043
00047 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00048                                                       "/yieldstore01.csv");
00049
00053 const std::string K_AIRINV_DEFAULT_SEGMENT_DATE_KEY ("SV,5,2010-03-11,KBP,JFK")
00054 ;
00058 const stdair::ClassCode_T K_AIRINV_DEFAULT_CLASS_CODE ("Y");
00059
00063 const stdair::PartySize_T K_AIRINV_DEFAULT_PARTY_SIZE (2);
00064
00069 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00070
00075 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00076
00080 const int K_AIRINV_EARLY_RETURN_STATUS = 99;

```

```

00081
00082 // ////////// Parsing of Options & Configuration //////////
00083 // A helper function to simplify the main part.
00084 template<class T> std::ostream& operator<< (std::ostream& os,
00085                                           const std::vector<T>& v) {
00086     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00087     return os;
00088 }
00089
00093 int readConfiguration (int argc, char* argv[],
00094                        bool& ioIsBuiltin, bool& ioIsForSchedule,
00095                        stdair::Filename_T& ioInventoryFilename,
00096                        stdair::Filename_T& ioScheduleInputFilename,
00097                        stdair::Filename_T& ioODInputFilename,
00098                        stdair::Filename_T& ioYieldInputFilename,
00099                        std::string& ioSegmentDateKey,
00100                        stdair::ClassCode_T& ioClassCode,
00101                        stdair::PartySize_T& ioPartySize,
00102                        std::string& ioLogFilename) {
00103     // Default for the built-in input
00104     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00105
00106     // Default for the inventory or schedule option
00107     ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00108
00109     // Declare a group of options that will be allowed only on command line
00110     boost::program_options::options_description generic ("Generic options");
00111     generic.add_options()
00112         ("prefix", "print installation prefix")
00113         ("version,v", "print version string")
00114         ("help,h", "produce help message");
00115
00116     // Declare a group of options that will be allowed both on command
00117     // line and in config file
00118
00119     boost::program_options::options_description config ("Configuration");
00120     config.add_options()
00121         ("builtin,b",
00122          "The sample BOM tree can be either built-in or parsed from an input file.
00123          That latter must then be given with the -i/--inventory or -s/--schedule option")
00124         ("for_schedule,f",
00125          "The BOM tree should be built from a schedule file (instead of from an
00126          inventory dump)")
00127         ("inventory,i",
00128          boost::program_options::value< std::string >(&ioInventoryFilename)->
00129          default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00130          "(CSV) input file for the inventory")
00131         ("schedule,s",
00132          boost::program_options::value< std::string >(&ioScheduleInputFilename)->
00133          default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00134          "(CSV) input file for the schedule")
00135         ("ond,o",
00136          boost::program_options::value< std::string >(&ioODInputFilename)->
00137          default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00138          "(CSV) input file for the O&D")
00139         ("yield,y",
00140          boost::program_options::value< std::string >(&ioYieldInputFilename)->
00141          default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00142          "(CSV) input file for the yield")
00143         ("segment_date_key,k",
00144          boost::program_options::value< std::string >(&ioSegmentDateKey)->
00145          default_value(K_AIRINV_DEFAULT_SEGMENT_DATE_KEY),
00146          "Segment-date key")
00147         ("class_code,c",
00148          boost::program_options::value< stdair::ClassCode_T >(&ioClassCode)->
00149          default_value(K_AIRINV_DEFAULT_CLASS_CODE),
00150          "Class code")
00151         ("party_size,p",
00152          boost::program_options::value< stdair::PartySize_T >(&ioPartySize)->
00153          default_value(K_AIRINV_DEFAULT_PARTY_SIZE),
00154          "Party size")
00155         ("log,l",
00156          boost::program_options::value< std::string >(&ioLogFilename)->
00157          default_value(K_AIRINV_DEFAULT_LOG_FILENAME),

```

```

00148     "Filename for the logs")
00149     ;
00150
00151     // Hidden options, will be allowed both on command line and
00152     // in config file, but will not be shown to the user.
00153     boost::program_options::options_description hidden ("Hidden options");
00154     hidden.add_options()
00155         ("copyright",
00156          boost::program_options::value< std::vector<std::string> >(),
00157          "Show the copyright (license)");
00158
00159     boost::program_options::options_description cmdline_options;
00160     cmdline_options.add(generic).add(config).add(hidden);
00161
00162     boost::program_options::options_description config_file_options;
00163     config_file_options.add(config).add(hidden);
00164     boost::program_options::options_description visible ("Allowed options");
00165     visible.add(generic).add(config);
00166
00167     boost::program_options::positional_options_description p;
00168     p.add ("copyright", -1);
00169
00170     boost::program_options::variables_map vm;
00171     boost::program_options::
00172         store (boost::program_options::command_line_parser (argc, argv).
00173               options (cmdline_options).positional(p).run(), vm);
00174
00175     std::ifstream ifs ("airinv.cfg");
00176     boost::program_options::store (parse_config_file (ifs, config_file_options),
00177                                   vm);
00178     boost::program_options::notify (vm);
00179
00180     if (vm.count ("help")) {
00181         std::cout << visible << std::endl;
00182         return K_AIRINV_EARLY_RETURN_STATUS;
00183     }
00184
00185     if (vm.count ("version")) {
00186         std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00187         return K_AIRINV_EARLY_RETURN_STATUS;
00188     }
00189
00190     if (vm.count ("prefix")) {
00191         std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192         return K_AIRINV_EARLY_RETURN_STATUS;
00193     }
00194
00195     if (vm.count ("builtin")) {
00196         ioIsBuiltin = true;
00197     }
00198     const std::string isBuiltinStr = (ioIsBuiltin == true)? "yes": "no";
00199     std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00200
00201     if (vm.count ("for_schedule")) {
00202         ioIsForSchedule = true;
00203     }
00204     const std::string isForScheduleStr = (ioIsForSchedule == true)? "yes": "no";
00205     std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206               << std::endl;
00207
00208     if (ioIsBuiltin == false) {
00209
00210         if (ioIsForSchedule == false) {
00211             // The BOM tree should be built from parsing an inventory dump
00212             if (vm.count ("inventory")) {
00213                 ioInventoryFilename = vm["inventory"].as< std::string >();
00214                 std::cout << "Input inventory filename is: " << ioInventoryFilename
00215                           << std::endl;
00216             } else {
00217                 // The built-in option is not selected. However, no inventory dump
00218                 // file is specified
00219                 std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00220                           << " -f/--for_schedule and -s/--schedule options "

```

```

00222         << "must be specified" << std::endl;
00223     }
00224
00225     } else {
00226         // The BOM tree should be built from parsing a schedule (and O&D) file
00227         if (vm.count("schedule")) {
00228             ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229             std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230                 << std::endl;
00231
00232         } else {
00233             // The built-in option is not selected. However, no schedule file
00234             // is specified
00235             std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236                 << " -f/--for_schedule and -s/--schedule options "
00237                 << "must be specified" << std::endl;
00238         }
00239
00240         if (vm.count("ond")) {
00241             ioODInputFilename = vm["ond"].as< std::string >();
00242             std::cout << "Input O&D filename is: " << ioODInputFilename << std
00243         ::endl;
00244     }
00245     if (vm.count("yield")) {
00246         ioYieldInputFilename = vm["yield"].as< std::string >();
00247         std::cout << "Input yield filename is: "
00248             << ioYieldInputFilename << std::endl;
00249     }
00250 }
00251 }
00252
00253 if (vm.count("log")) {
00254     ioLogFilename = vm["log"].as< std::string >();
00255     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00256 }
00257
00258 return 0;
00259 }
00260
00261 // //////////// M A I N ////////////
00262 int main (int argc, char* argv[]) {
00263
00264     // State whether the BOM tree should be built-in or parsed from an
00265     // input file
00266     bool isBuiltin;
00267     bool isForSchedule;
00268
00269     // Input file names
00270     stdair::Filename_T lInventoryFilename;
00271     stdair::Filename_T lScheduleInputFilename;
00272     stdair::Filename_T lODInputFilename;
00273     stdair::Filename_T lYieldInputFilename;
00274
00275     // Parameters for the sale
00276     std::string lSegmentDateKey;
00277     stdair::ClassCode_T lClassCode;
00278     stdair::PartySize_T lPartySize;
00279
00280     // Output log File
00281     stdair::Filename_T lLogFilename;
00282
00283     // Call the command-line option parser
00284     const int lOptionParserStatus =
00285         readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename
00286
00287             , lScheduleInputFilename, lODInputFilename,
00288             lYieldInputFilename, lSegmentDateKey, lClassCode,
00289             lPartySize, lLogFilename);
00290
00291     if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00292         return 0;
00293     }

```

```

00294
00295 // Set the log parameters
00296 std::ofstream logOutputFile;
00297 // Open and clean the log outputfile
00298 logOutputFile.open (lLogFilename.c_str());
00299 logOutputFile.clear();
00300
00301 // Initialise the inventory service
00302 const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00303 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00304
00305 // DEBUG
00306 STDAIR_LOG_DEBUG ("Welcome to AirInv");
00307
00308 // Check whether or not a (CSV) input file should be read
00309 if (isBuiltin == true) {
00310
00311 // Build the sample BOM tree for RMOL
00312 airinvService.buildSampleBom();
00313
00314 // Define a specific segment-date key for the sample BOM tree
00315 //lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00316 lSegmentDateKey = "SQ,11,2010-02-08,SIN,BKK";
00317
00318 } else {
00319 if (isForSchedule == true) {
00320 // Build the BOM tree from parsing a schedule file (and O&D list)
00321 AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00322 airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00323 lYieldFilePath);
00324
00325 if (lSegmentDateKey == K_AIRINV_DEFAULT_SEGMENT_DATE_KEY) {
00326 // Define a specific segment-date key for the schedule-based inventory
00327 lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00328 }
00329
00330 } else {
00331 // Build the BOM tree from parsing an inventory dump file
00332 airinvService.parseAndLoad (lInventoryFilename);
00333 }
00334 }
00335
00336 // Make a booking
00337 const bool isSellSuccessful =
00338 airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00339
00340 // DEBUG
00341 STDAIR_LOG_DEBUG ("Sale ('" << lSegmentDateKey << "', " << lClassCode << ": "
00342 << lPartySize << ") successful? " << isSellSuccessful);
00343
00344 // DEBUG: Display the whole BOM tree
00345 const std::string& lCSVDump = airinvService.csvDisplay();
00346 STDAIR_LOG_DEBUG (lCSVDump);
00347
00348 // Close the Log outputfile
00349 logOutputFile.close();
00350
00351 /*
00352 Note: as that program is not intended to be run on a server in
00353 production, it is better not to catch the exceptions. When it
00354 happens (that an exception is throwned), that way we get the
00355 call stack.
00356 */
00357
00358 return 0;
00359 }

```

25.31 airinv/bom/AirportList.hpp File Reference

```
#include <set> #include <vector> #include <stdair/stdair-
```

_basic_types.hpp>

Namespaces

- namespace [AIRINV](#)

Typedefs

- typedef [std::set](#) < stdair::AirportCode_T > [AIRINV::AirportList_T](#)
- typedef [std::vector](#) < stdair::AirportCode_T > [AIRINV::AirportOrderedList_T](#)

25.32 AirportList.hpp

```

00001 #ifndef __AIRINV_BOM_AIRPORTLIST_HPP
00002 #define __AIRINV_BOM_AIRPORTLIST_HPP
00003
00004 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00005 // Import section
00006 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00007 // STL
00008 #include <set>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_basic_types.hpp>
00012
00013 namespace AIRINV {
00014
00016     typedef std::set<stdair::AirportCode_T> AirportList_T;
00017     typedef std::vector<stdair::AirportCode_T> AirportOrderedList_T;
00018
00019 }
00020 #endif // __AIRINV_BOM_AIRPORTLIST_HPP

```

25.33 airinv/bom/BomAbstract.cpp File Reference

#include <airinv/bom/BomAbstract.hpp>

Namespaces

- namespace [AIRINV](#)

25.34 BomAbstract.cpp

```

00001 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00002 // Import section
00003 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00004 // AIRINV
00005 #include <airinv/bom/BomAbstract.hpp>
00006
00007 namespace AIRINV {
00008
00009 }

```

25.35 airinv/bom/BomAbstract.hpp File Reference

```
#include <iosfwd> #include <string>
```

Classes

- class [AIRINV::BomAbstract](#)

Namespaces

- namespace [AIRINV](#)

Functions

- template<class charT , class traits >
[std::basic_ostream](#)< charT, traits > & [operator<<](#) ([std::basic_ostream](#)< charT, traits > &ioOut, const [AIRINV::BomAbstract](#) &iBom)
- template<class charT , class traits >
[std::basic_istream](#)< charT, traits > & [operator>>](#) ([std::basic_istream](#)< charT, traits > &ioln, [AIRINV::BomAbstract](#) &iBom)

25.35.1 Function Documentation

25.35.1.1 template<class charT , class traits > [std::basic_ostream](#)<charT, traits>&
[operator<<](#) ([std::basic_ostream](#)< charT, traits > & *ioOut*, const
[AIRINV::BomAbstract](#) & *iBom*) `[inline]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (p653) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line [56](#) of file [BomAbstract.hpp](#).

25.35.1.2 template<class charT , class traits > [std::basic_istream](#)<charT, traits>& [operator>>](#) ([std::basic_istream](#)< charT, traits > & *ioln*,
[AIRINV::BomAbstract](#) & *ioBom*) `[inline]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (pp655-657) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line [84](#) of file [BomAbstract.hpp](#).

References [AIRINV::BomAbstract::fromStream\(\)](#).

25.36 BomAbstract.hpp

```
00001 #ifndef __AIRINV_BOM_BOMABSTRACT_HPP
```



```

00002 #define __AIRINV_BOM_BOMABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <iosfwd>
00009 #include <string>
00010
00011 namespace AIRINV {
00012
00013     class BomAbstract {
00014     public:
00015         friend class FacBomAbstract;
00016         // ////////////////////////////////// Display support methods //////////////////////////////////
00017         virtual void toStream (std::ostream& ioOut) const = 0;
00018
00019         virtual void fromStream (std::istream& ioIn) = 0;
00020
00021         virtual std::string toString() const = 0;
00022
00023         virtual std::string describeKey() const = 0;
00024
00025         virtual std::string describeShortKey() const = 0;
00026
00027     protected:
00028         BomAbstract() {}
00029         BomAbstract(const BomAbstract&) {}
00030
00031         virtual ~BomAbstract() {}
00032     };
00033
00034     template <class charT, class traits>
00035     inline
00036     std::basic_ostream<charT, traits>&
00037     operator<< (std::basic_ostream<charT, traits>& ioOut,
00038               const AIRINV::BomAbstract& iBom) {
00039         std::basic_ostringstream<charT, traits> ostr;
00040         ostr.copyfmt (ioOut);
00041         ostr.width (0);
00042
00043         // Fill string stream
00044         iBom.toStream (ostr);
00045
00046         // Print string stream
00047         ioOut << ostr.str();
00048
00049         return ioOut;
00050     }
00051
00052     template <class charT, class traits>
00053     inline
00054     std::basic_istream<charT, traits>&
00055     operator>> (std::basic_istream<charT, traits>& ioIn,
00056               AIRINV::BomAbstract& ioBom) {
00057         // Fill Bom object with input stream
00058         ioBom.fromStream (ioIn);
00059         return ioIn;
00060     }
00061
00062 #endif // __AIRINV_BOM_BOMABSTRACT_HPP

```

25.37 airinv/bom/BomRootHelper.cpp File Reference

```

#include <cassert>    #include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp> #include <stdair/bom/-
Inventory.hpp>    #include <airinv/bom/BomRootHelper.hpp> x

```

```
#include <airinv/bom/InventoryHelper.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.38 BomRootHelper.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/BomManager.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/bom/Inventory.hpp>
00010 // AIRINV
00011 #include <airinv/bom/BomRootHelper.hpp>
00012 #include <airinv/bom/InventoryHelper.hpp>
00013
00014 namespace AIRINV {
00015 // //////////////////////////////////////
00016 void BomRootHelper::fillFromRouting (const stdair::BomRoot& iBomRoot) {
00017     const stdair::InventoryList_T& lInventoryList =
00018         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00019
00020     // Browse the list of inventories and update each inventory.
00021     for (stdair::InventoryList_T::const_iterator itInventory =
00022         lInventoryList.begin();
00023         itInventory != lInventoryList.end(); ++itInventory) {
00024         const stdair::Inventory* lCurrentInventory_ptr = *itInventory;
00025         assert (lCurrentInventory_ptr != NULL);
00026         InventoryHelper::fillFromRouting (*lCurrentInventory_ptr);
00027     }
00028 }
00029
00030 }
```

25.39 airinv/bom/BomRootHelper.hpp File Reference

Classes

- class [AIRINV::BomRootHelper](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.40 BomRootHelper.hpp

```
00001 #ifndef __AIRINV_BOM_BOMROOTHELPER_HPP
00002 #define __AIRINV_BOM_BOMROOTHELPER_HPP
00003
```

```

00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 // Forward declarations.
00009 namespace stdair {
00010     class BomRoot;
00011 }
00012
00013 namespace AIRINV {
00014     class BomRootHelper {
00015     public:
00016         // ////////////////////////////////// Business Methods //////////////////////////////////
00021         static void fillFromRouting (const stdair::BomRoot&);
00022     };
00023 }
00024
00025 #endif // __AIRINV_BOM_BOMROOTHELPER_HPP

```

25.41 airinv/bom/BookingClassHelper.cpp File Reference

```

#include <cassert>      #include <stdair/bom/BookingClass.-
hpp> #include <airinv/bom/BookingClassHelper.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.42 BookingClassHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/BookingClass.hpp>
00008 // AIRINV
00009 #include <airinv/bom/BookingClassHelper.hpp>
00010
00011 namespace AIRINV {
00012
00013 }

```

25.43 airinv/bom/BookingClassHelper.hpp File Reference

Classes

- class [AIRINV::BookingClassHelper](#)

Namespaces

- namespace [stdair](#)
 Forward declarations.
- namespace [AIRINV](#)

25.44 BookingClassHelper.hpp

```

00001 #ifndef __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
00002 #define __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 // #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012     class BookingClass;
00013 }
00014
00015 namespace AIRINV {
00016
00017     class BookingClassHelper {
00018     public:
00019         ;
00020     };
00021 }
00022
00023 #endif // __AIRINV_BOM_BOOKINGCLASSHELPER_HPP

```

25.45 airinv/bom/BookingClassStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasConst_General.hpp> #include <stdair/bom/BookingClass.-
hpp> #include <airinv/bom/BookingClassStruct.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.46 BookingClassStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/BookingClass.hpp>
00010 // AirInv
00011 #include <airinv/bom/BookingClassStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 BookingClassStruct::BookingClassStruct () {
00017 }
00018
00019 // //////////////////////////////////////
00020 stdair::ClassCode_T BookingClassStruct::getFullSubclassCode () const {
00021     std::ostringstream oStr;
00022     oStr << _classCode << _subclassCode;
00023     return oStr.str();
00024 }
00025
00026 // //////////////////////////////////////

```

```

00027 const std::string BookingClassStruct::describe() const {
00028     std::ostringstream ostr;
00029     ostr << "          " << _classCode << _subclassCode
00030     << " (" << _parentClassCode << _parentSubclassCode << ")"
00031     << ", " << _cumulatedProtection << ":" << _protection
00032     << ", " << _nego
00033     << ", " << _noShowPercentage << ":" << _overbookingPercentage
00034     << ", " << _nbOfBookings << ":" << _nbOfGroupBookings
00035     << ":" << _nbOfPendingGroupBookings << ":" << _nbOfStaffBookings
00036     << ":" << _nbOfWLBookings << ":" << _etb
00037     << ", " << _netClassAvailability << ":" << _segmentAvailability
00038     << ":" << _netRevenueAvailability
00039     << std::endl;
00040     return ostr.str();
00041 }
00042
00043 // //////////////////////////////////////
00044 void BookingClassStruct::fill (stdair::BookingClass& ioBookingClass) const {
00045     // Set the Yield Range Upper Value
00046     // ioBookingClass.setYieldRangeValue (_yieldRangeUpperValue);
00047
00048     // Set the Availability
00049     // ioBookingClass.setAvailability (_availability);
00050
00051     // Set the number of seats
00052     // ioBookingClass.setNbOfSeats (_nbOfSeats);
00053
00054     // Set the Seat Index
00055     // ioBookingClass.setSeatIndex (_seatIndex);
00056 }
00057
00058 }

```

25.47 airinv/bom/BookingClassStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/AIRINV_Types.hpp>

```

Classes

- struct [AIRINV::BookingClassStruct](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef [std::vector](#) < [BookingClassStruct](#) > [AIRINV::BookingClassStructList_T](#)

25.48 BookingClassStruct.hpp

```

00001 #ifndef __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP

```

```

00002 #define __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/AIRINV_Types.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BookingClass;
00019 }
00020
00021 namespace AIRINV {
00022
00024     struct BookingClassStruct : public stdair::StructAbstract {
00025         // Attributes
00026         stdair::ClassCode_T _classCode;
00027         stdair::SubclassCode_T _subclassCode;
00028         stdair::ClassCode_T _parentClassCode;
00029         stdair::SubclassCode_T _parentSubclassCode;
00030         stdair::AuthorizationLevel_T _cumulatedProtection;
00031         stdair::AuthorizationLevel_T _protection;
00032         stdair::NbOfSeats_T _nego;
00033         stdair::OverbookingRate_T _noShowPercentage;
00034         stdair::OverbookingRate_T _overbookingPercentage;
00035         stdair::NbOfBookings_T _nbOfBookings;
00036         stdair::NbOfBookings_T _nbOfGroupBookings;
00037         stdair::NbOfBookings_T _nbOfPendingGroupBookings;
00038         stdair::NbOfBookings_T _nbOfStaffBookings;
00039         stdair::NbOfBookings_T _nbOfWLBookings;
00040         stdair::NbOfBookings_T _etb;
00041         stdair::Availability_T _netClassAvailability;
00042         stdair::Availability_T _segmentAvailability;
00043         stdair::Availability_T _netRevenueAvailability;
00044
00046         stdair::ClassCode_T getFullSubclassCode() const;
00047
00050         void fill (stdair::BookingClass&) const;
00051
00053         const std::string describe() const;
00054
00056         BookingClassStruct();
00057     };
00058
00060     typedef std::vector<BookingClassStruct> BookingClassStructList_T;
00061
00062 }
00063 #endif // __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP

```

25.49 airinv/bom/BucketStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasConst_General.hpp> #include <stdair/bom/Bucket.hpp> ×
#include <airinv/bom/BucketStruct.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.50 BucketStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/Bucket.hpp>
00010 // AirInv
00011 #include <airinv/bom/BucketStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 BucketStruct::BucketStruct() {
00017 }
00018
00019 // //////////////////////////////////////
00020 const std::string BucketStruct::describe() const {
00021     std::ostringstream ostr;
00022     ostr << "          " << _yieldRangeUpperValue << ":" << _availability
00023         << ":" << _nbOfSeats << ":" << _seatIndex
00024         << std::endl;
00025     return ostr.str();
00026 }
00027
00028 // //////////////////////////////////////
00029 void BucketStruct::fill (stdair::Bucket& ioBucket) const {
00030     // Set the Yield Range Upper Value
00031     ioBucket.setYieldRangeUpperValue (_yieldRangeUpperValue);
00032
00033     // Set the Availability
00034     ioBucket.setAvailability (_availability);
00035
00036     // Set the number of sold seats
00037     ioBucket.setSoldSeats (_nbOfSeats);
00038 }
00039
00040 }

```

25.51 airinv/bom/BucketStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/AIRINV_Types.hpp>

```

Classes

- struct [AIRINV::BucketStruct](#)
Utility Structure for the parsing of Bucket structures.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef `std::vector` < BucketStruct > `AIRINV::BucketStructList_T`

25.52 BucketStruct.hpp

```

00001 #ifndef __AIRINV_BOM_BUCKETSTRUCT_HPP
00002 #define __AIRINV_BOM_BUCKETSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/AIRINV_Types.hpp>
00015
00016 namespace stdair {
00017     class Bucket;
00018 }
00019
00020 namespace AIRINV {
00021
00022     struct BucketStruct : public stdair::StructAbstract {
00023         // Attributes
00024         stdair::Yield_T _yieldRangeUpperValue;
00025         stdair::CabinCapacity_T _availability;
00026         stdair::NbOfSeats_T _nbOfSeats;
00027         stdair::SeatIndex_T _seatIndex;
00028
00029         void fill (stdair::Bucket&) const;
00030
00031         const std::string describe() const;
00032
00033         BucketStruct();
00034     };
00035
00036     typedef std::vector<BucketStruct> BucketStructList_T;
00037 }
00038
00039 #endif // __AIRINV_BOM_BUCKETSTRUCT_HPP

```

25.53 airinv/bom/DCPEventStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <vector>
#include <stdair/basic/BasConst_General.hpp> #include
<stdair/service/Logger.hpp> #include <airinv/AIRINV_
Types.hpp> #include <airinv/bom/DCPEventStruct.hpp>

```

Namespaces

- namespace `AIRINV`

25.54 DCPEventStruct.cpp

```

00001 // //////////////////////////////////////

```



```

00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 #include <vector>
00008 // StdAir
00009 #include <stdair/basic/BasConst_General.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/bom/DCPEventStruct.hpp>
00014
00015 namespace AIRINV {
00016
00017 // //////////////////////////////////////
00018 DCPEventStruct::DCPEventStruct ()
00019 : _origin(""),
00020   _destination(""),
00021   _dateRangeStart(stdair::DEFAULT_DATE),
00022   _dateRangeEnd(stdair::DEFAULT_DATE),
00023   _timeRangeStart(stdair::DEFAULT_EPSILON_DURATION),
00024   _timeRangeEnd(stdair::DEFAULT_EPSILON_DURATION),
00025   _cabinCode(""),
00026   _pos(""),
00027   _advancePurchase(0),
00028   _saturdayStay("T"),
00029   _changeFees("T"),
00030   _nonRefundable("T"),
00031   _minimumStay(0),
00032   _DCP(0),
00033   _airlineCode(""),
00034   _classCode("") {
00035 }
00036
00037 // //////////////////////////////////////
00038 stdair::Date_T DCPEventStruct::getDate() const {
00039     _itYear.check(); _itMonth.check(); _itDay.check();
00040     return stdair::Date_T (_itYear._value, _itMonth._value, _itDay._value);
00041 }
00042
00043 // //////////////////////////////////////
00044 stdair::Duration_T DCPEventStruct::getTime() const {
00045     _itHours.check(); _itMinutes.check(); _itSeconds.check();
00046     return boost::posix_time::hours (_itHours._value)
00047         + boost::posix_time::minutes (_itMinutes._value)
00048         + boost::posix_time::seconds (_itSeconds._value);
00049 }
00050
00051 // //////////////////////////////////////
00052 const std::string DCPEventStruct::describe () const {
00053     std::ostringstream ostr;
00054     ostr << "DCPEvent: "
00055         << _origin << "-" << _destination
00056         << ", POS(" << _pos << "), ["
00057         << _dateRangeStart << "/" << _dateRangeEnd << "]" - ["
00058         << boost::posix_time::to_simple_string(_timeRangeStart) << "/"
00059         << boost::posix_time::to_simple_string(_timeRangeEnd) << "]" \n "
00060         << "-Cabin code- " << _cabinCode << "\n "
00061         << "-Channel- " << _channel << "\n "
00062         << "-Conditions- " << _saturdayStay << ", " << _changeFees << ", "
00063         << _nonRefundable << ", " << _advancePurchase << ", "
00064         << _minimumStay << "\n "
00065         << "-DCP- " << _DCP << "\n ";
00066     assert (_airlineCodeList.size() == _classCodeList.size());
00067     stdair::ClassList_StringList_T::const_iterator lItCurrentClassCode =
00068         _classCodeList.begin();
00069     stdair::AirlineCodeList_T lAirlineCode;
00070     std::string lClassCode;
00071     for (stdair::AirlineCodeList_T::const_iterator lItCurrentAirlineCode =
00072         _airlineCodeList.begin();
00073         lItCurrentAirlineCode != _airlineCodeList.end();
00074         lItCurrentAirlineCode++) {
00075

```

```

00076         lAirlineCode = *lItCurrentAirlineCode;
00077         lClassCode = *lItCurrentClassCode;
00078         ostr << lAirlineCode << ", " << lClassCode;
00079         ostr << " ";
00080         lItCurrentClassCode++;
00081     }
00082     ostr << std::endl;
00083     return ostr.str();
00084 }
00085
00086 // //////////////////////////////////////
00087 const stdair::AirlineCode_T& DCPEventStruct::getFirstAirlineCode () const {
00088     assert (_airlineCodeList.size() > 0);
00089     stdair::AirlineCodeList_T::const_iterator itFirstAirlineCode =
00090         _airlineCodeList.begin();
00091     return *itFirstAirlineCode;
00092 }
00093
00094 // //////////////////////////////////////
00095 void DCPEventStruct::beginAirline () {
00096     _itCurrentAirlineCode = _airlineCodeList.begin();
00097 }
00098
00099 // //////////////////////////////////////
00100 bool DCPEventStruct::hasNotReachedEndAirline () const {
00101     bool result = (_itCurrentAirlineCode != _airlineCodeList.end());
00102     return result;
00103 }
00104
00105 // //////////////////////////////////////
00106 stdair::AirlineCode_T DCPEventStruct::getCurrentAirlineCode () const {
00107     assert (_itCurrentAirlineCode != _airlineCodeList.end());
00108     return (*_itCurrentAirlineCode);
00109 }
00110
00111 // //////////////////////////////////////
00112 void DCPEventStruct::iterateAirline () {
00113     if (_itCurrentAirlineCode != _airlineCodeList.end()) {
00114         _itCurrentAirlineCode++;
00115     }
00116 }
00117
00118 // //////////////////////////////////////
00119 const std::string& DCPEventStruct::getFirstClassCode () const {
00120     assert (_classCodeList.size() > 0);
00121     stdair::ClassList_StringList_T::const_iterator itFirstClassCode =
00122         _classCodeList.begin();
00123     return *itFirstClassCode;
00124 }
00125
00126 // //////////////////////////////////////
00127 void DCPEventStruct::beginClassCode () {
00128     _itCurrentClassCode = _classCodeList.begin();
00129 }
00130
00131 // //////////////////////////////////////
00132 bool DCPEventStruct::hasNotReachedEndClassCode () const {
00133     bool result = (_itCurrentClassCode != _classCodeList.end());
00134     return result;
00135 }
00136
00137 // //////////////////////////////////////
00138 std::string DCPEventStruct::getCurrentClassCode () const {
00139     assert (_itCurrentClassCode != _classCodeList.end());
00140     return (*_itCurrentClassCode);
00141 }
00142
00143 // //////////////////////////////////////
00144 void DCPEventStruct::iterateClassCode () {
00145     if (_itCurrentClassCode != _classCodeList.end()) {
00146         _itCurrentClassCode++;
00147     }
00148 }
00149

```

```

00150
00151 }
00152

```

25.55 airinv/bom/DCPEventStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_demand_types.hpp> #include <stdair/stdair_inventory_-
types.hpp> #include <stdair/basic/StructAbstract.hpp>
#include <stdair/basic/BasParserTypes.hpp> #include <airinv/-
AIRINV_Types.hpp>

```

Classes

- struct [AIRINV::DCPEventStruct](#)

Namespaces

- namespace [AIRINV](#)

25.56 DCPEventStruct.hpp

```

00001 #ifndef __AIRINV_BOM_DCPEVENTSTRUCT_HPP
00002 #define __AIRINV_BOM_DCPEVENTSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_demand_types.hpp>
00012 #include <stdair/stdair_inventory_types.hpp>
00013 #include <stdair/basic/StructAbstract.hpp>
00014 #include <stdair/basic/BasParserTypes.hpp>
00015 // AirInv
00016 #include <airinv/AIRINV_Types.hpp>
00017
00018 namespace AIRINV {
00019
00021 struct DCPEventStruct : public stdair::StructAbstract {
00022 public:
00023
00025     DCPEventStruct ();
00026
00028     stdair::Date_T getDate() const;
00029
00031     stdair::Duration_T getTime() const;
00032
00034     const std::string describe() const;
00035
00037     const unsigned int getAirlineListSize () const {
00038         return _airlineCodeList.size();
00039     }
00040
00042     const unsigned int getClassCodeListSize () const {
00043         return _classCodeList.size();
00044     }
00045

```

```

00047     const stdair::AirlineCode_T& getFirstAirlineCode () const;
00048
00052     void beginAirline ();
00053
00056     bool hasNotReachedEndAirline () const;
00057
00059     stdair::AirlineCode_T getCurrentAirlineCode () const;
00060
00063     void iterateAirline ();
00064
00066     const std::string& getFirstClassCode () const;
00067
00071     void beginClassCode ();
00072
00075     bool hasNotReachedEndClassCode () const;
00076
00078     std::string getClassCode () const;
00079
00082     void iterateClassCode ();
00083
00084 public:
00085     // ////////////////////////////////// Attributes //////////////////////////////////
00087     stdair::year_t _itYear;
00088     stdair::month_t _itMonth;
00089     stdair::day_t _itDay;
00090
00092     //long _itHours;
00093     stdair::hour_t _itHours;
00094     stdair::minute_t _itMinutes;
00095     stdair::second_t _itSeconds;
00096
00098     stdair::AirlineCodeList_T::iterator _itCurrentAirlineCode;
00099
00101     stdair::ClassList_StringList_T::iterator _itCurrentClassCode;
00102
00104     stdair::AirportCode_T _origin;
00105
00107     stdair::AirportCode_T _destination;
00108
00110     stdair::Date_T _dateRangeStart;
00111
00113     stdair::Date_T _dateRangeEnd;
00114
00116     stdair::Duration_T _timeRangeStart;
00117
00119     stdair::Duration_T _timeRangeEnd;
00120
00122     stdair::CabinCode_T _cabinCode;
00123
00125     stdair::CityCode_T _pos;
00126
00128     stdair::ChannelLabel_T _channel;
00129
00131     stdair::DayDuration_T _advancePurchase;
00132
00134     stdair::SaturdayStay_T _saturdayStay;
00135
00137     stdair::ChangeFees_T _changeFees;
00138
00140     stdair::NonRefundable_T _nonRefundable;
00141
00143     stdair::DayDuration_T _minimumStay;
00144
00146     stdair::PriceValue_T _DCP;
00147
00149     stdair::AirlineCode_T _airlineCode;
00150
00152     stdair::ClassCode_T _classCode;
00153
00155     stdair::AirlineCodeList_T _airlineCodeList;
00156
00158     //unsigned long int _nbOfAirlines;
00159
00161     stdair::ClassList_StringList_T _classCodeList;

```

```

00162
00163     };
00164
00165 }
00166 #endif // __AIRINV_BOM_DCPEVENTSTRUCT_HPP

```

25.57 airinv/bom/FareFamilyStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasConst_Inventory.hpp> #include <stdair/bom/FareFamily.-
hpp> #include <airinv/bom/FareFamilyStruct.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.58 FareFamilyStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Inventory.hpp>
00009 #include <stdair/bom/FareFamily.hpp>
00010 // AirInv
00011 #include <airinv/bom/FareFamilyStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 FareFamilyStruct::FareFamilyStruct()
00017 : _familyCode (stdair::DEFAULT_NULL_FARE_FAMILY_CODE),
00018   _classes (stdair::DEFAULT_NULL_CLASS_CODE) {
00019 }
00020
00021 // //////////////////////////////////////
00022 FareFamilyStruct::
00023 FareFamilyStruct (const stdair::FamilyCode_T& iFamilyCode,
00024                  const stdair::ClassList_String_T& iClasses)
00025 : _familyCode (iFamilyCode), _classes (iClasses) {
00026 }
00027
00028 // //////////////////////////////////////
00029 const std::string FareFamilyStruct::describe() const {
00030     std::ostringstream ostr;
00031
00032     ostr << "          " << _familyCode << " " << _classes << ", ";
00033
00034     for (BookingClassStructList_T::const_iterator itBkgClass= _classList.begin(
00035 );
00036         itBkgClass != _classList.end(); ++itBkgClass) {
00037         const BookingClassStruct& lBkgClass = *itBkgClass;
00038         ostr << lBkgClass.describe();
00039     }
00040     if (_classList.empty() == false) {
00041         ostr << std::endl;
00042     }
00043     return ostr.str();
00044 }
00045

```

```

00046 // //////////////////////////////////////
00047 void FareFamilyStruct::fill (stdair::FareFamily& ioFareFamily) const {
00048     // Set attributes
00049     // ioFareFamily.setSomeAttribute (_someAttribute);
00050 }
00051
00052 }

```

25.59 airinv/bom/FareFamilyStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/bom/BookingClassStruct.hpp>

```

Classes

- struct [AIRINV::FareFamilyStruct](#)
Utility Structure for the parsing of fare family details.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef [std::vector](#) < FareFamilyStruct > [AIRINV::FareFamilyStructList_T](#)

25.60 FareFamilyStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
00002 #define __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/BookingClassStruct.hpp>
00015
00016 namespace stdair {
00017     class FareFamily;
00018 }
00019
00020 namespace AIRINV {
00021
00022     struct FareFamilyStruct : public stdair::StructAbstract {
00023         // Attributes
00024         stdair::FamilyCode_T _familyCode;
00025     };
00026 }

```

```

00029     stdair::ClassList_String_T _classes;
00030     BookingClassStructList_T _classList;
00031
00035     FareFamilyStruct();
00039     FareFamilyStruct (const stdair::FamilyCode_T&,
00040                     const stdair::ClassList_String_T&);
00041
00045     void fill (stdair::FareFamily&) const;
00046
00050     const std::string describe() const;
00051 };
00052
00056     typedef std::vector<FareFamilyStruct> FareFamilyStructList_T;
00057
00058 }
00059 #endif // __AIRINV_BOM_FAREFAMILYSTRUCT_HPP

```

25.61 airinv/bom/FlightDateHelper.cpp File Reference

```

#include <cassert>           #include <stdair/basic/BasConst_-
Inventory.hpp>             #include <stdair/bom/BomManager.hpp> ×
#include <stdair/bom/FlightDate.hpp> #include <stdair/bom/-
SegmentDate.hpp>          #include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegCabin.hpp> #include <airinv/bom/-
FlightDateHelper.hpp>      #include <airinv/bom/SegmentDate-
Helper.hpp>                #include <airinv/bom/SegmentCabinHelper.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

25.62 FlightDateHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/basic/BasConst_Inventory.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/FlightDate.hpp>
00010 #include <stdair/bom/SegmentDate.hpp>
00011 #include <stdair/bom/SegmentCabin.hpp>
00012 #include <stdair/bom/LegCabin.hpp>
00013 // AIRINV
00014 #include <airinv/bom/FlightDateHelper.hpp>
00015 #include <airinv/bom/SegmentDateHelper.hpp>
00016 #include <airinv/bom/SegmentCabinHelper.hpp>
00017
00018 namespace AIRINV {
00019
00020 // //////////////////////////////////////
00021 void FlightDateHelper::
00022 updateBookingControls (stdair::FlightDate& ioFlightDate) {
00023
00024     // Parse the segment-cabin list and build the pseudo bid price vector.
00025     const stdair::SegmentDateList_T& LSDList =
00026         stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00027     for (stdair::SegmentDateList_T::const_iterator itSD = LSDList.begin();

```

```

00028         itSD != LSDList.end(); ++itSD) {
00029     const stdair::SegmentDate* LSD_ptr = *itSD;
00030     assert (LSD_ptr != NULL);
00031
00032     //
00033     const stdair::SegmentCabinList_T& lSCList =
00034         stdair::BomManager::getList<stdair::SegmentCabin> (*LSD_ptr);
00035     for (stdair::SegmentCabinList_T::const_iterator itSC = lSCList.begin();
00036         itSC != lSCList.end(); ++itSC) {
00037         stdair::SegmentCabin* lSC_ptr = *itSC;
00038         assert (lSC_ptr != NULL);
00039
00040         // Build the pseudo bid price vector for the segment-cabin.
00041         SegmentCabinHelper::buildPseudoBidPriceVector (*lSC_ptr);
00042
00043         // Update the booking controls using the pseudo bid price vector.
00044         SegmentCabinHelper::
00045             updateBookingControlsUsingPseudoBidPriceVector (*lSC_ptr);
00046     }
00047 }
00048 }
00049
00050 // //////////////////////////////////////
00051 void FlightDateHelper::fillFromRouting(const stdair::FlightDate& iFlightDate)
00052 {
00053     const stdair::SegmentDateList_T& lSegmentDateList =
00054         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00055
00056     // Browse the list of segment-dates and update each segment-date.
00057     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00058         lSegmentDateList.begin();
00059         itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00060         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00061         assert (lCurrentSegmentDate_ptr != NULL);
00062         SegmentDateHelper::fillFromRouting (*lCurrentSegmentDate_ptr);
00063     }
00064 }
00065 // //////////////////////////////////////
00066 void FlightDateHelper::
00067 updateAvailabilityPool (const stdair::FlightDate& iFlightDate,
00068                        const stdair::CabinCode_T& iCabinCode){
00069     const stdair::SegmentDateList_T& lSegmentDateList =
00070         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00071     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00072         lSegmentDateList.begin(); itSegmentDate != lSegmentDateList.end();
00073         ++itSegmentDate) {
00074         const stdair::SegmentDate* lSegmentDate_ptr = *itSegmentDate;
00075         assert (lSegmentDate_ptr != NULL);
00076         stdair::SegmentCabin& lSegmentCabin =
00077             stdair::BomManager::getObject<stdair::SegmentCabin> (*lSegmentDate_ptr,
00078                                                                    iCabinCode);
00079
00080         // Update the availability pool of the segment-cabin to the minimal
00081         // availability pool of the member leg-cabins.
00082         const stdair::LegCabinList_T& lLegCabinList =
00083             stdair::BomManager::getList<stdair::LegCabin> (lSegmentCabin);
00084         stdair::Availability_T lAvailabilityPool = stdair::MAXIMAL_AVAILABILITY;
00085         for (stdair::LegCabinList_T::const_iterator itLegCabin =
00086             lLegCabinList.begin();
00087             itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00088             const stdair::LegCabin* lLegCabin_ptr = *itLegCabin;
00089             assert (lLegCabin_ptr != NULL);
00090             const stdair::Availability_T& lLegCabinAvailabilityPool =
00091                 lLegCabin_ptr->getAvailabilityPool();
00092             if (lAvailabilityPool > lLegCabinAvailabilityPool) {
00093                 lAvailabilityPool = lLegCabinAvailabilityPool;
00094             }
00095         }
00096         lSegmentCabin.setAvailabilityPool (lAvailabilityPool);
00097     }
00098 }
00099
00100 }

```


25.63 airinv/bom/FlightDateHelper.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class [AIRINV::FlightDateHelper](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.64 FlightDateHelper.hpp

```
00001 #ifndef __AIRINV_BOM_FLIGHTDATEHELPER_HPP
00002 #define __AIRINV_BOM_FLIGHTDATEHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012     class FlightDate;
00013 }
00014
00015 namespace AIRINV {
00016
00017     class FlightDateHelper {
00018     public:
00019         // ////////////////////////////////// Business Methods //////////////////////////////////
00020         static void fillFromRouting (const stdair::FlightDate&);
00021
00022         static void updateAvailabilityPool (const stdair::FlightDate&,
00023                                           const stdair::CabinCode_T&);
00024
00025         static void updateBookingControls (stdair::FlightDate&);
00026     };
00027 }
00028
00029 #endif // __AIRINV_BOM_FLIGHTDATEHELPER_HPP
```

25.65 airinv/bom/FlightDateStruct.cpp File Reference

```
#include <cassert> #include <sstream> #include <stdair/basic/-
BasConst_General.hpp> #include <stdair/service/Logger.-
hpp> #include <airinv/AIRINV_Types.hpp> #include <airinv/bom/-
FlightDateStruct.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.66 FlightDateStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AIRINV
00011 #include <airinv/AIRINV_Types.hpp>
00012 #include <airinv/bom/FlightDateStruct.hpp>
00013
00014 namespace AIRINV {
00015
00016 // //////////////////////////////////////
00017 FlightDateStruct::FlightDateStruct ()
00018 : _flightDate (stdair::DEFAULT_DATE),
00019   _flightTypeCode (FlightTypeCode::DOMESTIC),
00020   _flightVisibilityCode (FlightVisibilityCode::NORMAL),
00021   _itSeconds (0), _legAlreadyDefined (false) {
00022 }
00023
00024 // //////////////////////////////////////
00025 stdair::Date_T FlightDateStruct::getDate() const {
00026     return stdair::Date_T (_itYear + 2000, _itMonth, _itDay);
00027 }
00028
00029 // //////////////////////////////////////
00030 stdair::Duration_T FlightDateStruct::getTime() const {
00031     return boost::posix_time::hours (_itHours)
00032         + boost::posix_time::minutes (_itMinutes)
00033         + boost::posix_time::seconds (_itSeconds);
00034 }
00035
00036 // //////////////////////////////////////
00037 const std::string FlightDateStruct::describe() const {
00038     std::ostringstream ostr;
00039     ostr << _airlineCode << _flightNumber << ", " << _flightDate
00040         << " (" << _flightTypeCode;
00041     if (_flightVisibilityCode.getCode() != FlightVisibilityCode::NORMAL) {
00042         ostr << "/" << _flightVisibilityCode;
00043     }
00044     ostr << ")" << std::endl;
00045
00046     for (LegStructList_T::const_iterator itLeg = _legList.begin();
00047          itLeg != _legList.end(); ++itLeg) {
00048         const LegStruct& lLeg = *itLeg;
00049         ostr << lLeg.describe();
00050     }
00051
00052     for (SegmentStructList_T::const_iterator itSegment = _segmentList.begin();
00053          itSegment != _segmentList.end(); ++itSegment) {
00054         const SegmentStruct& lSegment = *itSegment;
00055         ostr << lSegment.describe();
00056     }
00057
00058     //ostr << "[Debug] - Staging Leg: ";
00059     //ostr << _itLeg.describe();
00060     //ostr << "[Debug] - Staging Cabin: ";
00061     //ostr << _itCabin.describe();
00062
00063     return ostr.str();
00064 }
00065
00066 // //////////////////////////////////////
00067 void FlightDateStruct::addAirport (const stdair::AirportCode_T& iAirport) {
00068     AirportList_T::const_iterator itAirport = _airportList.find (iAirport);
00069     if (itAirport == _airportList.end()) {
00070         // Add the airport code to the airport set
00071         const bool insertSuccessful = _airportList.insert (iAirport).second;

```

```

00072
00073         if (insertSuccessful == false) {
00074             // TODO: throw an exception
00075         }
00076
00077         // Add the airport code to the airport vector
00078         _airportOrderedList.push_back (iAirport);
00079     }
00080 }
00081
00082 // //////////////////////////////////////
00083 void FlightDateStruct::buildSegments () {
00084     // The list of airports encompasses all the airports on which
00085     // the flight takes off or lands. Moreover, that list is
00086     // time-ordered: the first airport is the initial departure of
00087     // the flight, and the last airport is the eventual point of
00088     // rest of the flight.
00089     // Be l the size of the ordered list of airports.
00090     // We want to generate all the segment combinations from the legs
00091     // and, hence, from all the possible (time-ordered) airport pairs.
00092     // Thus, we both iterator on i=0...l-1 and j=i+1...l
00093     assert (_airportOrderedList.size() >= 2);
00094
00095     _segmentList.clear();
00096     for (AirportOrderedList_T::const_iterator itAirport_i =
00097         _airportOrderedList.begin();
00098         itAirport_i != _airportOrderedList.end()-1; ++itAirport_i) {
00099         for (AirportOrderedList_T::const_iterator itAirport_j = itAirport_i + 1;
00100             itAirport_j != _airportOrderedList.end(); ++itAirport_j) {
00101             SegmentStruct lSegmentStruct;
00102             lSegmentStruct._boardingPoint = *itAirport_i;
00103             lSegmentStruct._offPoint = *itAirport_j;
00104
00105             _segmentList.push_back (lSegmentStruct);
00106         }
00107     }
00108
00109     // Clear the lists of airports, so that it is ready for the next flight
00110     _airportList.clear();
00111     _airportOrderedList.clear();
00112 }
00113
00114 // //////////////////////////////////////
00115 void FlightDateStruct::
00116 addSegmentCabin (const SegmentStruct& iSegment,
00117                 const SegmentCabinStruct& iCabin) {
00118     // Retrieve the Segment structure corresponding to the (boarding, off)
00119     point
00120     // pair.
00121     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00122     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00123         const SegmentStruct& lSegment = *itSegment;
00124
00125         const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00126         const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00127         if (lSegment._boardingPoint == lBoardingPoint
00128             && lSegment._offPoint == lOffPoint) {
00129             break;
00130         }
00131     }
00132
00133     // If the segment key (airport pair) given in the schedule input file
00134     // does not correspond to the leg (boarding, off) points, throw an
00135     exception
00136     // so that the user knows the schedule input file is corrupted.
00137     if (itSegment == _segmentList.end()) {
00138         STDAIR_LOG_ERROR ("Within the inventory input file, there is a "
00139             "<< "flight for which the airports of segments "
00140             "<< "and those of the legs do not correspond.");
00141         throw SegmentDateNotFoundException ("Within the inventory input file, "
00142             "there is a flight for which the "
00143             "airports of segments and those of "
00144             "the legs do not correspond.");
00145     }

```

```

00144
00145 // Add the Cabin structure to the Segment Cabin structure.
00146 assert (itSegment != _segmentList.end());
00147 SegmentStruct& lSegment = *itSegment;
00148 lSegment._cabinList.push_back (iCabin);
00149 }
00150
00151 // //////////////////////////////////////
00152 void FlightDateStruct::
00153 addSegmentCabin (const SegmentCabinStruct& iCabin) {
00154 // Iterate on all the Segment structures (as they get the same cabin
00155 // definitions)
00156
00157 for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00158      itSegment != _segmentList.end(); ++itSegment) {
00159     SegmentStruct& lSegment = *itSegment;
00160
00161     lSegment._cabinList.push_back (iCabin);
00162 }
00163 }
00164
00165 // //////////////////////////////////////
00166 void FlightDateStruct::
00167 addFareFamily (const SegmentStruct& iSegment,
00168               const SegmentCabinStruct& iCabin,
00169               const FareFamilyStruct& iFareFamily) {
00170 // Retrieve the Segment structure corresponding to the (boarding, off)
point
00171 // pair.
00172 SegmentStructList_T::iterator itSegment = _segmentList.begin();
00173 for ( ; itSegment != _segmentList.end(); ++itSegment) {
00174     const SegmentStruct& lSegment = *itSegment;
00175
00176     const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00177     const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00178     if (lSegment._boardingPoint == lBoardingPoint
00179         && lSegment._offPoint == lOffPoint) {
00180         break;
00181     }
00182 }
00183
00184 // If the segment key (airport pair) given in the schedule input file
00185 // does not correspond to the leg (boarding, off) points, throw an
exception
00186 // so that the user knows the schedule input file is corrupted.
00187 if (itSegment == _segmentList.end()) {
00188     STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00189                      << "for which the airports of segments and "
00190                      << "those of the legs do not correspond.");
00191     throw SegmentDateNotFoundException ("Within the schedule input file, "
00192                                       "there is a flight for which the "
00193                                       "airports of segments and those of "
00194                                       "the legs do not correspond.");
00195 }
00196
00197 // Add the Cabin structure to the Segment Cabin structure.
00198 assert (itSegment != _segmentList.end());
00199 SegmentStruct& lSegment = *itSegment;
00200
00201 // Retrieve the Segment cabin structure given the cabin code
00202 SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00203 for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00204     const SegmentCabinStruct& lCabin = *itCabin;
00205
00206     const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00207     if (iCabin._cabinCode == lCabinCode) {
00208         break;
00209     }
00210 }
00211
00212 // If the segmentCabin key (cabin code) given in the schedule input file
00213 // does not correspond to the stored cabin codes, throw an exception
00214 // so that the user knows the schedule input file is corrupted.
00215 if (itCabin == lSegment._cabinList.end()) {

```

```

00216         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00217                             << "for which the cabin code does not exist.");
00218         throw SegmentDateNotFoundException ("Within the schedule input file, "
00219                                             "there is a flight for which the "
00220                                             "cabin code does not exist.");
00221     }
00222
00223     // Add the Cabin structure to the Segment Cabin structure.
00224     assert (itCabin != lSegment._cabinList.end());
00225     SegmentCabinStruct& lCabin = *itCabin;
00226     lCabin._fareFamilies.push_back (iFareFamily);
00227 }
00228
00229 // //////////////////////////////////////
00230 void FlightDateStruct::
00231 addFareFamily (const SegmentCabinStruct& iCabin,
00232               const FareFamilyStruct& iFareFamily) {
00233     // Iterate on all the Segment structures (as they get the same cabin
00234     // definitions)
00235
00236     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00237          itSegment != _segmentList.end(); ++itSegment) {
00238         SegmentStruct& lSegment = *itSegment;
00239
00240         // Retrieve the Segment cabin structure given the cabin code
00241         SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00242         for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00243             const SegmentCabinStruct& lCabin = *itCabin;
00244
00245             const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00246             if (iCabin._cabinCode == lCabinCode) {
00247                 break;
00248             }
00249         }
00250
00251         // If the segmentCabin key (cabin code) given in the schedule input file
00252         // does not correspond to the stored cabin codes, throw an exception
00253         // so that the user knows the schedule input file is corrupted.
00254         if (itCabin == lSegment._cabinList.end()) {
00255             STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight"
00256                             << " for which the cabin code does not exist.");
00257             throw SegmentDateNotFoundException ("Within the schedule input file, "
00258                                                 "there is a flight for which the "
00259                                                 "cabin code does not exist.");
00260         }
00261
00262         // Add the Cabin structure to the Segment Cabin structure.
00263         assert (itCabin != lSegment._cabinList.end());
00264         SegmentCabinStruct& lCabin = *itCabin;
00265         lCabin._fareFamilies.push_back (iFareFamily);
00266     }
00267 }
00268
00269 }

```

25.67 airinv/bom/FlightDateStruct.hpp File Reference

```

#include <string>          #include <stdair/stdair_inventory_-
types.hpp>               #include <stdair/basic/StructAbstract.hpp>
#include <stdair/bom/DoWStruct.hpp> #include <airinv/basic/-
FlightTypeCode.hpp> #include <airinv/basic/FlightVisibility-
Code.hpp> #include <airinv/bom/LegStruct.hpp> #include
<airinv/bom/LegCabinStruct.hpp> #include <airinv/bom/-
BucketStruct.hpp> #include <airinv/bom/SegmentStruct.-
hpp> #include <airinv/bom/SegmentCabinStruct.hpp> #include
<airinv/bom/FareFamilyStruct.hpp> #include <airinv/bom/-

```

AirportList.hpp>

Classes

- struct [AIRINV::FlightDateStruct](#)

Namespaces

- namespace [AIRINV](#)

25.68 FlightDateStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
00002 #define __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_inventory_types.hpp>
00011 #include <stdair/basic/StructAbstract.hpp>
00012 #include <stdair/bom/DoWStruct.hpp>
00013 // AirInv
00014 #include <airinv/basic/FlightTypeCode.hpp>
00015 #include <airinv/basic/FlightVisibilityCode.hpp>
00016 #include <airinv/bom/LegStruct.hpp>
00017 #include <airinv/bom/LegCabinStruct.hpp>
00018 #include <airinv/bom/BucketStruct.hpp>
00019 #include <airinv/bom/SegmentStruct.hpp>
00020 #include <airinv/bom/SegmentCabinStruct.hpp>
00021 #include <airinv/bom/FareFamilyStruct.hpp>
00022 #include <airinv/bom/AirportList.hpp>
00023
00024 namespace AIRINV {
00025
00026     struct FlightDateStruct : public stdair::StructAbstract {
00027
00028         stdair::Date_T getDate() const;
00029
00030         stdair::Duration_T getTime() const;
00031
00032         const std::string describe() const;
00033
00034         void addAirport (const stdair::AirportCode_T&);
00035
00036         void buildSegments ();
00037
00038         void addSegmentCabin (const SegmentStruct&,
00039                             const SegmentCabinStruct&);
00040
00041         void addSegmentCabin (const SegmentCabinStruct&);
00042
00043         void addFareFamily (const SegmentStruct&, const SegmentCabinStruct&,
00044                             const FareFamilyStruct&);
00045
00046         void addFareFamily (const SegmentCabinStruct&, const FareFamilyStruct&);
00047
00048         FlightDateStruct ();
00049
00050         // Attributes
00051         stdair::AirlineCode_T _airlineCode;
00052         stdair::FlightNumber_T _flightNumber;
00053         stdair::Date_T _flightDate;
00054     };
00055
00056 #endif

```

```

00084     FlightTypeCode _flightTypeCode;
00085     FlightVisibilityCode _flightVisibilityCode;
00086     LegStructList_T _legList;
00087     SegmentStructList_T _segmentList;
00088
00090     unsigned int _itYear;
00091     unsigned int _itMonth;
00092     unsigned int _itDay;
00093     int _dateOffset;
00094
00096     long _itHours;
00097     long _itMinutes;
00098     long _itSeconds;
00099
00102     AirportList_T _airportList;
00103     AirportOrderedList_T _airportOrderedList;
00104
00107     bool _legAlreadyDefined;
00108     LegStruct _itLeg;
00109     LegCabinStruct _itLegCabin;
00110     BucketStruct _itBucket;
00111
00113     bool _areSegmentDefinitionsSpecific;
00114     SegmentStruct _itSegment;
00115     SegmentCabinStruct _itSegmentCabin;
00116     BookingClassStruct _itBookingClass;
00117 };
00118
00119 }
00120 #endif // __AIRINV_BOM_FLIGHTDATESTRUCT_HPP

```

25.69 airinv/bom/FlightPeriodStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasConst_Period_BOM.hpp> #include <stdair/service/Logger.-
hpp> #include <airinv/AIRINV_Types.hpp> #include <airinv/bom/-
FlightPeriodStruct.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.70 FlightPeriodStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Period_BOM.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AIRINV
00011 #include <airinv/AIRINV_Types.hpp>
00012 #include <airinv/bom/FlightPeriodStruct.hpp>
00013
00014 namespace AIRINV {
00015
00016 // //////////////////////////////////////
00017 FlightPeriodStruct::FlightPeriodStruct ()
00018 : _dateRange (stdair::BOOST_DEFAULT_DATE_PERIOD),
00019   _dow (stdair::DEFAULT_DOW_STRING),

```

```

00020     _legAlreadyDefined (false), _itSeconds (0) {
00021     }
00022
00023     // //////////////////////////////////////
00024     stdair::Date_T FlightPeriodStruct::getDate() const {
00025         return stdair::Date_T (_itYear, _itMonth, _itDay);
00026     }
00027
00028     // //////////////////////////////////////
00029     stdair::Duration_T FlightPeriodStruct::getTime() const {
00030         return boost::posix_time::hours (_itHours)
00031             + boost::posix_time::minutes (_itMinutes)
00032             + boost::posix_time::seconds (_itSeconds);
00033     }
00034
00035     // //////////////////////////////////////
00036     const std::string FlightPeriodStruct::describe() const {
00037         std::ostringstream ostr;
00038         ostr << _airlineCode << _flightNumber << ", " << _dateRange
00039             << " - " << _dow << std::endl;
00040
00041         for (LegStructList_T::const_iterator itLeg = _legList.begin();
00042              itLeg != _legList.end(); ++itLeg) {
00043             const LegStruct& lLeg = *itLeg;
00044             ostr << lLeg.describe();
00045         }
00046
00047         for (SegmentStructList_T::const_iterator itSegment = _segmentList.begin();
00048              itSegment != _segmentList.end(); ++itSegment) {
00049             const SegmentStruct& lSegment = *itSegment;
00050             ostr << lSegment.describe();
00051         }
00052
00053         //ostr << "[Debug] - Staging Leg: ";
00054         //ostr << _itLeg.describe();
00055         //ostr << "[Debug] - Staging Cabin: ";
00056         //ostr << _itCabin.describe();
00057
00058         return ostr.str();
00059     }
00060
00061     // //////////////////////////////////////
00062     void FlightPeriodStruct::addAirport (const stdair::AirportCode_T& iAirport) {
00063         AirportList_T::const_iterator itAirport = _airportList.find (iAirport);
00064         if (itAirport == _airportList.end()) {
00065             // Add the airport code to the airport set
00066             const bool insertSuccessful = _airportList.insert (iAirport).second;
00067
00068             if (insertSuccessful == false) {
00069                 // TODO: throw an exception
00070             }
00071
00072             // Add the airport code to the airport vector
00073             _airportOrderedList.push_back (iAirport);
00074         }
00075     }
00076
00077     // //////////////////////////////////////
00078     void FlightPeriodStruct::buildSegments () {
00079         // The list of airports encompasses all the airports on which
00080         // the flight takes off or lands. Moreover, that list is
00081         // time-ordered: the first airport is the initial departure of
00082         // the flight, and the last airport is the eventual point of
00083         // rest of the flight.
00084         // Be l the size of the ordered list of airports.
00085         // We want to generate all the segment combinations from the legs
00086         // and, hence, from all the possible (time-ordered) airport pairs.
00087         // Thus, we both iterator on i=0...l-1 and j=i+1...l
00088         assert (_airportOrderedList.size() >= 2);
00089
00090         _segmentList.clear();
00091         for (AirportOrderedList_T::const_iterator itAirport_i =
00092              _airportOrderedList.begin();
00093              itAirport_i != _airportOrderedList.end()-1; ++itAirport_i) {

```



```

00094         for (AirportOrderedList_T::const_iterator itAirport_j = itAirport_i + 1;
00095              itAirport_j != _airportOrderedList.end(); ++itAirport_j) {
00096             SegmentStruct lSegmentStruct;
00097             lSegmentStruct._boardingPoint = *itAirport_i;
00098             lSegmentStruct._offPoint = *itAirport_j;
00099
00100             _segmentList.push_back (lSegmentStruct);
00101         }
00102     }
00103
00104     // Clear the lists of airports, so that it is ready for the next flight
00105     _airportList.clear();
00106     _airportOrderedList.clear();
00107 }
00108
00109 // //////////////////////////////////////
00110 void FlightPeriodStruct::
00111 addSegmentCabin (const SegmentStruct& iSegment,
00112                 const SegmentCabinStruct& iCabin) {
00113     // Retrieve the Segment structure corresponding to the (boarding, off)
point
00114     // pair.
00115     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00116     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00117         const SegmentStruct& lSegment = *itSegment;
00118
00119         const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00120         const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00121         if (lSegment._boardingPoint == lBoardingPoint
00122             && lSegment._offPoint == lOffPoint) {
00123             break;
00124         }
00125     }
00126
00127     // If the segment key (airport pair) given in the schedule input file
00128     // does not correspond to the leg (boarding, off) points, throw an
exception
00129     // so that the user knows the schedule input file is corrupted.
00130     if (itSegment == _segmentList.end()) {
00131         STDAIR_LOG_ERROR ("Within the schedule input file, there is a "
00132                          << "flight for which the airports of segments "
00133                          << "and those of the legs do not correspond.");
00134         throw SegmentDateNotFoundException ("Within the schedule input file, "
00135                                             "there is a flight for which the "
00136                                             "airports of segments and those of "
00137                                             "the legs do not correspond.");
00138     }
00139
00140     // Add the Cabin structure to the Segment Cabin structure.
00141     assert (itSegment != _segmentList.end());
00142     SegmentStruct& lSegment = *itSegment;
00143     lSegment._cabinList.push_back (iCabin);
00144 }
00145
00146 // //////////////////////////////////////
00147 void FlightPeriodStruct::
00148 addSegmentCabin (const SegmentCabinStruct& iCabin) {
00149     // Iterate on all the Segment structures (as they get the same cabin
00150     // definitions)
00151     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00152          itSegment != _segmentList.end(); ++itSegment) {
00153         SegmentStruct& lSegment = *itSegment;
00154
00155         lSegment._cabinList.push_back (iCabin);
00156     }
00157 }
00158
00159 // //////////////////////////////////////
00160 void FlightPeriodStruct::
00161 addFareFamily (const SegmentStruct& iSegment,
00162               const SegmentCabinStruct& iCabin,
00163               const FareFamilyStruct& iFareFamily) {
00164     // Retrieve the Segment structure corresponding to the (boarding, off)
point

```

```

00165 // pair.
00166 SegmentStructList_T::iterator itSegment = _segmentList.begin();
00167 for ( ; itSegment != _segmentList.end(); ++itSegment) {
00168     const SegmentStruct& lSegment = *itSegment;
00169
00170     const stdair::AirportCode_T& lBoardingPoint = lSegment._boardingPoint;
00171     const stdair::AirportCode_T& lOffPoint = lSegment._offPoint;
00172     if (lSegment._boardingPoint == lBoardingPoint
00173         && lSegment._offPoint == lOffPoint) {
00174         break;
00175     }
00176 }
00177
00178 // If the segment key (airport pair) given in the schedule input file
00179 // does not correspond to the leg (boarding, off) points, throw an
exception
// so that the user knows the schedule input file is corrupted.
00180 if (itSegment == _segmentList.end()) {
00181     STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00182         << "for which the airports of segments and "
00183         << "those of the legs do not correspond.");
00184     throw SegmentDateNotFoundException ("Within the schedule input file, "
00185         "there is a flight for which the "
00186         "airports of segments and those of "
00187         "the legs do not correspond.");
00188 }
00189
00190 // Add the Cabin structure to the Segment Cabin structure.
00191 assert (itSegment != _segmentList.end());
00192 SegmentStruct& lSegment = *itSegment;
00193
00194 // Retrieve the Segment cabin structure given the cabin code
00195 SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00196 for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00197     const SegmentCabinStruct& lCabin = *itCabin;
00198
00199     const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00200     if (lCabin._cabinCode == lCabinCode) {
00201         break;
00202     }
00203 }
00204
00205 // If the segmentCabin key (cabin code) given in the schedule input file
00206 // does not correspond to the stored cabin codes, throw an exception
00207 // so that the user knows the schedule input file is corrupted.
00208 if (itCabin == lSegment._cabinList.end()) {
00209     STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00210         << "for which the cabin code does not exist.");
00211     throw SegmentDateNotFoundException ("Within the schedule input file, "
00212         "there is a flight for which the "
00213         "cabin code does not exist.");
00214 }
00215
00216 // Add the Cabin structure to the Segment Cabin structure.
00217 assert (itCabin != lSegment._cabinList.end());
00218 SegmentCabinStruct& lCabin = *itCabin;
00219 lCabin._fareFamilies.push_back(iFareFamily);
00220 }
00221
00222 // //////////////////////////////////////
00223 void FlightPeriodStruct::
00224 addFareFamily (const SegmentCabinStruct& iCabin,
00225     const FareFamilyStruct& iFareFamily) {
00226     // Iterate on all the Segment structures (as they get the same cabin
00227     // definitions)
00228
00229     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00230         itSegment != _segmentList.end(); ++itSegment) {
00231         SegmentStruct& lSegment = *itSegment;
00232
00233         // Retrieve the Segment cabin structure given the cabin code
00234         SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00235         for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00236             const SegmentCabinStruct& lCabin = *itCabin;

```

```

00238
00239         const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00240         if (lCabin._cabinCode == lCabinCode) {
00241             break;
00242         }
00243     }
00244
00245     // If the segmentCabin key (cabin code) given in the schedule input file
00246     // does not correspond to the stored cabin codes, throw an exception
00247     // so that the user knows the schedule input file is corrupted.
00248     if (itCabin == lSegment._cabinList.end()) {
00249         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight"
00250             << " for which the cabin code does not exist.");
00251         throw SegmentDateNotFoundException ("Within the schedule input file, "
00252             "there is a flight for which the "
00253             "cabin code does not exist.");
00254     }
00255
00256     // Add the Cabin structure to the Segment Cabin structure.
00257     assert (itCabin != lSegment._cabinList.end());
00258     SegmentCabinStruct& lCabin = *itCabin;
00259     lCabin._fareFamilies.push_back (iFareFamily);
00260 }
00261 }
00262
00263 }

```

25.71 airinv/bom/FlightPeriodStruct.hpp File Reference

```

#include <string>          #include <stdair/stdair_inventory_-
types.hpp>               #include <stdair/basic/StructAbstract.hpp>
#include <stdair/bom/DoWStruct.hpp> #include <airinv/bom/-
LegCabinStruct.hpp>     #include <airinv/bom/LegStruct.hpp>
#include <airinv/bom/SegmentStruct.hpp> #include <airinv/bom/-
SegmentCabinStruct.hpp> #include <airinv/bom/FareFamily-
Struct.hpp> #include <airinv/bom/AirportList.hpp>

```

Classes

- struct [AIRINV::FlightPeriodStruct](#)

Namespaces

- namespace [AIRINV](#)

25.72 FlightPeriodStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
00002 #define __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_inventory_types.hpp>
00011 #include <stdair/basic/StructAbstract.hpp>
00012 #include <stdair/bom/DoWStruct.hpp>

```

```

00013 // AirInv
00014 #include <airinv/bom/LegCabinStruct.hpp>
00015 #include <airinv/bom/LegStruct.hpp>
00016 #include <airinv/bom/SegmentStruct.hpp>
00017 #include <airinv/bom/SegmentCabinStruct.hpp>
00018 #include <airinv/bom/FareFamilyStruct.hpp>
00019 #include <airinv/bom/AirportList.hpp>
00020
00021 namespace AIRINV {
00022
00023     struct FlightPeriodStruct : public stdair::StructAbstract {
00024
00025         stdair::Date_T getDate() const;
00026
00027         stdair::Duration_T getTime() const;
00028
00029         const std::string describe() const;
00030
00031         void addAirport (const stdair::AirportCode_T&);
00032
00033         void buildSegments ();
00034
00035         void addSegmentCabin (const SegmentStruct&,
00036                             const SegmentCabinStruct&);
00037
00038         void addSegmentCabin (const SegmentCabinStruct&);
00039
00040         void addFareFamily (const SegmentStruct&,
00041                             const SegmentCabinStruct&,
00042                             const FareFamilyStruct&);
00043
00044         void addFareFamily (const SegmentCabinStruct&,
00045                             const FareFamilyStruct&);
00046
00047         FlightPeriodStruct ();
00048
00049         // Attributes
00050         stdair::AirlineCode_T _airlineCode;
00051         stdair::FlightNumber_T _flightNumber;
00052         stdair::DatePeriod_T _dateRange;
00053         stdair::DoWStruct _dow;
00054         LegStructList_T _legList;
00055         SegmentStructList_T _segmentList;
00056
00057         bool _legAlreadyDefined;
00058         LegStruct _itLeg;
00059         LegCabinStruct _itLegCabin;
00060
00061         stdair::Date_T _dateRangeStart;
00062         stdair::Date_T _dateRangeEnd;
00063         unsigned int _itYear;
00064         unsigned int _itMonth;
00065         unsigned int _itDay;
00066         int _dateOffset;
00067
00068         long _itHours;
00069         long _itMinutes;
00070         long _itSeconds;
00071
00072         AirportList_T _airportList;
00073         AirportOrderedList_T _airportOrderedList;
00074
00075         bool _areSegmentDefinitionsSpecific;
00076         SegmentStruct _itSegment;
00077         SegmentCabinStruct _itSegmentCabin;
00078     };
00079
00080 }
00081 #endif // __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP

```

25.73 airinv/bom/GuillotineBlockHelper.cpp File Reference

```
#include <cassert> #include <cmath> #include <stdair/basic/-
BasConst_Inventory.hpp> #include <stdair/bom/BomRetriever.-
hpp> #include <stdair/bom/BomManager.hpp> #include <stdair/bom/-
SegmentDate.hpp> #include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp> #include <stdair/bom/-
BookingClass.hpp> #include <stdair/bom/GuillotineBlock.-
hpp> #include <stdair/service/Logger.hpp> #include <airinv/basic/-
BasConst_Curves.hpp> #include <airinv/bom/Guillotine-
BlockHelper.hpp> #include <airinv/bom/FlightDateHelper.-
hpp> #include <airinv/bom/SegmentCabinHelper.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.74 GuillotineBlockHelper.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <cmath>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Inventory.hpp>
00009 #include <stdair/bom/BomRetriever.hpp>
00010 #include <stdair/bom/BomManager.hpp>
00011 #include <stdair/bom/SegmentDate.hpp>
00012 #include <stdair/bom/SegmentCabin.hpp>
00013 #include <stdair/bom/FareFamily.hpp>
00014 #include <stdair/bom/BookingClass.hpp>
00015 #include <stdair/bom/GuillotineBlock.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 // AirInv
00018 #include <airinv/basic/BasConst_Curves.hpp>
00019 #include <airinv/bom/GuillotineBlockHelper.hpp>
00020 #include <airinv/bom/FlightDateHelper.hpp>
00021 #include <airinv/bom/SegmentCabinHelper.hpp>
00022
00023 namespace AIRINV {
00024
00025 // //////////////////////////////////////
00026 void GuillotineBlockHelper::
00027 takeSnapshots (stdair::GuillotineBlock& ioGuillotineBlock,
00028               const stdair::DateTime_T& iSnapshotTime) {
00029     // Retrieve the segment-cabin index and take the snapshots for
00030     // each segment-cabin.
00031     const stdair::SegmentCabinIndexMap_T& lSegmentCabinIndexMap =
00032         ioGuillotineBlock.getSegmentCabinIndexMap();
00033     for (stdair::SegmentCabinIndexMap_T::const_iterator itSCIdx =
00034          lSegmentCabinIndexMap.begin();
00035          itSCIdx != lSegmentCabinIndexMap.end(); ++itSCIdx) {
00036         const stdair::SegmentCabin* lSC_ptr = itSCIdx->first;
00037         assert (lSC_ptr != NULL);
00038         const stdair::BlockNumber_T& lSCIdx = itSCIdx->second;
00039
00040         const stdair::Date_T& lSnapshotDate = iSnapshotTime.date();
00041
00042         // Compare the date of the snapshot time and the departure date of
00043         // the segment-cabin in order to verify the necessity of taking
00044         snapshots.
00045     }
```

```

00044     const stdair::SegmentDate& lSegmentDate =
00045         stdair::BomManager::getParent<stdair::SegmentDate> (*lSC_ptr);
00046     const stdair::Date_T& lDepartureDate = lSegmentDate.getBoardingDate();
00047     const stdair::DateOffset_T lDateOffset = lDepartureDate - lSnapshotDate;
00048     const stdair::DTD_T lDTD = lDateOffset.days() + 1;
00049
00050     if (lDTD >= 0 && lDTD <= stdair::DEFAULT_MAX_DTD) {
00051         SegmentCabinHelper::updateAvailabilities (*lSC_ptr);
00052         takeSnapshots (ioGuillotineBlock, lDTD, *lSC_ptr, lSCIdx);
00053         registerProductAndPriceOrientedBookings (ioGuillotineBlock,
00054             lDTD, *lSC_ptr, lSCIdx);
00055     }
00056 }
00057 }
00058
00059 // //////////////////////////////////////
00060 void GuillotineBlockHelper::
00061 takeSnapshots (stdair::GuillotineBlock& ioGuillotineBlock,
00062     const stdair::DTD_T& iDTD,
00063     const stdair::SegmentCabin& iSegmentCabin,
00064     const stdair::BlockNumber_T iSegmentCabinIdx) {
00065
00066     // Extract the views for the corresponding DTD and segment-cabin.
00067     stdair::SegmentCabinDTDSnapshotView_T lBookingView = ioGuillotineBlock.
00068         getSegmentCabinDTDSnapshotView (iSegmentCabinIdx,
00069             iSegmentCabinIdx, iDTD);
00069     stdair::SegmentCabinDTDSnapshotView_T lCancellationView = ioGuillotineBlock
00070
00071         getSegmentCabinDTDCancellationSnapshotView (iSegmentCabinIdx,
00072             iSegmentCabinIdx, iDTD);
00073     stdair::SegmentCabinDTDSnapshotView_T lAvailabilityView = ioGuillotineBlock
00074
00075         getSegmentCabinDTDAvailabilitySnapshotView (iSegmentCabinIdx,
00076             iSegmentCabinIdx, iDTD);
00076
00077     // Retrieve the block index of the segment-cabin.
00078     std::ostringstream lSCMapKey;
00079     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
00080         << iSegmentCabin.describeKey();
00081     const stdair::BlockIndex_T& lCabinIdx =
00082         ioGuillotineBlock.getBlockIndex (lSCMapKey.str());
00083     lAvailabilityView[lCabinIdx] = iSegmentCabin.getAvailabilityPool();
00084
00085     // Browse the booking class list
00086     const stdair::BookingClassList_T& lBCList =
00087         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00088     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00089         itBC != lBCList.end(); ++itBC) {
00090         const stdair::BookingClass* lBookingClass_ptr = *itBC;
00091         assert (lBookingClass_ptr != NULL);
00092
00093         // Retrieve the block index of the booking class.
00094         const stdair::BlockIndex_T& lIdx =
00095             ioGuillotineBlock.getBlockIndex (lBookingClass_ptr->describeKey());
00096
00097         // DEBUG
00098         // STDAIR_LOG_DEBUG ("Taking snapshot for "
00099             // << iSegmentCabin.describeKey() << ", "
00100             // << lBookingClass_ptr->describeKey()
00101             // << ", DTD: " << iDTD << ", nb of bookings: "
00102             // << lBookingClass_ptr->getNbOfBookings());
00103
00104         // Write the snapshot.
00105         lBookingView[lIdx] = lBookingClass_ptr->getNbOfBookings();
00106         lCancellationView[lIdx] =
00107             lBookingClass_ptr->getNbOfCancellations();
00108         lAvailabilityView[lIdx] =
00109             lBookingClass_ptr->getSegmentAvailability();
00110     }
00111 }
00112 }
00113
00114 // //////////////////////////////////////
00115 void GuillotineBlockHelper::registerProductAndPriceOrientedBookings

```

```

00116 (stdair::GuillotineBlock& ioGuillotineBlock, const stdair::DTD_T& iDTD,
00117 const stdair::SegmentCabin& iSegmentCabin,
00118 const stdair::BlockNumber_T iSegmentCabinIdx) {
00119
00120     // Extract the views for the corresponding DTD and segment-cabin.
00121     stdair::SegmentCabinDTDRangeSnapshotView_T lRangeBookingView =
00122         ioGuillotineBlock.getSegmentCabinDTDRangeBookingSnapshotView (
00123             iSegmentCabinIdx, iSegmentCabinIdx, iDTD, iDTD + 1);
00124     stdair::SegmentCabinDTDRangeSnapshotView_T lRangeCancellationView =
00125         ioGuillotineBlock.getSegmentCabinDTDRangeCancellationSnapshotView (
00126             iSegmentCabinIdx, iSegmentCabinIdx, iDTD, iDTD + 1);
00127     stdair::SegmentCabinDTDSnapshotView_T lProductAndPriceOrientedBookingView =
00128         ioGuillotineBlock.
00129         getSegmentCabinDTDProductAndPriceOrientedBookingSnapshotView (iSegmentCabinIdx, iSegmentCabinIdx, iDTD);
00130
00131     // Retrieve the block index of the segment-cabin.
00132     std::ostream lSCMapKey;
00133     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
00134         << iSegmentCabin.describeKey();
00135     const stdair::BlockIndex_T& lCabinIdx =
00136         ioGuillotineBlock.getBlockIndex (lSCMapKey.str());
00137
00138     // Retrieve the lowest class and treat the number of gross
00139     // bookings of this class the price oriented bookings.
00140     const stdair::BookingClassList_T& lBCList =
00141         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00142     stdair::BookingClassList_T::const_reverse_iterator itBC = lBCList.rbegin();
00143     assert (itBC != lBCList.rend());
00144     stdair::BookingClass* lLowestClass_ptr = *itBC; ++itBC;
00145     assert (lLowestClass_ptr != NULL);
00146
00147     // Retrieve the block index of the booking class.
00148     const stdair::BlockIndex_T& lClassIdx =
00149         ioGuillotineBlock.getBlockIndex (lLowestClass_ptr->describeKey());
00150
00151     // Compute the number of gross bookings for this class.
00152     const stdair::NbOfBookings_T lNbOfNetBkgs =
00153         lRangeBookingView[lClassIdx][0] - lRangeBookingView[lClassIdx][1];
00154     const stdair::NbOfCancellations_T lNbOfCx =
00155         lRangeCancellationView[lClassIdx][0] - lRangeCancellationView[lClassIdx][1];
00156
00157     const stdair::NbOfBookings_T lNbOfGrossBkgs = lNbOfNetBkgs + lNbOfCx;
00158
00159     // Write this number of bookings to the price-oriented value.
00160     lProductAndPriceOrientedBookingView[lCabinIdx] = lNbOfGrossBkgs;
00161
00162     // Retrieve the lowest yield.
00163     const stdair::Yield_T& lLowestYield = lLowestClass_ptr->getYield();
00164
00165     // Boolean for "no lower class available" verification.
00166     bool noLowerClassAvl = true;
00167     if (lLowestClass_ptr->getSegmentAvailability() >= 1.0) {
00168         noLowerClassAvl = false;
00169     }
00170
00171     // Retrieve the FRAT5 coefficient and compute the sell-up coef.
00172     const double lFRAT5Coef = getFRAT5Coefficient (iDTD);
00173     const double lSellUpCoef = -log(0.5) / (lFRAT5Coef - 1);
00174
00175     // Browse the booking class list
00176     for (; itBC != lBCList.rend(); ++itBC) {
00177         const stdair::BookingClass* lBookingClass_ptr = *itBC;
00178         assert (lBookingClass_ptr != NULL);
00179
00180         // Retrieve the yield of the this class.
00181         const stdair::Yield_T& lYield = lBookingClass_ptr->getYield();
00182         assert (lYield > lLowestYield);
00183
00184         // Retrieve the block index of the booking class.
00185         const stdair::BlockIndex_T& lIdx =
00186             ioGuillotineBlock.getBlockIndex (lBookingClass_ptr->describeKey());
00187
00188         // Compute the number of gross bookings for this class.
00189         const stdair::NbOfBookings_T lNetBkgs =

```

```

00186         lRangeBookingView[lIdx][0] - lRangeBookingView[lIdx][1];
00187     const stdair::NbOfCancellations_T lCx =
00188         lRangeCancellationView[lIdx][0] - lRangeCancellationView[lIdx][1];
00189     const stdair::NbOfBookings_T lGrossBkgs = lNetBkgs + lCx;
00190
00191     // If there is a lower class available, these gross bookings
00192     // will be considered product-oriented. Otherwise, they will be
00193     // considered price-oriented
00194     if (noLowerClassAvl == false) {
00195         lProductAndPriceOrientedBookingView[lIdx] = lGrossBkgs;
00196     } else {
00197         // Convert the bookings to Q-equivalent bookings.
00198         const stdair::NbOfBookings_T lQEqBkgs =
00199             lGrossBkgs / exp ((1.0 - lYield/lLowestYield) * lSellUpCoef);
00200         lProductAndPriceOrientedBookingView[lCabinIdx] += lQEqBkgs;
00201
00202         if (lBookingClass_ptr->getSegmentAvailability() >= 1.0) {
00203             noLowerClassAvl = false;
00204         }
00205     }
00206 }
00207 }
00208
00209 // //////////////////////////////////////
00210 double GuillotineBlockHelper::getFRAT5Coefficient (const stdair::DTD_T& iDTD)
00211 {
00212     FRAT5Curve_T::const_iterator itFRAT5 =
00213         DEFAULT_PICKUP_FRAT5_CURVE.lower_bound (iDTD);
00214     assert (itFRAT5 != DEFAULT_PICKUP_FRAT5_CURVE.end());
00215
00216     if (itFRAT5 == DEFAULT_PICKUP_FRAT5_CURVE.begin()) {
00217         return itFRAT5->second;
00218     }
00219
00220     assert (itFRAT5 != DEFAULT_PICKUP_FRAT5_CURVE.begin());
00221     FRAT5Curve_T::const_iterator itNextFRAT5 = itFRAT5; --itNextFRAT5;
00222
00223     const stdair::DTD_T& lPrevDTD = itFRAT5->first;
00224     const stdair::DTD_T& lNextDTD = itNextFRAT5->first;
00225     const double& lPrevFRAT5 = itFRAT5->second;
00226     const double& lNextFRAT5 = itNextFRAT5->second;
00227     assert (lPrevDTD > lNextDTD);
00228
00229     double oFRAT5 = lPrevFRAT5
00230         + (iDTD - lNextDTD) * (lNextFRAT5 - lPrevFRAT5) / (lPrevDTD - lNextDTD);
00231
00232     return oFRAT5;
00233 }

```

25.75 airinv/bom/GuillotineBlockHelper.hpp File Reference

```
#include <string>    #include <stdair/stdair_basic_types.-
hpp>
```

Classes

- class [AIRINV::GuillotineBlockHelper](#)

Namespaces

- namespace [stdair](#)

Forward declarations.

- namespace `AIRINV`

25.76 GuillotineBlockHelper.hpp

```

00001 #ifndef __AIRINV_BOM_GUILLOTINEBLOCKHELPER_HPP
00002 #define __AIRINV_BOM_GUILLOTINEBLOCKHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014     class GuillotineBlock;
00015     class SegmentCabin;
00016 }
00017
00018 namespace AIRINV {
00019
00020     class GuillotineBlockHelper {
00021     public:
00022         // ////////////////////////////////// Business Methods //////////////////////////////////
00023         static void takeSnapshots (stdair::GuillotineBlock&,
00024                                     const stdair::DateTime_T&);
00025     private:
00026         // ////////////////////////////////// Helpers for business methods. //////////////////////////////////
00027         static void takeSnapshots (stdair::GuillotineBlock&, const stdair::DTD_T&,
00028                                     const stdair::SegmentCabin&,
00029                                     const stdair::BlockNumber_T);
00030
00031         static void registerProductAndPriceOrientedBookings
00032             (stdair::GuillotineBlock&, const stdair::DTD_T&,
00033              const stdair::SegmentCabin&, const stdair::BlockNumber_T);
00034
00035         static double getFRAT5Coefficient (const stdair::DTD_T&);
00036     };
00037
00038 }
00039
00040 #endif // __AIRINV_BOM_GUILLOTINEBLOCKHELPER_HPP

```

25.77 airinv/bom/InventoryHelper.cpp File Reference

```

#include <cassert>      #include <stdair/bom/BomRetriever.-
                        hpp> #include <stdair/bom/BomManager.hpp> #include <stdair/bom/-
                        Inventory.hpp>      #include <stdair/bom/FlightDate.hpp> ×
#include <stdair/bom/SegmentDate.hpp> #include <stdair/bom/-
                        SegmentCabin.hpp>    #include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp> #include <stdair/bom/-
                        GuillotineBlock.hpp> #include <stdair/bom/TravelSolution-
                        Struct.hpp> #include <stdair/service/Logger.hpp> #include
<stdair/bom/LegCabin.hpp> #include <airinv/bom/Inventory-
                        Helper.hpp> #include <airinv/bom/FlightDateHelper.hpp> ×
#include <airinv/bom/GuillotineBlockHelper.hpp> #include
<airinv/bom/SegmentCabinHelper.hpp>

```

Namespaces

- namespace `AIRINV`

25.78 InventoryHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/bom/BomRetriever.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/Inventory.hpp>
00010 #include <stdair/bom/FlightDate.hpp>
00011 #include <stdair/bom/SegmentDate.hpp>
00012 #include <stdair/bom/SegmentCabin.hpp>
00013 #include <stdair/bom/FareFamily.hpp>
00014 #include <stdair/bom/BookingClass.hpp>
00015 #include <stdair/bom/GuillotineBlock.hpp>
00016 #include <stdair/bom/TravelSolutionStruct.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 #include <stdair/bom/LegCabin.hpp>
00019 // AirInv
00020 #include <airinv/bom/InventoryHelper.hpp>
00021 #include <airinv/bom/FlightDateHelper.hpp>
00022 #include <airinv/bom/GuillotineBlockHelper.hpp>
00023 #include <airinv/bom/SegmentCabinHelper.hpp>
00024
00025 namespace AIRINV {
00026
00027 // //////////////////////////////////////
00028 void InventoryHelper::fillFromRouting (const stdair::Inventory& iInventory) {
00029     const stdair::FlightDateList_T& lFlightDateList =
00030         stdair::BomManager::getList<stdair::FlightDate> (iInventory);
00031
00032     // Browse the list of flight-dates and update each flight-date.
00033     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00034         lFlightDateList.begin();
00035         itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00036         const stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00037         assert (lCurrentFlightDate_ptr != NULL);
00038         FlightDateHelper::fillFromRouting (*lCurrentFlightDate_ptr);
00039     }
00040 }
00041
00042 // //////////////////////////////////////
00043 void InventoryHelper::
00044 calculateAvailability (const stdair::Inventory& iInventory,
00045                     const std::string& iFullSegmentDateKey,
00046                     stdair::TravelSolutionStruct& ioTravelSolution) {
00047
00048     // Create the map of class/availability for the given segment date.
00049     stdair::ClassAvailabilityMap_T lClassAvailabilityMap;
00050
00051     // DEBUG
00052     STDAIR_LOG_DEBUG (iFullSegmentDateKey);
00053     //
00054     stdair::SegmentDate* lSegmentDate_ptr =
00055         stdair::BomRetriever::retrieveSegmentDateFromLongKey (iInventory,
00056                                                             iFullSegmentDateKey)
00057 ;
00058     assert (lSegmentDate_ptr != NULL);
00059
00060     // Browse the segment-cabins and fill the map with the availability of
00061     // each booking class.
00062     const stdair::SegmentCabinList_T& lSegmentCabinList =
00063         stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);
00064     for (stdair::SegmentCabinList_T::const_iterator itCabin =

```

```

00064         lSegmentCabinList.begin();
00065         itCabin != lSegmentCabinList.end(); ++itCabin) {
00066             stdair::SegmentCabin* lSegmentCabin_ptr = *itCabin;
00067             assert (lSegmentCabin_ptr != NULL);
00068
00069
00070             // Compute the availability using the AU and the cumulative
00071             // booking counter.
00072             SegmentCabinHelper::updateAvailabilities (*lSegmentCabin_ptr);
00073             const stdair::BookingClassList_T& lBCList =
00074                 stdair::BomManager::getList<stdair::BookingClass> (*lSegmentCabin_ptr);
00075             for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00076                 lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00077                 stdair::BookingClass* lBC_ptr = *itBC;
00078                 assert (lBC_ptr != NULL);
00079
00080                 const stdair::Availability_T lAvl = lBC_ptr->getSegmentAvailability();
00081
00082                 const stdair::ClassCode_T& lClassCode = lBC_ptr->getClassCode();
00083
00084                 const bool insertSuccessful = lClassAvailabilityMap.
00085                     insert (stdair::ClassAvailabilityMap_T::value_type (lClassCode,
00086                                     lAvl)).second;
00087                 assert (insertSuccessful == true);
00088             }
00089         }
00090     //
00091     ioTravelSolution.addClassAvailabilityMap (lClassAvailabilityMap);
00092 }
00093
00094
00095 // //////////////////////////////////////
00096 void InventoryHelper::
00097 getYieldAndBidPrice (const stdair::Inventory& iInventory,
00098                     const std::string& iFullSegmentDateKey,
00099                     stdair::TravelSolutionStruct& ioTravelSolution) {
00100
00101     // Create the map of class/availability for the given segment date.
00102     // stdair::ClassAvailabilityMap_T lClassAvailabilityMap;
00103
00104     stdair::ClassYieldMap_T lClassYieldMap;
00105
00106     stdair::ClassBpvMap_T lClassBpvMap;
00107
00108     // DEBUG
00109     STDAIR_LOG_DEBUG (iFullSegmentDateKey);
00110     //
00111     stdair::SegmentDate* lSegmentDate_ptr =
00112         stdair::BomRetriever::retrieveSegmentDateFromLongKey (iInventory,
00113                                                         iFullSegmentDateKey
00114 );
00115     assert (lSegmentDate_ptr != NULL);
00116
00117     // Browse the segment-cabins and fill the maps with the bid price vector
00118     // reference
00119     // and yield of each booking class.
00120     const stdair::SegmentCabinList_T& lSegmentCabinList =
00121         stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);
00122     for (stdair::SegmentCabinList_T::const_iterator itCabin =
00123         lSegmentCabinList.begin();
00124         itCabin != lSegmentCabinList.end(); ++itCabin) {
00125         stdair::SegmentCabin* lSegmentCabin_ptr = *itCabin;
00126         assert (lSegmentCabin_ptr != NULL);
00127
00128         stdair::BidPriceVector_T lBPV;
00129
00130         //stdair::BidPriceVector_T lBPV;
00131         stdair::LegCabinList_T lLegCabinList =
00132             stdair::BomManager::getList<stdair::LegCabin> (*lSegmentCabin_ptr);
00133         assert (!lLegCabinList.empty());
00134         if (lLegCabinList.size() > 1) {
00135             // Compute the sum of bid prices and return a vector containing that

```

```

value.
00135     stdair::BidPrice_T lBidPriceValue = 0;
00136     for (stdair::LegCabinList_T::const_iterator itLC = lLegCabinList.begin(
);
00137         itLC != lLegCabinList.end(); ++itLC) {
00138         const stdair::LegCabin* lLegCabin_ptr = *itLC;
00139         const stdair::BidPriceVector_T& lLegCabinBPV = lLegCabin_ptr->
getBidPriceVector();
00140         if (!lLegCabinBPV.empty()) {
00141             lBidPriceValue += lLegCabinBPV.back();
00142         } else {
00143             // If the remaining capacity is zero (empty bid price vector) on
one of the legs,
00144             // then the remaining capacity of the segment is also zero (return
an empty bid price).
00145             lBidPriceValue = std::numeric_limits<stdair::BidPrice_T>::max();
00146             break;
00147         }
00148     }
00149     if (lBidPriceValue < std::numeric_limits<stdair::BidPrice_T>::max()) {
00150         lBPV.push_back(lBidPriceValue);
00151     }
00152 } else {
00153     const stdair::LegCabin* lLegCabin_ptr = lLegCabinList.front();
00154     lBPV = lLegCabin_ptr->getBidPriceVector();
00155 }
00156 }
00157
00158 // const stdair::CabinCapacity_T& lCabinCapacity =
lSegmentCabin_ptr->getCapacity();
00159 // const stdair::CommittedSpace_T& lCommittedSpace =
lSegmentCabin_ptr->getCommittedSpace();
00160 // assert (lCabinCapacity - lCommittedSpace > 0);
00161 // lBPV.resize(lCabinCapacity - lCommittedSpace);
00162
00163 const stdair::Availability_T& lAvailabilityPool =
lSegmentCabin_ptr->getAvailabilityPool();
00164 //assert (lAvailabilityPool > 0);
00165
00166 if (lAvailabilityPool < lBPV.size()) {
00167     lBPV.resize(lAvailabilityPool);
00168 }
00169
00170 //
00171 ioTravelSolution.addBidPriceVector (lBPV);
00172
00173 const stdair::BidPriceVectorHolder_T& lBidPriceVectorHolder =
ioTravelSolution.getBidPriceVectorHolder();
00174 const stdair::BidPriceVectorHolder_T::const_reverse_iterator itBPV =
lBidPriceVectorHolder.rbegin();
00175 const stdair::BidPriceVector_T& lBpvRef = *itBPV;
00176
00177 const stdair::FareFamilyList_T& lFFList =
stdair::BomManager::getList<stdair::FareFamily> (*lSegmentCabin_ptr);
00178 for (stdair::FareFamilyList_T::const_iterator itFF = lFFList.begin();
itFF != lFFList.end(); ++itFF) {
00179     const stdair::FareFamily* lFareFamily_ptr = *itFF;
00180     assert (lFareFamily_ptr != NULL);
00181
00182     const stdair::BookingClassList_T& lBCList =
stdair::BomManager::getList<stdair::BookingClass> (*lFareFamily_ptr);
00183 for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
itBC != lBCList.end(); ++itBC) {
00184     const stdair::BookingClass* lBC_ptr = *itBC;
00185     assert (lBC_ptr != NULL);
00186
00187     const stdair::ClassCode_T& lClassCode = lBC_ptr->getClassCode();
00188
00189     const stdair::YieldValue_T lYld = lBC_ptr->getYield();
00190     const bool insertYieldMapSuccessful = lClassYieldMap.
insert (stdair::ClassYieldMap_T::value_type (lClassCode,
lYld)).second;
00191
00192
00193
00194
00195
00196
00197
00198
00199
00200
00201

```

```

00202         assert (insertYieldMapSuccessful == true);
00203
00204         const bool insertBvpMapSuccessful = lClassBvpMap.
00205             insert (stdair::ClassBvpMap_T::value_type (lClassCode,
00206                                                         &lBvpRef)).second;
00207         assert (insertBvpMapSuccessful == true);
00208
00209         // DEBUG
00210         // STDAIR_LOG_DEBUG ("Class: " << lClassCode
00211                             << ", " << "Yield: " << lYld << ", "
00212                             << "Bid price: " << lBvpRef.back() << ", "
00213                             << "Remaining capacity: "
00214                             << lCabinCapacity - lCommittedSpace);
00215
00216         //
00217         stdair::BidPrice_T lBvpVal = std::numeric_limits<double>::max();
00218         if (lBvpRef.empty() == false) {
00219             lBvpVal = lBvpRef.back();
00220         }
00221
00222         //lBvpVal = boost::lexical_cast<std::string> (lBvpRef.back());
00223         STDAIR_LOG_DEBUG ("Class: " << lClassCode
00224                             << ", " << "Yield: " << lYld << ", "
00225                             << "Bid price: " << lBvpVal << ", "
00226                             << "Remaining capacity: " << lAvailabilityPool
00227                             << " Segment date: " << iFullSegmentDateKey);
00228     }
00229 }
00230
00231 //
00232 ioTravelSolution.addClassYieldMap (lClassYieldMap);
00233 ioTravelSolution.addClassBvpMap (lClassBvpMap);
00234 }
00235
00236
00237
00238 ///////////////////////////////////////////////////////////////////
00239 bool InventoryHelper::sell (stdair::Inventory& ioInventory,
00240                             const std::string& iFullSegmentDateKey,
00241                             const stdair::ClassCode_T& iClassCode,
00242                             const stdair::PartySize_T& iPartySize) {
00243     bool hasSaleBeenSuccessful = false;
00244
00245     // DEBUG
00246     STDAIR_LOG_DEBUG ("Full key: '" << iFullSegmentDateKey
00247                       << "', " << iClassCode);
00248
00249     //
00250     stdair::BookingClass* lBookingClass_ptr =
00251         stdair::BomRetriever::retrieveBookingClassFromLongKey(ioInventory,
00252                                                                iFullSegmentDateKey
00253                                                                iClassCode);
00254
00255     // DEBUG
00256     const std::string hasFoundBookingClassStr =
00257         (lBookingClass_ptr != NULL) ? "Yes" : "No";
00258     STDAIR_LOG_DEBUG ("Found booking class? " << hasFoundBookingClassStr);
00259
00260     if (lBookingClass_ptr != NULL) {
00261         // Register the sale in the class.
00262         lBookingClass_ptr->sell (iPartySize);
00263
00264         //
00265         stdair::FareFamily& lFareFamily =
00266             stdair::BomManager::getParent<stdair::FareFamily> (*lBookingClass_ptr);
00267
00268         //
00269         stdair::SegmentCabin& lSegmentCabin =
00270             stdair::BomManager::getParent<stdair::SegmentCabin> (lFareFamily);
00271
00272         //
00273         stdair::SegmentDate& lSegmentDate =
00274             stdair::BomManager::getParent<stdair::SegmentDate,

```

```

00275         stdair::SegmentCabin> (lSegmentCabin);
00276
00277         //
00278         stdair::FlightDate& lFlightDate =
00279             stdair::BomManager::getParent<stdair::FlightDate,
00280                 stdair::SegmentDate> (lSegmentDate);
00281
00282         // Update the committed space of the segment-cabins and the leg-cabins.
00283         SegmentCabinHelper::updateFromReservation (lFlightDate, lSegmentCabin,
00284             iPartySize);
00285
00286         // STDAIR_LOG_NOTIFICATION (lFlightDate.getDepartureDate()
00287         // << ";" << iClassCode);
00288         hasSaleBeenSuccessful = true;
00289     }
00290
00291     return hasSaleBeenSuccessful;
00292 }
00293
00294 // //////////////////////////////////////
00295 bool InventoryHelper::cancel (stdair::Inventory& ioInventory,
00296     const std::string& iFullSegmentDateKey,
00297     const stdair::ClassCode_T& iClassCode,
00298     const stdair::PartySize_T& iPartySize) {
00299     bool hasCancellationBeenSuccessful = false;
00300
00301     // DEBUG
00302     STDAIR_LOG_DEBUG ("Full key: '" << iFullSegmentDateKey
00303         << "', " << iClassCode);
00304
00305     //
00306     stdair::BookingClass* lBookingClass_ptr =
00307         stdair::BomRetriever::retrieveBookingClassFromLongKey (ioInventory,
00308             iFullSegmentDateKey
00309             ,
00310             iClassCode);
00311
00312     // DEBUG
00313     const std::string hasFoundBookingClassStr =
00314         (lBookingClass_ptr != NULL) ? "Yes" : "No";
00315     STDAIR_LOG_DEBUG ("Found booking class? " << hasFoundBookingClassStr);
00316
00317     if (lBookingClass_ptr != NULL) {
00318         // Register the cancellation in the class.
00319         lBookingClass_ptr->cancel (iPartySize);
00320
00321         //
00322         stdair::FareFamily& lFareFamily =
00323             stdair::BomManager::getParent<stdair::FareFamily> (*lBookingClass_ptr);
00324
00325         //
00326         stdair::SegmentCabin& lSegmentCabin =
00327             stdair::BomManager::getParent<stdair::SegmentCabin> (lFareFamily);
00328
00329         //
00330         stdair::SegmentDate& lSegmentDate =
00331             stdair::BomManager::getParent<stdair::SegmentDate,
00332                 stdair::SegmentCabin> (lSegmentCabin);
00333
00334         //
00335         stdair::FlightDate& lFlightDate =
00336             stdair::BomManager::getParent<stdair::FlightDate,
00337                 stdair::SegmentDate> (lSegmentDate);
00338
00339         // Update the committed space of the segment-cabins and the leg-cabins.
00340         SegmentCabinHelper::updateFromReservation (lFlightDate, lSegmentCabin,
00341             -iPartySize);
00342
00343         // STDAIR_LOG_NOTIFICATION (lFlightDate.getDepartureDate()
00344         // << ";" << iClassCode);
00345         hasCancellationBeenSuccessful = true;
00346     }
00347     return hasCancellationBeenSuccessful;

```

```

00348     }
00349
00350     // //////////////////////////////////////
00351     void InventoryHelper::takeSnapshots(const stdair::Inventory& iInventory,
00352                                         const stdair::DateTime_T& iSnapshotTime)
00353     {
00354         // Browse the guillotine block list and take the snapshots for
00355         // each guillotine.
00356         const stdair::GuillotineBlockList_T& lGuillotineBlockList =
00357             stdair::BomManager::getList<stdair::GuillotineBlock> (iInventory);
00358         for (stdair::GuillotineBlockList_T::const_iterator itGB =
00359             lGuillotineBlockList.begin();
00360             itGB != lGuillotineBlockList.end(); ++itGB) {
00361             stdair::GuillotineBlock* lGuillotineBlock_ptr = *itGB;
00362             GuillotineBlockHelper::takeSnapshots(*lGuillotineBlock_ptr, iSnapshotTime)
00363         };
00364     }
00365 }

```

25.79 airinv/bom/InventoryHelper.hpp File Reference

```

#include <string>    #include <stdair/stdair_basic_types.-
hpp>

```

Classes

- class [AIRINV::InventoryHelper](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.80 InventoryHelper.hpp

```

00001 #ifndef __AIRINV_BOM_INVENTORYHELPER_HPP
00002 #define __AIRINV_BOM_INVENTORYHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014     struct TravelSolutionStruct;
00015     class Inventory;
00016 }
00017
00018 namespace AIRINV {
00019
00020     class InventoryHelper {
00021     public:
00022         // ////////////////////////////////// Business Methods //////////////////////////////////

```

```

00027     static void fillFromRouting (const stdair::Inventory&);
00028
00030     static void calculateAvailability (const stdair::Inventory&,
00031                                     const std::string&,
00032                                     stdair::TravelSolutionStruct&);
00033
00035     static void getYieldAndBidPrice (const stdair::Inventory&,
00036                                     const std::string&,
00037                                     stdair::TravelSolutionStruct&);
00038
00040     static bool sell (stdair::Inventory&, const std::string& iSegmentDateKey,
00041                     const stdair::ClassCode_T&, const stdair::PartySize_T&);
00042
00044     static bool cancel (stdair::Inventory&, const std::string& iSegmentDateKey,
00045                       const stdair::ClassCode_T&, const stdair::PartySize_T&)
00046 ;
00048     static void takeSnapshots (const stdair::Inventory&,
00049                               const stdair::DateTime_T&);
00050 };
00051
00052 }
00053 #endif // __AIRINV_BOM_INVENTORYHELPER_HPP

```

25.81 airinv/bom/LegCabinHelper.cpp File Reference

```

#include <cassert>    #include <stdair/bom/LegCabin.hpp> ×
#include <airinv/bom/LegCabinHelper.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.82 LegCabinHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/LegCabin.hpp>
00008 // AIRINV
00009 #include <airinv/bom/LegCabinHelper.hpp>
00010
00011 namespace AIRINV {
00012
00013 }

```

25.83 airinv/bom/LegCabinHelper.hpp File Reference

Classes

- class [AIRINV::LegCabinHelper](#)

Namespaces

- namespace [stdair](#)

Forward declarations.

- namespace [AIRINV](#)

25.84 LegCabinHelper.hpp

```
00001 #ifndef __AIRINV_BOM_LEGCABINHELPER_HPP
00002 #define __AIRINV_BOM_LEGCABINHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 // Forward declarations
00009 namespace stdair {
00010     class LegCabin;
00011 }
00012
00013 namespace AIRINV {
00016     class LegCabinHelper {
00017
00018     };
00019
00020 }
00021 #endif // __AIRINV_BOM_LEGCABINHELPER_HPP
```

25.85 airinv/bom/LegCabinStruct.cpp File Reference

```
#include <cassert> #include <sstream> #include <stdair/bom/-
LegCabin.hpp> #include <airinv/bom/LegCabinStruct.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.86 LegCabinStruct.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/LegCabin.hpp>
00009 // AirInv
00010 #include <airinv/bom/LegCabinStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015 const std::string LegCabinStruct::describe() const {
00016     std::ostringstream ostr;
00017     ostr << " " << _cabinCode << ", " << _saleableCapacity
00018     << ", " << _adjustment << ", " << _dcsRegrade
00019     << ", " << _au << ", " << _avPool
00020     << ", " << _upr << ", " << _nbOfBookings << ", " << _nav
00021     << ", " << _gav << ", " << _acp << ", " << _etb
00022     << ", " << _staffNbOfBookings << ", " << _wlNbOfBookings
00023     << ", " << _groupNbOfBookings
00024     << std::endl;
00025 }
```

```

00026     for (BucketStructList_T::const_iterator itBucket = _bucketList.begin();
00027         itBucket != _bucketList.end(); ++itBucket) {
00028         const BucketStruct& lBucket = *itBucket;
00029         ostr << lBucket.describe();
00030     }
00031     if (_bucketList.empty() == false) {
00032         ostr << std::endl;
00033     }
00034     return ostr.str();
00035 }
00036
00037 // //////////////////////////////////////
00038 void LegCabinStruct::fill (stdair::LegCabin& ioLegCabin) const {
00039     // Set the Capacity
00040     ioLegCabin.setCapacities (_saleableCapacity);
00041 }
00042
00043 }

```

25.87 airinv/bom/LegCabinStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/bom/BucketStruct.hpp>

```

Classes

- struct [AIRINV::LegCabinStruct](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef [std::vector](#) < [LegCabinStruct](#) > [AIRINV::LegCabinStructList_T](#)

25.88 LegCabinStruct.hpp

```

00001 #ifndef __AIRINV_BOM_LEGCABINSTRUCT_HPP
00002 #define __AIRINV_BOM_LEGCABINSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/BucketStruct.hpp>
00015

```

```

00016 // Forward declarations
00017 namespace stdair {
00018     class LegCabin;
00019 }
00020
00021 namespace AIRINV {
00022
00023     struct LegCabinStruct : public stdair::StructAbstract {
00024         // Attributes
00025         stdair::CabinCode_T _cabinCode;
00026         stdair::CabinCapacity_T _saleableCapacity;
00027         stdair::CapacityAdjustment_T _adjustment;
00028         stdair::CapacityAdjustment_T _dcsRegrade;
00029         stdair::AuthorizationLevel_T _au;
00030         stdair::Availability_T _avPool;
00031         stdair::UPR_T _upr;
00032         stdair::NbOfBookings_T _nbOfBookings;
00033         stdair::Availability_T _nav;
00034         stdair::Availability_T _gav;
00035         stdair::OverbookingRate_T _acp;
00036         stdair::NbOfBookings_T _etb;
00037         stdair::NbOfBookings_T _staffNbOfBookings;
00038         stdair::NbOfBookings_T _wlNbOfBookings;
00039         stdair::NbOfBookings_T _groupNbOfBookings;
00040         BucketStructList_T _bucketList;
00041
00042         void fill (stdair::LegCabin&) const;
00043
00044         const std::string describe() const;
00045     };
00046
00047     typedef std::vector<LegCabinStruct> LegCabinStructList_T;
00048 }
00049
00050 #endif // __AIRINV_BOM_LEGCAINSTRUCT_HPP

```

25.89 airinv/bom/LegStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasConst_General.hpp> #include <stdair/bom/LegDate.hpp>
#include <airinv/bom/LegStruct.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.90 LegStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // STDAIR
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/LegDate.hpp>
00010 // AIRINV
00011 #include <airinv/bom/LegStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015     // //////////////////////////////////////
00016     LegStruct::LegStruct ()

```

```

00017 : _boardingDate (stdair::DEFAULT_DATE), _offDate (stdair::DEFAULT_DATE) {
00018 }
00019
00020 // //////////////////////////////////////
00021 const std::string LegStruct::describe() const {
00022     std::ostringstream ostr;
00023     ostr << " " << _boardingPoint << " / " << _boardingDate << " "
00024     << boost::posix_time::to_simple_string(_boardingTime)
00025     << " -- " << _offPoint << " / " << _offDate << " "
00026     << boost::posix_time::to_simple_string(_offTime)
00027     << " --> "
00028     << boost::posix_time::to_simple_string(_elapsed)
00029     << std::endl;
00030     for (LegCabinStructList_T::const_iterator itCabin = _cabinList.begin();
00031          itCabin != _cabinList.end(); itCabin++) {
00032         const LegCabinStruct& lCabin = *itCabin;
00033         ostr << lCabin.describe();
00034     }
00035     ostr << std::endl;
00036
00037     return ostr.str();
00038 }
00039
00040 // //////////////////////////////////////
00041 void LegStruct::fill (const stdair::Date_T& iRefDate,
00042                     stdair::LegDate& ioLegDate) const {
00043     // Set the Off Point
00044     ioLegDate.setOffPoint (_offPoint);
00045     // Set the Boarding Date
00046     ioLegDate.setBoardingDate (iRefDate + _boardingDateOffset);
00047     // Set the Boarding Time
00048     ioLegDate.setBoardingTime (_boardingTime);
00049     // Set the Off Date
00050     ioLegDate.setOffDate (iRefDate + _offDateOffset);
00051     // Set the Off Time
00052     ioLegDate.setOffTime (_offTime);
00053     // Set the Elapsed Time
00054     ioLegDate.setElapsedTime (_elapsed);
00055 }
00056
00057 // //////////////////////////////////////
00058 void LegStruct::fill (stdair::LegDate& ioLegDate) const {
00059     // Set the Off Point
00060     ioLegDate.setOffPoint (_offPoint);
00061     // Set the Boarding Date
00062     ioLegDate.setBoardingDate (_offDate);
00063     // Set the Boarding Time
00064     ioLegDate.setBoardingTime (_boardingTime);
00065     // Set the Off Date
00066     ioLegDate.setOffDate (_offDate);
00067     // Set the Off Time
00068     ioLegDate.setOffTime (_offTime);
00069     // Set the Elapsed Time
00070     ioLegDate.setElapsedTime (_elapsed);
00071 }
00072
00073 }

```

25.91 airinv/bom/LegStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/bom/LegCabinStruct.hpp>

```

Classes

- struct [AIRINV::LegStruct](#)

Namespaces

- namespace `stdair`
Forward declarations.
- namespace `AIRINV`

Typedefs

- typedef `std::vector< LegStruct > AIRINV::LegStructList_T`

25.92 LegStruct.hpp

```

00001 #ifndef __AIRINV_BOM_LEGSTRUCT_HPP
00002 #define __AIRINV_BOM_LEGSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AIRINV
00014 #include <airinv/bom/LegCabinStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class LegDate;
00019 }
00020
00021 namespace AIRINV {
00022
00023     struct LegStruct : public stdair::StructAbstract {
00024         // Attributes
00025         stdair::AirportCode_T _boardingPoint;
00026         stdair::DateOffset_T _boardingDateOffset;
00027         stdair::Date_T _boardingDate;
00028         stdair::Duration_T _boardingTime;
00029         stdair::AirportCode_T _offPoint;
00030         stdair::DateOffset_T _offDateOffset;
00031         stdair::Date_T _offDate;
00032         stdair::Duration_T _offTime;
00033         stdair::Duration_T _elapsed;
00034         LegCabinStructList_T _cabinList;
00035
00036         void fill (const stdair::Date_T& iRefDate, stdair::LegDate&) const;
00042
00043         void fill (stdair::LegDate&) const;
00044
00045         const std::string describe() const;
00046
00047         LegStruct ();
00051     };
00052
00053     typedef std::vector<LegStruct> LegStructList_T;
00055
00056
00057 }
00058 #endif // __AIRINV_BOM_LEGSTRUCT_HPP

```

25.93 airinv/bom/SegmentCabinHelper.cpp File Reference

```
#include <cassert> #include <sstream> #include <stdair/bom/-
BomManager.hpp> #include <stdair/bom/FlightDate.hpp> ×
#include <stdair/bom/LegCabin.hpp> #include <stdair/bom/-
SegmentCabin.hpp> #include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp> #include <airinv/bom/-
SegmentCabinHelper.hpp> #include <airinv/bom/FlightDate-
Helper.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.94 SegmentCabinHelper.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/FlightDate.hpp>
00010 #include <stdair/bom/LegCabin.hpp>
00011 #include <stdair/bom/SegmentCabin.hpp>
00012 #include <stdair/bom/FareFamily.hpp>
00013 #include <stdair/bom/BookingClass.hpp>
00014 // AirInv
00015 #include <airinv/bom/SegmentCabinHelper.hpp>
00016 #include <airinv/bom/FlightDateHelper.hpp>
00017
00018 namespace AIRINV {
00019
00020 // //////////////////////////////////////
00021 void SegmentCabinHelper::initialiseAU (stdair::SegmentCabin& iSegmentCabin) {
00022
00023     // Initialise the capacity and availability pool.
00024     const stdair::LegCabinList_T& lLCList =
00025         stdair::BomManager::getList<stdair::LegCabin> (iSegmentCabin);
00026
00027     stdair::CabinCapacity_T lCapacity =
00028         std::numeric_limits<stdair::CabinCapacity_T>::max();
00029     for (stdair::LegCabinList_T::const_iterator itLC = lLCList.begin();
00030          itLC != lLCList.end(); ++itLC) {
00031
00032         const stdair::LegCabin* lLC_ptr = *itLC;
00033         assert (lLC_ptr != NULL);
00034
00035         const stdair::CabinCapacity_T& lCabinCap = lLC_ptr->getOfferedCapacity();
00036         if (lCapacity > lCabinCap) {
00037             lCapacity = lCabinCap;
00038         }
00039     }
00040     iSegmentCabin.setCapacity (lCapacity);
00041     iSegmentCabin.setAvailabilityPool (lCapacity);
00042
00043     // Browse the list of booking classes and set the AU of each booking
00044     // class to the availability pool of the cabin.
00045     const stdair::BookingClassList_T& lBCList =
00046         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00047     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00048          itBC != lBCList.end(); ++itBC) {
```

```

00049         stdair::BookingClass* lBC_ptr = *itBC;
00050         assert (lBC_ptr != NULL);
00051         lBC_ptr->setAuthorizationLevel (lCapacity);
00052     }
00053 }
00054
00055 ///////////////////////////////////////////////////////////////////
00056 void SegmentCabinHelper::
00057 updateFromReservation (const stdair::FlightDate& iFlightDate,
00058                       stdair::SegmentCabin& ioSegmentCabin,
00059                       const stdair::PartySize_T& iNbOfBookings){
00060     // Update the committed space of the segment-cabin.
00061     ioSegmentCabin.updateFromReservation (iNbOfBookings);
00062
00063     // Update the committed space of the member leg-cabins.
00064     const stdair::LegCabinList_T& lLegCabinList =
00065         stdair::BomManager::getList<stdair::LegCabin> (ioSegmentCabin);
00066     for (stdair::LegCabinList_T::const_iterator itLegCabin =
00067          lLegCabinList.begin();
00068          itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00069         stdair::LegCabin* lLegCabin_ptr = *itLegCabin;
00070         assert (lLegCabin_ptr != NULL);
00071         lLegCabin_ptr->updateFromReservation (iNbOfBookings);
00072     }
00073
00074     // Update the availability pool of all the segment-cabin which belong to
the
00075     // same flight-date.
00076     const stdair::CabinCode_T& lCabinCode = ioSegmentCabin.getCabinCode();
00077     FlightDateHelper::updateAvailabilityPool (iFlightDate, lCabinCode);
00078 }
00079
00080 ///////////////////////////////////////////////////////////////////
00081 void SegmentCabinHelper::
00082 buildPseudoBidPriceVector (stdair::SegmentCabin& ioSegmentCabin) {
00083     // Retrieve the segment-cabin capacity.
00084     const stdair::Availability_T& lAvlPool=ioSegmentCabin.getAvailabilityPool()
;
00085     const unsigned int lAvlPoolInt =
00086         static_cast<unsigned int> (lAvlPool);
00087     stdair::BidPriceVector_T lPseudoBidPriceVector (lAvlPoolInt, 0.0);
00088
00089     // Browse the leg-cabin list.
00090     const stdair::LegCabinList_T& lLCList =
00091         stdair::BomManager::getList<stdair::LegCabin> (ioSegmentCabin);
00092     for (stdair::LegCabinList_T::const_iterator itLC = lLCList.begin();
00093          itLC != lLCList.end(); ++itLC) {
00094         const stdair::LegCabin* lLC_ptr = *itLC;
00095         assert (lLC_ptr != NULL);
00096
00097         const stdair::BidPriceVector_T& lBPV = lLC_ptr->getBidPriceVector();
00098         stdair::BidPriceVector_T::const_reverse_iterator itBP = lBPV.rbegin();
00099         for (stdair::BidPriceVector_T::reverse_iterator itPBP =
00100              lPseudoBidPriceVector.rbegin();
00101              itPBP != lPseudoBidPriceVector.rend(); ++itPBP, ++itBP) {
00102             assert (itBP != lBPV.rend());
00103             stdair::BidPrice_T lCurrentPBP = *itPBP;
00104             const stdair::BidPrice_T& lCurrentBP = *itBP;
00105             lCurrentPBP += lCurrentBP;
00106         }
00107     }
00108
00109     ioSegmentCabin.setBidPriceVector (lPseudoBidPriceVector);
00110
00111     // // DEBUG
00112     // std::ostream ostr;
00113     // ostr << "Pseudo BPV: ";
00114     // for (stdair::BidPriceVector_T::const_iterator itBP =
00115          // lPseudoBidPriceVector.begin(); itBP !=
lPseudoBidPriceVector.end();
00116          // ++itBP) {
00117     //     const stdair::BidPrice_T& lCurrentBP = *itBP;
00118     //     ostr << lCurrentBP << " ";
00119     // }

```

```

00120     // //     STDAIR_LOG_DEBUG (ostr.str());
00121     // std::cout << ostr.str() << std::endl;
00122 }
00123
00124 // //////////////////////////////////////
00125 void SegmentCabinHelper::
00126 updateBookingControlsUsingPseudoBidPriceVector (const stdair::SegmentCabin&
iSegmentCabin) {
00127     // Retrieve the pseudo bid price vector.
00128     const stdair::BidPriceVector_T& lPseudoBPV =
00129         iSegmentCabin.getBidPriceVector();
00130     const stdair::Availability_T& lAvlPool=iSegmentCabin.getAvailabilityPool();
00131
00132     // Update the cumulative booking limit for all booking classes.
00133     const stdair::BookingClassList_T& lBCList =
00134         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00135     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00136          itBC != lBCList.end(); ++itBC) {
00137         stdair::BookingClass* lBC_ptr = *itBC;
00138         assert (lBC_ptr != NULL);
00139
00140         lBC_ptr->setCumulatedBookingLimit (lAvlPool);
00141         const stdair::Yield_T& lYield = lBC_ptr->getYield();
00142         for (stdair::BidPriceVector_T::const_reverse_iterator itBP =
00143              lPseudoBPV.rbegin(); itBP != lPseudoBPV.rend(); ++itBP) {
00144             const stdair::BidPrice_T& lBP = *itBP;
00145             if (lYield < lBP) {
00146                 stdair::BookingLimit_T lCumuBL = itBP - lPseudoBPV.rbegin();
00147                 lBC_ptr->setCumulatedBookingLimit (lCumuBL);
00148                 break;
00149             }
00150         }
00151     }
00152
00153     // Update the authorization levels from the booking limits
00154     updateAUs (iSegmentCabin);
00155 }
00156
00157 // //////////////////////////////////////
00158 void SegmentCabinHelper::updateAUs(const stdair::SegmentCabin& iSegmentCabin)
{
00159     // Browse the booking class list and compute the AU from the
00160     // cumulative booking counter and the cumulative booking limit.
00161     stdair::NbOfBookings_T lCumulativeBookingCounter = 0.0;
00162     const stdair::BookingClassList_T& lBCList =
00163         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00164     for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00165          lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00166         stdair::BookingClass* lBC_ptr = *itBC;
00167         assert (lBC_ptr != NULL);
00168
00169         const stdair::NbOfBookings_T& lNbOfBookings = lBC_ptr->getNbOfBookings();
00170         lCumulativeBookingCounter += lNbOfBookings;
00171
00172         const stdair::BookingLimit_T& lCumuBookingLimit =
00173             lBC_ptr->getCumulatedBookingLimit();
00174
00175         stdair::AuthorizationLevel_T lAU =
00176             lCumulativeBookingCounter + lCumuBookingLimit;
00177         lBC_ptr->setAuthorizationLevel (lAU);
00178
00179         // DEBUG
00180         // STDAIR_LOG_DEBUG ("Updating the AU for class: "
00181         //                    << lBC_ptr->describeKey()
00182         //                    << ", with BL: " << lCumuBookingLimit
00183         //                    << ", CumuBkg: " << lCumulativeBookingCounter
00184         //                    << ", AU: " << lAU);
00185     }
00186 }
00187
00188 // //////////////////////////////////////
00189 void SegmentCabinHelper::
00190 updateAvailabilities (const stdair::SegmentCabin& iSegmentCabin) {
00191     // Browse the booking class list and compute the avl from the

```



```

00192     // cumulative booking counter and the AU.
00193     stdair::NbOfBookings_T lCumulativeBookingCounter = 0.0;
00194     const stdair::BookingClassList_T& lBCList =
00195         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00196     for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00197         lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00198         stdair::BookingClass* lBC_ptr = *itBC;
00199         assert (lBC_ptr != NULL);
00200
00201         const stdair::NbOfBookings_T& lNbOfBookings = lBC_ptr->getNbOfBookings();
00202         lCumulativeBookingCounter += lNbOfBookings;
00203
00204         const stdair::AuthorizationLevel_T& lAU=lBC_ptr->getAuthorizationLevel();
00205
00206         const stdair::Availability_T lAvl = lAU - lCumulativeBookingCounter;
00207         lBC_ptr->setSegmentAvailability (lAvl);
00208     }
00209 }
00210 }

```

25.95 airinv/bom/SegmentCabinHelper.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
```

Classes

- class [AIRINV::SegmentCabinHelper](#)
Class representing the actual business functions for an airline segment-cabin.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.96 SegmentCabinHelper.hpp

```

00001 #ifndef __AIRINV_BOM_SEGMENTCABINHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTCABINHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012     class FlightDate;
00013     class SegmentCabin;
00014     class FareFamily;
00015 }
00016
00017 namespace AIRINV {
00018
00023     class SegmentCabinHelper {
00024     public:
00025         // ////////////////////////////////// Business Methods //////////////////////////////////
00029         static void updateFromReservation (const stdair::FlightDate&,

```

```

00030                                     stdair::SegmentCabin&,
00031                                     const stdair::PartySize_T&);
00032
00036     static void buildPseudoBidPriceVector (stdair::SegmentCabin&);
00037
00041     static void updateBookingControlsUsingPseudoBidPriceVector (const
stdair::SegmentCabin&);
00042
00045     static void updateAUs (const stdair::SegmentCabin&);
00046
00049     static void updateAvailabilities (const stdair::SegmentCabin&);
00050
00054     static void initialiseAU (stdair::SegmentCabin&);
00055 };
00056
00057 }
00058 #endif // __AIRINV_BOM_SEGMENTCABINHELPER_HPP

```

25.97 airinv/bom/SegmentCabinStruct.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/bom/-
SegmentCabin.hpp> #include <airinv/bom/SegmentCabinStruct.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

25.98 SegmentCabinStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/SegmentCabin.hpp>
00009 // AirInv
00010 #include <airinv/bom/SegmentCabinStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015 const std::string SegmentCabinStruct::describe() const {
00016     std::ostringstream ostr;
00017
00018     ostr << "          " << _cabinCode << ", " << _nbOfBookings << std::endl;
00019
00020     for (FareFamilyStructList_T::const_iterator itFF = _fareFamilies.begin();
00021          itFF != _fareFamilies.end(); ++itFF) {
00022         const FareFamilyStruct& lFF = *itFF;
00023         ostr << lFF.describe();
00024     }
00025     if (_fareFamilies.empty() == false) {
00026         ostr << std::endl;
00027     }
00028
00029     return ostr.str();
00030 }
00031
00032 // //////////////////////////////////////
00033 void SegmentCabinStruct::fill (stdair::SegmentCabin& ioSegmentCabin) const {
00034     // Set the total number of bookings

```

```

00035         // ioSegmentCabin.setNbOfBookings (_nbOfBookings);
00036     }
00037
00038 }
```

25.99 airinv/bom/SegmentCabinStruct.hpp File Reference

```

#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/bom/FareFamilyStruct.hpp>
```

Classes

- struct [AIRINV::SegmentCabinStruct](#)
Utility Structure for the parsing of SegmentCabin details.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef [std::vector](#) < [SegmentCabinStruct](#) > [AIRINV::SegmentCabinStructList_T](#)

25.100 SegmentCabinStruct.hpp

```

00001 #ifndef __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
00002 #define __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/FareFamilyStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class SegmentCabin;
00019 }
00020
00021 namespace AIRINV {
00022
00026     struct SegmentCabinStruct : public stdair::StructAbstract {
00027         // Attributes
00028         stdair::CabinCode_T _cabinCode;
00029         stdair::NbOfBookings_T _nbOfBookings;
```

```

00030     FareFamilyStruct _itFareFamily;
00031     FareFamilyStructList_T _fareFamilies;
00032
00037     void fill (stdair::SegmentCabin&) const;
00038
00042     const std::string describe() const;
00043 };
00044
00048 typedef std::vector<SegmentCabinStruct> SegmentCabinStructList_T;
00049
00050 }
00051 #endif // __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP

```

25.101 airinv/bom/SegmentDateHelper.cpp File Reference

```

#include <cassert>          #include <stdair/basic/BasConst_
General.hpp> #include <stdair/bom/BomManager.hpp> #include
<stdair/bom/SegmentDate.hpp> #include <stdair/bom/Segment-
Cabin.hpp> #include <stdair/bom/LegDate.hpp> #include
<airinv/bom/SegmentDateHelper.hpp> #include <airinv/bom/-
SegmentCabinHelper.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.102 SegmentDateHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/basic/BasConst_General.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/SegmentDate.hpp>
00010 #include <stdair/bom/SegmentCabin.hpp>
00011 #include <stdair/bom/LegDate.hpp>
00012 // AIRINV
00013 #include <airinv/bom/SegmentDateHelper.hpp>
00014 #include <airinv/bom/SegmentCabinHelper.hpp>
00015
00016 namespace AIRINV {
00017 // //////////////////////////////////////
00018 void SegmentDateHelper::fillFromRouting (stdair::SegmentDate& ioSegmentDate)
00019 {
00020     /*
00021     * If the segment is just marketed by this carrier,
00022     * retrieve the operating segment and call the fillFromRouting
00023     * method on it.
00024     */
00025     stdair::SegmentDate* lOperatingSegmentDate_ptr =
00026         ioSegmentDate.getOperatingSegmentDate ();
00027     if (lOperatingSegmentDate_ptr != NULL) {
00028         fillFromRouting (*lOperatingSegmentDate_ptr);
00029         return;
00030     }
00031     // Retrieve the first and the last legs of the routing.
00032     // Note that in the majority of the cases, as flights are mono-legs,
00033     // the first and last legs are thus the same.
00034     const stdair::LegDateList_T& lLegDateList =

```

```

00034     stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00035     stdair::LegDateList_T::const_iterator itFirstLeg = lLegDateList.begin();
00036     const stdair::LegDate* lFirstLeg_ptr = *itFirstLeg;
00037     assert (lFirstLeg_ptr != NULL);
00038     stdair::LegDateList_T::const_reverse_iterator itLastLeg =
00039         lLegDateList.rbegin();
00040     const stdair::LegDate* lLastLeg_ptr = *itLastLeg;
00041     assert (lLastLeg_ptr != NULL);
00042
00043     // Set the Boarding Date
00044     const stdair::Date_T& lBoardingDate = lFirstLeg_ptr->getBoardingDate();
00045     ioSegmentDate.setBoardingDate (lBoardingDate);
00046     // Set the Boarding Time
00047     const stdair::Duration_T& lBoardingTime = lFirstLeg_ptr->getBoardingTime();
00048     ioSegmentDate.setBoardingTime (lBoardingTime);
00049     // Set the Off Date
00050     const stdair::Date_T& lOffDate = lLastLeg_ptr->getOffDate();
00051     ioSegmentDate.setOffDate (lOffDate);
00052     // Set the Off Time
00053     const stdair::Duration_T& lOffTime = lLastLeg_ptr->getOffTime();
00054     ioSegmentDate.setOffTime (lOffTime);
00055     // Set the Elapsed Time for the whole path
00056     updateElapsedTimeFromRouting (ioSegmentDate);
00057
00058     // Initialise the AU for all classes.
00059     const stdair::SegmentCabinList_T& lSegmentCabinList =
00060         stdair::BomManager::getList<stdair::SegmentCabin> (ioSegmentDate);
00061     for (stdair::SegmentCabinList_T::const_iterator itSC =
00062         lSegmentCabinList.begin(); itSC != lSegmentCabinList.end(); ++itSC)
00063     {
00064         stdair::SegmentCabin* lSC_ptr = *itSC;
00065         assert (lSC_ptr != NULL);
00066
00067         // Initialise the AU for children booking classes.
00068         SegmentCabinHelper::initialiseAU (*lSC_ptr);
00069     }
00070
00071     ///////////////////////////////////////////////////////////////////
00072     void SegmentDateHelper::
00073     updateElapsedTimeFromRouting (stdair::SegmentDate& ioSegmentDate) {
00074
00075         const stdair::LegDateList_T& lLegDateList =
00076             stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00077
00078         stdair::LegDateList_T::const_iterator itLegDate = lLegDateList.begin();
00079         const stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00080         assert (lCurrentLegDate_ptr != NULL);
00081
00082         // Retrieve the elapsed time of the first leg
00083         stdair::Duration_T lElapsedTime = lCurrentLegDate_ptr->getElapsedTime();
00084
00085         // Go to the next leg, if existing. If not existing, the following
00086         // loop will not be entered (as it means: currentLeg ==
00087         _legDateList.end()).
00088         ++itLegDate;
00089
00090         for (const stdair::LegDate* lPreviousLegDate_ptr = lCurrentLegDate_ptr;
00091             itLegDate != lLegDateList.end();
00092             ++itLegDate, lPreviousLegDate_ptr = lCurrentLegDate_ptr) {
00093             lCurrentLegDate_ptr = *itLegDate;
00094
00095             // As the boarding point of the current leg is the same as the off point
00096             // of the previous leg (by construction), there is no time difference.
00097             assert (lCurrentLegDate_ptr->getBoardingPoint()
00098                 == lPreviousLegDate_ptr->getOffPoint());
00099             const stdair::Duration_T& lStopOverTime =
00100                 lCurrentLegDate_ptr->getBoardingTime() - lPreviousLegDate_ptr->
00101                 getOffTime();
00102             lElapsedTime += lStopOverTime;
00103
00104             // Add the elapsed time of the current leg
00105             const stdair::Duration_T& currentElapsedTime =
00106                 lCurrentLegDate_ptr->getElapsedTime();

```

```

00105         lElapsedTime += currentElapsedTime;
00106     }
00107
00108     // Store the result
00109     ioSegmentDate.setElapsedTime (lElapsedTime);
00110     // From the elapsed time, update the distance
00111     updateDistanceFromElapsedTime (ioSegmentDate);
00112 }
00113
00114 // //////////////////////////////////////
00115 void SegmentDateHelper::
00116 updateDistanceFromElapsedTime (stdair::SegmentDate& ioSegmentDate) {
00117     const stdair::Duration_T& lElapsedTime = ioSegmentDate.getElapsedTime();
00118     const double lElapseInHours=static_cast<const double>(lElapsedTime.hours())
00119 ;
00119     const long int lDistance =
00120         static_cast<const long int>(stdair::DEFAULT_FLIGHT_SPEED*lElapseInHours);
00121     ioSegmentDate.setDistance (lDistance);
00122 }
00123
00124 }

```

25.103 airinv/bom/SegmentDateHelper.hpp File Reference

Classes

- class [AIRINV::SegmentDateHelper](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.104 SegmentDateHelper.hpp

```

00001 #ifndef __AIRINV_BOM_SEGMENTDATEHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTDATEHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 // Forward declarations
00009 namespace stdair {
00010     class SegmentDate;
00011 }
00012
00013 namespace AIRINV {
00016     class SegmentDateHelper {
00017     public:
00018         // ////////////////////////////////// Business Methods //////////////////////////////////
00021         static void fillFromRouting (stdair::SegmentDate&);
00022
00032         static void updateElapsedTimeFromRouting (stdair::SegmentDate&);
00033
00035         static void updateDistanceFromElapsedTime (stdair::SegmentDate&);
00036     };
00037
00038 }
00039 #endif // __AIRINV_BOM_SEGMENTDATEHELPER_HPP

```

25.105 airinv/bom/SegmentStruct.cpp File Reference

```
#include <cassert>          #include <stdair/bom/SegmentDate.-
hpp> #include <airinv/bom/SegmentStruct.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.106 SegmentStruct.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/SegmentDate.hpp>
00008 // AIRINV
00009 #include <airinv/bom/SegmentStruct.hpp>
00010
00011 namespace AIRINV {
00012
00013 // //////////////////////////////////////
00014 const std::string SegmentStruct::describe() const {
00015     std::ostringstream ostr;
00016
00017     ostr << "      " << _boardingPoint << " / "
00018         << boost::posix_time::to_simple_string(_boardingTime)
00019         << " -- " << _offPoint << " / "
00020         << boost::posix_time::to_simple_string(_offTime)
00021         << " --> "
00022         << boost::posix_time::to_simple_string(_elapsed)
00023         << std::endl;
00024
00025     for (SegmentCabinStructList_T::const_iterator itCabin =
00026         _cabinList.begin(); itCabin != _cabinList.end(); itCabin++) {
00027         const SegmentCabinStruct& lCabin = *itCabin;
00028         ostr << lCabin.describe();
00029     }
00030     ostr << std::endl;
00031
00032     return ostr.str();
00033 }
00034
00035 // //////////////////////////////////////
00036 void SegmentStruct::fill (stdair::SegmentDate& ioSegmentDate) const {
00037     // Set the Boarding Date
00038     ioSegmentDate.setBoardingDate (_offDate);
00039     // Set the Boarding Time
00040     ioSegmentDate.setBoardingTime (_boardingTime);
00041     // Set the Off Date
00042     ioSegmentDate.setOffDate (_offDate);
00043     // Set the Off Time
00044     ioSegmentDate.setOffTime (_offTime);
00045     // Set the Elapsed Time
00046     ioSegmentDate.setElapsedTime (_elapsed);
00047 }
00048
00049 }
```

25.107 airinv/bom/SegmentStruct.hpp File Reference

```
#include <string> #include <vector> #include <stdair/stdair-
_inventory_types.hpp> #include <stdair/basic/StructAbstract.-
hpp> #include <airinv/bom/SegmentCabinStruct.hpp>
```

Classes

- struct [AIRINV::SegmentStruct](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef [std::vector](#) < SegmentStruct > [AIRINV::SegmentStructList_T](#)

25.108 SegmentStruct.hpp

```
00001 #ifndef __AIRINV_BOM_SEGMENTSTRUCT_HPP
00002 #define __AIRINV_BOM_SEGMENTSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AIRINV
00014 #include <airinv/bom/SegmentCabinStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class SegmentDate;
00019 }
00020
00021 namespace AIRINV {
00022     struct SegmentStruct : public stdair::StructAbstract {
00023         // Attributes
00024         stdair::AirportCode_T _boardingPoint;
00025         stdair::AirportCode_T _offPoint;
00026         stdair::Date_T _boardingDate;
00027         stdair::Duration_T _boardingTime;
00028         stdair::Date_T _offDate;
00029         stdair::Duration_T _offTime;
00030         stdair::Duration_T _elapsed;
00031         SegmentCabinStructList_T _cabinList;
00032
00033         void fill (stdair::SegmentDate&) const;
00034
00035         const std::string describe() const;
00036     };
00037
00038     const std::string describe() const;
00039 };
00040
00041
```



```

00043  typedef std::vector<SegmentStruct> SegmentStructList_T;
00044
00045  }
00046  #endif // __AIRINV_BOM_SEGMENTSTRUCT_HPP

```

25.109 airinv/command/InventoryBuilder.cpp File Reference

```

#include <cassert> #include <boost/date_time/date_iterator.-
hpp> #include <stdair/basic/BasConst_BookingClass.hpp>
#include <stdair/basic/BasConst_Yield.hpp> #include <stdair/basic/-
BasConst_Inventory.hpp> #include <stdair/bom/BomManager.-
hpp> #include <stdair/bom/BomRoot.hpp> #include <stdair/bom/-
Inventory.hpp> #include <stdair/bom/FlightDate.hpp> ×
#include <stdair/bom/SegmentDate.hpp> #include <stdair/bom/-
SegmentCabin.hpp> #include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp> #include <stdair/bom/-
LegDate.hpp> #include <stdair/bom/LegCabin.hpp> #include
<stdair/bom/Bucket.hpp> #include <stdair/factory/FacBom.-
hpp> #include <stdair/factory/FacBomManager.hpp> #include
<stdair/service/Logger.hpp> #include <airinv/bom/Flight-
DateStruct.hpp> #include <airinv/command/InventoryBuilder.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

25.110 InventoryBuilder.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/date_time/date_iterator.hpp>
00008 // StdAir
00009 #include <stdair/basic/BasConst_BookingClass.hpp>
00010 #include <stdair/basic/BasConst_Yield.hpp>
00011 #include <stdair/basic/BasConst_Inventory.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomRoot.hpp>
00014 #include <stdair/bom/Inventory.hpp>
00015 #include <stdair/bom/FlightDate.hpp>
00016 #include <stdair/bom/SegmentDate.hpp>
00017 #include <stdair/bom/SegmentCabin.hpp>
00018 #include <stdair/bom/FareFamily.hpp>
00019 #include <stdair/bom/BookingClass.hpp>
00020 #include <stdair/bom/LegDate.hpp>
00021 #include <stdair/bom/LegCabin.hpp>
00022 #include <stdair/bom/Bucket.hpp>
00023 #include <stdair/factory/FacBom.hpp>
00024 #include <stdair/factory/FacBomManager.hpp>
00025 #include <stdair/service/Logger.hpp>
00026 // AirInv
00027 #include <airinv/bom/FlightDateStruct.hpp>
00028 #include <airinv/command/InventoryBuilder.hpp>
00029

```

```

00030 namespace AIRINV {
00031
00032 // //////////////////////////////////////
00033 void InventoryBuilder::
00034     buildInventory (stdair::BomRoot& ioBomRoot,
00035                     const FlightDateStruct& iFlightDateStruct) {
00036     const stdair::AirlineCode_T& lAirlineCode = iFlightDateStruct._airlineCode;
00037
00038     // Instantiate an inventory object (if not exist)
00039     // for the given key (airline code)
00040     stdair::Inventory* lInventory_ptr = stdair::BomManager::
00041         getObjectPtr<stdair::Inventory> (ioBomRoot, lAirlineCode);
00042     if (lInventory_ptr == NULL) {
00043         stdair::InventoryKey lKey (lAirlineCode);
00044         lInventory_ptr =
00045             &stdair::FacBom<stdair::Inventory>::instance().create (lKey);
00046         stdair::FacBomManager::addToListAndMap (ioBomRoot, *lInventory_ptr);
00047         stdair::FacBomManager::linkWithParent (ioBomRoot, *lInventory_ptr);
00048     }
00049     assert (lInventory_ptr != NULL);
00050
00051     // Build the flight-date within the inventory.
00052     buildFlightDate (*lInventory_ptr, iFlightDateStruct);
00053 }
00054
00055 // //////////////////////////////////////
00056 void InventoryBuilder::
00057     buildFlightDate (stdair::Inventory& ioInventory,
00058                     const FlightDateStruct& iFlightDateStruct) {
00059     // Create the FlightDateKey
00060     const stdair::FlightDateKey lFlightDateKey (iFlightDateStruct._flightNumber
00061
00062                                     iFlightDateStruct._flightDate);
00063
00064     // Check that the flight-date object is not already existing. If a
00065     // flight-date object with the same key has already been created,
00066     // then just update it, ifnot, create a flight-date and update it.
00067     stdair::FlightDate* lFlightDate_ptr = stdair::BomManager::
00068         getObjectPtr<stdair::FlightDate> (ioInventory, lFlightDateKey.toString());
00069
00070     if (lFlightDate_ptr == NULL) {
00071         // Instantiate a flighty-date object for the given key (flight number and
00072         // flight date)
00073         lFlightDate_ptr =
00074             &stdair::FacBom<stdair::FlightDate>::instance().create (lFlightDateKey)
00075
00076     stdair::FacBomManager::addToListAndMap (ioInventory, *lFlightDate_ptr);
00077     stdair::FacBomManager::linkWithParent (ioInventory, *lFlightDate_ptr);
00078     }
00079     assert (lFlightDate_ptr != NULL);
00080
00081     // Update the BOM flight-date with the attributes of the flight-date
00082     struct.
00083
00084     // Browse the list of leg-date struct and segment-date struct and
00085     // create the corresponding BOM.
00086     for (LegStructList_T::const_iterator itLegDate =
00087         iFlightDateStruct._legList.begin();
00088         itLegDate != iFlightDateStruct._legList.end(); ++itLegDate) {
00089         const LegStruct& lCurrentLegDateStruct = *itLegDate;
00090         buildLegDate (*lFlightDate_ptr, lCurrentLegDateStruct);
00091     }
00092
00093     for (SegmentStructList_T::const_iterator itSegmentDate =
00094         iFlightDateStruct._segmentList.begin();
00095         itSegmentDate != iFlightDateStruct._segmentList.end();
00096         ++itSegmentDate) {
00097         const SegmentStruct& lCurrentSegmentDateStruct = *itSegmentDate;
00098         buildSegmentDate (*lFlightDate_ptr, lCurrentSegmentDateStruct);
00099     }
00100 }
00101
00102 // //////////////////////////////////////
00103 void InventoryBuilder::

```

```

00100     buildLegDate (stdair::FlightDate& ioFlightDate,
00101                  const LegStruct& iLegDateStruct) {
00102         // Check that the leg-date object is not already existing. If a
00103         // leg-date object with the same key has already been created,
00104         // then just update it, ifnot, create a leg-date and update it.
00105         stdair::LegDate* lLegDate_ptr = stdair::BomManager::
00106             getObjectPtr<stdair::LegDate>(ioFlightDate, iLegDateStruct._boardingPoint
00107     );
00108     if (lLegDate_ptr == NULL) {
00109         // Instantiate a leg-date object for the given key (boarding point);
00110         stdair::LegDateKey lKey (iLegDateStruct._boardingPoint);
00111         lLegDate_ptr = &stdair::FacBom<stdair::LegDate>::instance().create (lKey)
00112     };
00113     stdair::FacBomManager::addToListAndMap (ioFlightDate, *lLegDate_ptr);
00114     stdair::FacBomManager::linkWithParent (ioFlightDate, *lLegDate_ptr);
00115     }
00116     assert (lLegDate_ptr != NULL);
00117     // Update the BOM leg-date with the attributes of the leg-date struct.
00118     iLegDateStruct.fill (*lLegDate_ptr);
00119     // Browse the list of leg-cabin structs and create the corresponding BOM.
00120     for (LegCabinStructList_T::const_iterator itLegCabin =
00121         iLegDateStruct._cabinList.begin();
00122         itLegCabin != iLegDateStruct._cabinList.end(); ++itLegCabin) {
00123         const LegCabinStruct& lCurrentLegCabinStruct = *itLegCabin;
00124         buildLegCabin (*lLegDate_ptr, lCurrentLegCabinStruct);
00125     }
00126 }
00127
00128 // //////////////////////////////////////
00129 void InventoryBuilder::
00130 buildLegCabin (stdair::LegDate& ioLegDate,
00131               const LegCabinStruct& iLegCabinStruct) {
00132     // Check that the leg-cabin object is not already existing. If a
00133     // leg-cabin object with the same key has already been created,
00134     // then just update it, ifnot, create a leg-cabin and update it.
00135     stdair::LegCabin* lLegCabin_ptr = stdair::BomManager::
00136         getObjectPtr<stdair::LegCabin> (ioLegDate, iLegCabinStruct._cabinCode);
00137     if (lLegCabin_ptr == NULL) {
00138         // Instantiate a leg-cabin object for the given key (cabin code);
00139         stdair::LegCabinKey lKey (iLegCabinStruct._cabinCode);
00140         lLegCabin_ptr = &stdair::FacBom<stdair::LegCabin>::instance().create (lKey
00141     );
00142     stdair::FacBomManager::addToListAndMap (ioLegDate, *lLegCabin_ptr);
00143     stdair::FacBomManager::linkWithParent (ioLegDate, *lLegCabin_ptr);
00144     }
00145     assert (lLegCabin_ptr != NULL);
00146     // TODO: Update the BOM leg-cabin with the attributes of the
00147     // leg-cabin struct.
00148     iLegCabinStruct.fill (*lLegCabin_ptr);
00149     // Browse the list of bucket structs and create the corresponding BOM.
00150     for (BucketStructList_T::const_iterator itBucket =
00151         iLegCabinStruct._bucketList.begin();
00152         itBucket != iLegCabinStruct._bucketList.end(); ++itBucket) {
00153         const BucketStruct& lCurrentBucketStruct = *itBucket;
00154         buildBucket (*lLegCabin_ptr, lCurrentBucketStruct);
00155     }
00156 }
00157
00158 // //////////////////////////////////////
00159 void InventoryBuilder::buildBucket (stdair::LegCabin& ioLegCabin,
00160                                   const BucketStruct& iBucketStruct) {
00161     // Create the BucketKey
00162     const stdair::BucketKey lBucketKey (iBucketStruct._seatIndex);
00163     // Check that the bucket object is not already existing. If a
00164     // bucket object with the same key has already been created,
00165     // then just update it, ifnot, create a bucket and update it.
00166     stdair::Bucket* lBucket_ptr = stdair::BomManager::
00167         getObjectPtr<stdair::Bucket> (ioLegCabin, lBucketKey.toString());
00170

```

```

00171     if (lBucket_ptr == NULL) {
00172         // Instantiate a bucket object for the given key (seat index);
00173         stdair::BucketKey lKey (iBucketStruct._seatIndex);
00174         lBucket_ptr = &stdair::FacBom<stdair::Bucket>::instance().create (lKey);
00175         stdair::FacBomManager::addToListAndMap (ioLegCabin, *lBucket_ptr);
00176         stdair::FacBomManager::linkWithParent (ioLegCabin, *lBucket_ptr);
00177     }
00178     assert (lBucket_ptr != NULL);
00179
00180     //
00181     iBucketStruct.fill (*lBucket_ptr);
00182 }
00183
00184 // //////////////////////////////////////
00185 void InventoryBuilder::
00186 buildSegmentDate (stdair::FlightDate& ioFlightDate,
00187                  const SegmentStruct& iSegmentDateStruct) {
00188     // Check that the segment-date object is not already existing. If a
00189     // segment-date object with the same key has already been created,
00190     // then just update it, ifnot, create a segment-date and update it.
00191     const stdair::SegmentDateKey
00192         lSegmentDateKey (iSegmentDateStruct._boardingPoint,
00193                         iSegmentDateStruct._offPoint);
00194     stdair::SegmentDate* lSegmentDate_ptr = stdair::BomManager::
00195         getObjectPtr<stdair::SegmentDate>(ioFlightDate, lSegmentDateKey.toString());
00196 };
00197     if (lSegmentDate_ptr == NULL) {
00198         // Instantiate a segment-date object for the given key (boarding
00199         // and off points);
00200         lSegmentDate_ptr = &stdair::FacBom<stdair::SegmentDate>::
00201             instance().create (lSegmentDateKey);
00202         stdair::FacBomManager::addToListAndMap (ioFlightDate, *lSegmentDate_ptr);
00203         stdair::FacBomManager::linkWithParent (ioFlightDate, *lSegmentDate_ptr);
00204     }
00205     assert (lSegmentDate_ptr != NULL);
00206
00207     // Update the BOM segment-date with the attributes of the
00208     // segment-date struct.
00209     iSegmentDateStruct.fill (*lSegmentDate_ptr);
00210
00211     // Browse the list of segment-cabin struct and create the corresponding
00212     BOM.
00213     for (SegmentCabinStructList_T::const_iterator itSegmentCabin =
00214         iSegmentDateStruct._cabinList.begin();
00215         itSegmentCabin != iSegmentDateStruct._cabinList.end();
00216         ++itSegmentCabin) {
00217         const SegmentCabinStruct& lCurrentSegmentCabinStruct = *itSegmentCabin;
00218         buildSegmentCabin (*lSegmentDate_ptr, lCurrentSegmentCabinStruct);
00219     }
00220
00221 // //////////////////////////////////////
00222 void InventoryBuilder::
00223 buildSegmentCabin (stdair::SegmentDate& ioSegmentDate,
00224                  const SegmentCabinStruct& iSegmentCabinStruct) {
00225     // Check that the segment-cabin object is not already existing. If a
00226     // segment-cabin object with the same key has already been created,
00227     // then just update it, ifnot, create a segment-cabin and update it.
00228     stdair::SegmentCabin* lSegmentCabin_ptr = stdair::BomManager::
00229         getObjectPtr<stdair::SegmentCabin> (ioSegmentDate,
00230                                             iSegmentCabinStruct._cabinCode);
00231     if (lSegmentCabin_ptr == NULL) {
00232         // Instantiate a segment-cabin object for the given key (cabin code);
00233         stdair::SegmentCabinKey lKey (iSegmentCabinStruct._cabinCode);
00234         lSegmentCabin_ptr =
00235             &stdair::FacBom<stdair::SegmentCabin>::instance().create (lKey);
00236
00237         // Link the segment-cabin to the segment-date
00238         stdair::FacBomManager::addToListAndMap (ioSegmentDate, *lSegmentCabin_ptr);
00239     };
00240     stdair::FacBomManager::linkWithParent (ioSegmentDate, *lSegmentCabin_ptr);
00241 };
00242     }
00243     assert (lSegmentCabin_ptr != NULL);

```

```

00241
00242 // TODO: Update the BOM segment-cabin with the attributes of the
00243 // segment-cabin struct.
00244 iSegmentCabinStruct.fill (*lSegmentCabin_ptr);
00245
00246 // Browse the list of fare family struct and create the corresponding BOM.
00247 for (FareFamilyStructList_T::const_iterator itFareFamily =
00248      iSegmentCabinStruct._fareFamilies.begin();
00249      itFareFamily != iSegmentCabinStruct._fareFamilies.end();
00250      ++itFareFamily) {
00251     const FareFamilyStruct& lCurrentFareFamilyStruct = *itFareFamily;
00252     buildFareFamily (*lSegmentCabin_ptr, lCurrentFareFamilyStruct);
00253 }
00254 }
00255
00256 // //////////////////////////////////////
00257 void InventoryBuilder::
00258 buildFareFamily (stdair::SegmentCabin& ioSegmentCabin,
00259                 const FareFamilyStruct& iFareFamilyStruct) {
00260
00261     // Check that the fare family object is not already existing. If a
00262     // fare family object with the same key has already been created,
00263     // then just update it. If not, create a fare family and update it.
00264     stdair::FareFamily* lFareFamily_ptr = stdair::BomManager::
00265         getObjectPtr<stdair::FareFamily> (ioSegmentCabin,
00266                                           iFareFamilyStruct._familyCode);
00267     if (lFareFamily_ptr == NULL) {
00268         // Instantiate a fare family object for the given key (fare family code);
00269         const stdair::FareFamilyKey lFFKey (iFareFamilyStruct._familyCode);
00270         lFareFamily_ptr =
00271             &stdair::FacBom<stdair::FareFamily>::instance().create (lFFKey);
00272
00273         // Link the fare family to the segment-cabin
00274         stdair::FacBomManager::addToListAndMap (ioSegmentCabin, *lFareFamily_ptr)
00275     ;
00276     stdair::FacBomManager::linkWithParent (ioSegmentCabin, *lFareFamily_ptr);
00277     }
00278     assert (lFareFamily_ptr != NULL);
00279
00280     // TODO: Upcabin the BOM fare family with the attributes of the
00281     // fare family struct.
00282     iFareFamilyStruct.fill (*lFareFamily_ptr);
00283
00284     // Browse the list of booking-class struct and create the corresponding
00285     BOM.
00286     for (BookingClassStructList_T::const_iterator itBookingClass =
00287          iFareFamilyStruct._classList.begin();
00288          itBookingClass != iFareFamilyStruct._classList.end();
00289          ++itBookingClass) {
00290         const BookingClassStruct& lCurrentBookingClassStruct = *itBookingClass;
00291         buildBookingClass (*lFareFamily_ptr, lCurrentBookingClassStruct);
00292     }
00293
00294 // //////////////////////////////////////
00295 void InventoryBuilder::
00296 buildBookingClass (stdair::FareFamily& ioFareFamily,
00297                   const BookingClassStruct& iBookingClassStruct) {
00298
00299     // Check that the booking class object is not already existing. If a
00300     // booking-class object with the same key has already been created,
00301     // then just update it. If not, create a booking-class and update it.
00302     stdair::BookingClass* lBookingClass_ptr = stdair::BomManager::
00303         getObjectPtr<stdair::BookingClass> (ioFareFamily,
00304                                              iBookingClassStruct._classCode);
00305     if (lBookingClass_ptr == NULL) {
00306         // Instantiate a booking class object for the given key (class code);
00307         const stdair::BookingClassKey lClassKey (iBookingClassStruct._classCode);
00308         lBookingClass_ptr =
00309             &stdair::FacBom<stdair::BookingClass>::instance().create (lClassKey);
00310
00311         // Link the booking-class to the fare family
00312         stdair::FacBomManager::addToListAndMap (ioFareFamily, *lBookingClass_ptr)
00313     ;

```

```

00312         stdair::FacBomManager::linkWithParent (ioFareFamily, *lBookingClass_ptr);
00313
00314         // Link the booking-class to the segment-cabin
00315         stdair::SegmentCabin& lSegmentCabin =
00316             stdair::BomManager::getParent<stdair::SegmentCabin> (ioFareFamily);
00317         stdair::FacBomManager::addToListAndMap (lSegmentCabin, *lBookingClass_ptr
00318     );
00319         // Link the booking-class to the segment-date
00320         stdair::SegmentDate& lSegmentDate =
00321             stdair::BomManager::getParent<stdair::SegmentDate> (lSegmentCabin);
00322         stdair::FacBomManager::addToListAndMap (lSegmentDate, *lBookingClass_ptr)
00323     ;
00324     }
00325     assert (lBookingClass_ptr != NULL);
00326     // TODO: Upcabin the BOM booking-class with the attributes of the
00327     // booking-class struct.
00328     iBookingClassStruct.fill (*lBookingClass_ptr);
00329 }
00330
00331 }
```

25.111 airinv/command/InventoryBuilder.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp> #include <airinv/-
AIRINV_Types.hpp>
```

Classes

- class [AIRINV::InventoryBuilder](#)
Class handling the generation / instantiation of the Inventory BOM.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)
- namespace [AIRINV::InventoryParserHelper](#)

25.112 InventoryBuilder.hpp

```

00001 #ifndef __AIRINV_CMD_INVENTORYBUILDER_HPP
00002 #define __AIRINV_CMD_INVENTORYBUILDER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00013 namespace stdair {
00014     class BomRoot;
00015     class Inventory;
00016     class FlightDate;
00017     class LegDate;
```

```

00018  class LegCabin;
00019  class Bucket;
00020  class SegmentDate;
00021  class SegmentCabin;
00022  class FareFamily;
00023 }
00024
00025 namespace AIRINV {
00026
00028     struct FlightDateStruct;
00029     struct LegStruct;
00030     struct LegCabinStruct;
00031     struct BucketStruct;
00032     struct SegmentStruct;
00033     struct SegmentCabinStruct;
00034     struct FareFamilyStruct;
00035     struct BookingClassStruct;
00036     namespace InventoryParserHelper {
00037         struct doEndFlightDate;
00038     }
00039
00043     class InventoryBuilder : public stdair::CmdAbstract {
00049         friend struct InventoryParserHelper::doEndFlightDate;
00050
00051     private:
00056         static void buildInventory (stdair::BomRoot&, const FlightDateStruct&);
00057
00062         static void buildFlightDate (stdair::Inventory&, const FlightDateStruct&);
00063
00068         static void buildLegDate (stdair::FlightDate&, const LegStruct&);
00069
00074         static void buildLegCabin (stdair::LegDate&, const LegCabinStruct&);
00075
00080         static void buildBucket (stdair::LegCabin&, const BucketStruct&);
00081
00086         static void buildSegmentDate (stdair::FlightDate&, const SegmentStruct&);
00087
00092         static void buildSegmentCabin (stdair::SegmentDate&,
00093                                         const SegmentCabinStruct&);
00094
00099         static void buildFareFamily (stdair::SegmentCabin&,
00100                                         const FareFamilyStruct&);
00101
00106         static void buildBookingClass (stdair::FareFamily&,
00107                                         const BookingClassStruct&);
00108     };
00109
00110 }
00111 #endif // __AIRINV_CMD_INVENTORYBUILDER_HPP

```

25.113 airinv/command/InventoryGenerator.cpp File Reference

```

#include <cassert> #include <boost/date_time/date_iterator.-
hpp> #include <stdair/stdair_types.hpp> #include <stdair/basic/-
BasConst_Inventory.hpp> #include <stdair/bom/BomManager.-
hpp> #include <stdair/bom/BomRoot.hpp> #include <stdair/bom/-
Inventory.hpp> #include <stdair/bom/FlightDate.hpp> ×
#include <stdair/bom/SegmentDate.hpp> #include <stdair/bom/-
SegmentCabin.hpp> #include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp> #include <stdair/bom/-
LegDate.hpp> #include <stdair/bom/LegCabin.hpp> #include
<stdair/bom/Bucket.hpp> #include <stdair/factory/Fac-
BomManager.hpp> #include <stdair/service/Logger.hpp> ×
#include <airinv/bom/FlightPeriodStruct.hpp> #include
<airinv/command/InventoryGenerator.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.114 InventoryGenerator.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/date_time/date_iterator.hpp>
00008 // StdAir
00009 #include <stdair/stdair_types.hpp>
00010 #include <stdair/basic/BasConst_Inventory.hpp>
00011 #include <stdair/bom/BomManager.hpp>
00012 #include <stdair/bom/BomRoot.hpp>
00013 #include <stdair/bom/Inventory.hpp>
00014 #include <stdair/bom/FlightDate.hpp>
00015 #include <stdair/bom/SegmentDate.hpp>
00016 #include <stdair/bom/SegmentCabin.hpp>
00017 #include <stdair/bom/FareFamily.hpp>
00018 #include <stdair/bom/BookingClass.hpp>
00019 #include <stdair/bom/LegDate.hpp>
00020 #include <stdair/bom/LegCabin.hpp>
00021 #include <stdair/bom/Bucket.hpp>
00022 #include <stdair/factory/FacBomManager.hpp>
00023 #include <stdair/service/Logger.hpp>
00024 // AirInv
00025 #include <airinv/bom/FlightPeriodStruct.hpp>
00026 #include <airinv/command/InventoryGenerator.hpp>
00027
00028 namespace AIRINV {
00029
00030 // //////////////////////////////////////
00031 void InventoryGenerator::
00032 createFlightDate (stdair::BomRoot& ioBomRoot,
00033                  const FlightPeriodStruct& iFlightPeriod) {
00034     const stdair::AirlineCode_T& lAirlineCode = iFlightPeriod._airlineCode;
00035
00036     // Instantiate an inventory object (if not exist)
00037     // for the given key (airline code)
00038     stdair::Inventory* lInventory_ptr = stdair::BomManager::
00039         getObjectPtr<stdair::Inventory> (ioBomRoot, lAirlineCode);
00040     if (lInventory_ptr == NULL) {
00041         stdair::InventoryKey lKey (lAirlineCode);
00042         lInventory_ptr =
00043             &stdair::FacBom<stdair::Inventory>::instance().create (lKey);
00044         stdair::FacBomManager::addToListAndMap (ioBomRoot, *lInventory_ptr);
00045         stdair::FacBomManager::linkWithParent (ioBomRoot, *lInventory_ptr);
00046     }
00047     assert (lInventory_ptr != NULL);
00048
00049     // Generate all the dates corresponding to the period
00050     // and create the corresponding flight-dates.
00051     const stdair::DatePeriod_T lDateRange = iFlightPeriod._dateRange;
00052
00053     for (boost::gregorian::day_iterator itDate = lDateRange.begin();
00054          itDate != lDateRange.end(); ++itDate) {
00055         const stdair::Date_T& currentDate = *itDate;
00056
00057         // Retrieve, for the current day, the Day-Of-the-Week (thanks to Boost)
00058         const unsigned short currentDoW = currentDate.day_of_week().as_number();
00059
00060         // The FlightPeriod structure stores which Days (-Of-the-Week) are
00061         // active within the week. For each day (Mon., Tue., etc.), a boolean
00062         // states whether the Flight is active for that day.
00063         const stdair::DoWStruct& lDoWList = iFlightPeriod._dow;
00064         const bool isDoWActive = lDoWList.getStandardDayOfWeek (currentDoW);

```



```

00065
00066         if (isDoWActive == true) {
00067             createFlightDate (*lInventory_ptr, currentDate, iFlightPeriod);
00068         }
00069     }
00070 }
00071
00072 // //////////////////////////////////////
00073 void InventoryGenerator::
00074 createFlightDate (stdair::Inventory& ioInventory,
00075                  const stdair::Date_T& iFlightDate,
00076                  const FlightPeriodStruct& iFlightPeriod) {
00077     // Create the FlightDateKey
00078     const stdair::FlightNumber_T& lFlightNumber = iFlightPeriod._flightNumber;
00079     stdair::FlightDateKey lFlightDateKey (lFlightNumber, iFlightDate);
00080
00081     // DEBUG
00082     // STDAIR_LOG_DEBUG ("Creating flight-date: " <<
lFlightDateKey.toString());
00083
00084     // Check that the flight-date object is not already existing. If a
00085     // FlightDate object with the same key has already been created,
00086     // it means that the schedule input file is invalid (two flight-periods
00087     // are overlapping).
00088     stdair::FlightDate* lFlightDate_ptr = stdair::BomManager::
00089         getObjectPtr<stdair::FlightDate> (ioInventory, lFlightDateKey.toString())
;
00090     if (lFlightDate_ptr != NULL) {
00091         std::ostringstream oMessage;
00092         oMessage << ioInventory.describeKey() << ", "
00093             << lFlightDate_ptr->describeKey();
00094         throw FlightDateDuplicationException (oMessage.str());
00095     }
00096
00097     // Instantiate a flight-date object with the given key (flight number and
00098     // flight date)
00099     lFlightDate_ptr =
00100         &stdair::FacBom<stdair::FlightDate>::instance().create (lFlightDateKey);
00101     stdair::FacBomManager::addToListAndMap (ioInventory, *lFlightDate_ptr);
00102     stdair::FacBomManager::linkWithParent (ioInventory, *lFlightDate_ptr);
00103
00104     // Iterate on the leg-dates
00105     stdair::Duration_T currentOffTime (0, 0, 0);
00106     stdair::AirportCode_T previousOffPoint;
00107     const LegStructList_T& lLegList = iFlightPeriod._legList;
00108     for (LegStructList_T::const_iterator itLeg = lLegList.begin();
00109          itLeg != lLegList.end(); ++itLeg) {
00110         const LegStruct& lLeg = *itLeg;
00111
00112         // Create the leg-branch of the flight-date BOM
00113         stdair::LegDate& lLegDate =
00114             createLegDate (*lFlightDate_ptr, iFlightDate, lLeg);
00115
00116         // TODO: Check that the boarding date/time of the next leg is created
00117         // than the off date/time of the current leg. Throw an exception
00118         // otherwise.
00119
00120         // TODO: specify, in the schedule input file specifications, that the
00121         // legs should be given in their natural order.
00122         // Then, replace the assertion by a thrown exception.
00123         //
00124         // Check that the legs are given in their natural order. If the schedule
00125         // input does not respect that assumption, the following assertion will
00126         // fail.
00127         if (itLeg != lLegList.begin()) {
00128             const stdair::AirportCode_T& currentBoardingPoint =
00129                 lLegDate.getBoardingPoint();
00130             assert (currentBoardingPoint == previousOffPoint);
00131         }
00132
00133         // Set the local variable for the next iteration
00134         previousOffPoint = lLegDate.getOffPoint();
00135     }
00136

```

```

00137 // Iterate on the segment structures
00138 const SegmentStructList_T& lSegmentList = iFlightPeriod._segmentList;
00139 for (SegmentStructList_T::const_iterator itSegment = lSegmentList.begin();
00140      itSegment != lSegmentList.end(); ++itSegment) {
00141     const SegmentStruct& lSegment = *itSegment;
00142
00143     createSegmentDate (*lFlightDate_ptr, lSegment);
00144 }
00145 }
00146
00147 // //////////////////////////////////////
00148 stdair::LegDate& InventoryGenerator::
00149 createLegDate (stdair::FlightDate& ioFlightDate,
00150               const stdair::Date_T& iReferenceDate,
00151               const LegStruct& iLeg) {
00152     // Create the leg-date corresponding to the boarding point.
00153     stdair::LegDateKey lKey (iLeg._boardingPoint);
00154     stdair::LegDate& lLegDate =
00155         stdair::FacBom<stdair::LegDate>::instance().create (lKey);
00156     stdair::FacBomManager::addToListAndMap (ioFlightDate, lLegDate);
00157     stdair::FacBomManager::linkWithParent (ioFlightDate, lLegDate);
00158
00159     // Set the leg-date attributes
00160     iLeg.fill (iReferenceDate, lLegDate);
00161
00162     // Iterate on the cabins
00163     const LegCabinStructList_T& lCabinList = iLeg._cabinList;
00164     for (LegCabinStructList_T::const_iterator itCabin = lCabinList.begin();
00165          itCabin != lCabinList.end(); ++itCabin) {
00166         const LegCabinStruct& lCabin = *itCabin;
00167
00168         // Create the leg-cabin-branch of the leg-date
00169         createLegCabin (lLegDate, lCabin);
00170     }
00171
00172     return lLegDate;
00173 }
00174
00175 // //////////////////////////////////////
00176 void InventoryGenerator::
00177 createLegCabin (stdair::LegDate& ioLegDate,
00178               const LegCabinStruct& iCabin) {
00179     // Instantiate an leg-cabin object with the corresponding cabin code
00180     const stdair::LegCabinKey lKey (iCabin._cabinCode);
00181     stdair::LegCabin& lLegCabin =
00182         stdair::FacBom<stdair::LegCabin>::instance().create (lKey);
00183     stdair::FacBomManager::addToListAndMap (ioLegDate, lLegCabin);
00184     stdair::FacBomManager::linkWithParent (ioLegDate, lLegCabin);
00185
00186     // Set the Leg-Cabin attributes
00187     iCabin.fill (lLegCabin);
00188
00189     // Iterate on the bucket
00190     const BucketStructList_T& lBucketList = iCabin._bucketList;
00191     for (BucketStructList_T::const_iterator itBucket = lBucketList.begin();
00192          itBucket != lBucketList.end(); ++itBucket) {
00193         const BucketStruct& lBucket = *itBucket;
00194
00195         // Create the bucket of the leg-cabin
00196         createBucket (lLegCabin, lBucket);
00197     }
00198 }
00199
00200 // //////////////////////////////////////
00201 void InventoryGenerator::createBucket (stdair::LegCabin& ioLegCabin,
00202                                     const BucketStruct& iBucket) {
00203     // Instantiate a bucket object with the corresponding seat index
00204     const stdair::BucketKey lKey (iBucket._seatIndex);
00205     stdair::Bucket& lBucket =
00206         stdair::FacBom<stdair::Bucket>::instance().create (lKey);
00207     stdair::FacBomManager::addToListAndMap (ioLegCabin, lBucket);
00208     stdair::FacBomManager::linkWithParent (ioLegCabin, lBucket);
00209
00210     // Set the Bucket attributes

```

```

00211     iBucket.fill (lBucket);
00212 }
00213
00214 ///////////////////////////////////////////////////////////////////
00215 void InventoryGenerator::
00216 createSegmentDate (stdair::FlightDate& ioFlightDate,
00217                   const SegmentStruct& iSegment) {
00218     // Set the segment-date primary key
00219     const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00220     const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00221     stdair::SegmentDateKey lSegmentDateKey (lBoardingPoint, lOffPoint);
00222     // Instantiate an segment-date object with the key.
00223     stdair::SegmentDate& lSegmentDate =
00224         stdair::FacBom<stdair::SegmentDate>::instance().create (lSegmentDateKey);
00225     stdair::FacBomManager::addToListAndMap (ioFlightDate, lSegmentDate);
00226     stdair::FacBomManager::linkWithParent (ioFlightDate, lSegmentDate);
00227
00228     // Set the segment-date attributes
00229     iSegment.fill (lSegmentDate);
00230
00231     // Iterate on the Cabins
00232     const SegmentCabinStructList_T& lCabinList = iSegment._cabinList;
00233     for (SegmentCabinStructList_T::const_iterator itCabin =
00234         lCabinList.begin(); itCabin != lCabinList.end(); ++itCabin) {
00235         const SegmentCabinStruct& lCabin = *itCabin;
00236
00237         // Create the segment-cabin-branch of the segment-date BOM
00238         createSegmentCabin (lSegmentDate, lCabin);
00239     }
00240 }
00241
00242 ///////////////////////////////////////////////////////////////////
00243 void InventoryGenerator::
00244 createSegmentCabin (stdair::SegmentDate& ioSegmentDate,
00245                   const SegmentCabinStruct& iCabin) {
00246
00247     // Instantiate an segment-cabin object with the corresponding cabin code
00248     stdair::SegmentCabinKey lKey (iCabin._cabinCode);
00249     stdair::SegmentCabin& lSegmentCabin =
00250         stdair::FacBom<stdair::SegmentCabin>::instance().create (lKey);
00251
00252     // Link the segment-cabin to its parent, the segment-date
00253     stdair::FacBomManager::addToListAndMap (ioSegmentDate, lSegmentCabin);
00254     stdair::FacBomManager::linkWithParent (ioSegmentDate, lSegmentCabin);
00255
00256     // Set the segment-cabin attributes
00257     iCabin.fill (lSegmentCabin);
00258
00259     // Create the list of fare families
00260     for (FareFamilyStructList_T::const_iterator itFareFamily =
00261         iCabin._fareFamilies.begin();
00262         itFareFamily != iCabin._fareFamilies.end(); itFareFamily++) {
00263         const FareFamilyStruct& lFareFamilyStruct = *itFareFamily;
00264
00265         //
00266         createFareFamily (lSegmentCabin, lFareFamilyStruct);
00267     }
00268 }
00269
00270 ///////////////////////////////////////////////////////////////////
00271 void InventoryGenerator::
00272 createFareFamily (stdair::SegmentCabin& ioSegmentCabin,
00273                 const FareFamilyStruct& iFF) {
00274     // Instantiate an segment-cabin object with the corresponding cabin code
00275     stdair::FareFamilyKey lKey (iFF._familyCode);
00276     stdair::FareFamily& lFareFamily =
00277         stdair::FacBom<stdair::FareFamily>::instance().create (lKey);
00278
00279     // Link the fare family to its parent, the segment-cabin
00280     stdair::FacBomManager::addToListAndMap (ioSegmentCabin,
00281                                             lFareFamily);
00282     stdair::FacBomManager::linkWithParent (ioSegmentCabin,
00283                                             lFareFamily);
00284 }

```

```

00285 // Set the fare family attributes
00286 iFF.fill (lFareFamily);
00287
00288 // Iterate on the classes
00289 const stdair::ClassList_String_T& lClassList = iFF._classes;
00290 for (stdair::ClassList_String_T::const_iterator itClass =
00291      lClassList.begin(); itClass != lClassList.end(); ++itClass) {
00292     // Transform the single-character class code into a STL string
00293     std::ostringstream ostr;
00294     ostr << *itClass;
00295     const stdair::ClassCode_T lClassCode (ostr.str());
00296
00297     // Create the booking class branch of the segment-cabin BOM
00298     createClass (lFareFamily, lClassCode);
00299 }
00300 }
00301
00302 // //////////////////////////////////////
00303 void InventoryGenerator::createClass (stdair::FareFamily& ioFareFamily,
00304                                     const stdair::ClassCode_T& iClassCode)
00305 {
00306     // Instantiate a booking class object with the given class code
00307     const stdair::BookingClassKey lClassKey (iClassCode);
00308     stdair::BookingClass& lClass =
00309         stdair::FacBom<stdair::BookingClass>::instance().create (lClassKey);
00310
00311     // Link the booking-class to the fare family
00312     stdair::FacBomManager::addToListAndMap (ioFareFamily, lClass);
00313     stdair::FacBomManager::linkWithParent (ioFareFamily, lClass);
00314
00315     // Link the booking-class to the segment-cabin
00316     stdair::SegmentCabin& lSegmentCabin =
00317         stdair::BomManager::getParent<stdair::SegmentCabin> (ioFareFamily);
00318     stdair::FacBomManager::addToListAndMap (lSegmentCabin, lClass);
00319
00320     // Link the booking-class to the segment-date
00321     stdair::SegmentDate& lSegmentDate =
00322         stdair::BomManager::getParent<stdair::SegmentDate> (lSegmentCabin);
00323     stdair::FacBomManager::addToListAndMap (lSegmentDate, lClass);
00324 }
00325 }

```

25.115 airinv/command/InventoryGenerator.hpp File Reference

```

#include <stdair/command/CmdAbstract.hpp> #include <airinv/-
AIRINV_Types.hpp>

```

Classes

- class [AIRINV::InventoryGenerator](#)
Class handling the generation / instantiation of the Inventory BOM.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)
- namespace [AIRINV::ScheduleParserHelper](#)

25.116 InventoryGenerator.hpp

```

00001 #ifndef __AIRINV_CMD_INVENTORYGENERATOR_HPP
00002 #define __AIRINV_CMD_INVENTORYGENERATOR_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00012 namespace stdair {
00013     class BomRoot;
00014     class Inventory;
00015     class FlightDate;
00016     class LegDate;
00017     class LegCabin;
00018     class SegmentDate;
00019     class SegmentCabin;
00020     class FareFamily;
00021 }
00022
00023 namespace AIRINV {
00024     // Forward declarations
00025     struct FlightPeriodStruct;
00026     struct LegStruct;
00027     struct SegmentStruct;
00028     struct LegCabinStruct;
00029     struct SegmentCabinStruct;
00030     struct FareFamilyStruct;
00031     struct BucketStruct;
00032     namespace ScheduleParserHelper {
00033         struct doEndFlight;
00034     }
00035
00036     class InventoryGenerator : public stdair::CmdAbstract {
00037     public:
00038         friend class FlightPeriodFileParser;
00039         friend class FFFlightPeriodFileParser;
00040         friend struct ScheduleParserHelper::doEndFlight;
00041         friend class ScheduleParser;
00042
00043     private:
00044         static void createFlightDate (stdair::BomRoot&,
00045                                     const FlightPeriodStruct&);
00046
00047         static void createFlightDate (stdair::Inventory&,
00048                                     const stdair::Date_T&,
00049                                     const FlightPeriodStruct&);
00050
00051         static stdair::LegDate& createLegDate (stdair::FlightDate&,
00052                                             const stdair::Date_T&,
00053                                             const LegStruct&);
00054
00055         static void createLegCabin (stdair::LegDate&, const LegCabinStruct&);
00056
00057         static void createBucket (stdair::LegCabin&, const BucketStruct&);
00058
00059         static void createSegmentDate (stdair::FlightDate&,
00060                                     const SegmentStruct&);
00061
00062         static void createSegmentCabin (stdair::SegmentDate&,
00063                                     const SegmentCabinStruct&);
00064
00065         static void createFareFamily (stdair::SegmentCabin&,
00066                                     const FareFamilyStruct&);
00067
00068         static void createClass (stdair::FareFamily&,
00069                                const stdair::ClassCode_T&);
00070
00071     };

```

```

00110
00111 }
00112 #endif // __AIRINV_CMD_INVENTORYGENERATOR_HPP

```

25.117 airinv/command/InventoryManager.cpp File Reference

```

#include <exception> #include <algorithm> #include <boost/make-
_shared.hpp> #include <stdair/basic/BasConst_Inventory.-
hpp> #include <stdair/basic/BasConst_BomDisplay.hpp>
#include <stdair/bom/BomManager.hpp> #include <stdair/bom/-
BomKeyManager.hpp> #include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp> #include <stdair/bom/-
FlightDate.hpp> #include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp> #include <stdair/bom/-
LegDate.hpp> #include <stdair/bom/LegCabin.hpp> #include
<stdair/bom/FareFamily.hpp> #include <stdair/bom/Booking-
Class.hpp> #include <stdair/bom/GuillotineBlock.hpp> x
#include <stdair/bom/TravelSolutionStruct.hpp> #include
<stdair/bom/FareOptionStruct.hpp> #include <stdair/bom/-
EventStruct.hpp> #include <stdair/bom/EventQueue.hpp>
#include <stdair/bom/SnapshotStruct.hpp> #include <stdair/bom/-
RMEventStruct.hpp> #include <stdair/factory/FacBomManager.-
hpp> #include <stdair/factory/FacBom.hpp> #include <stdair/service/-
Logger.hpp> #include <airinv/AIRINV_Types.hpp> #include
<airinv/bom/BomRootHelper.hpp> #include <airinv/bom/-
InventoryHelper.hpp> #include <airinv/bom/FlightDate-
Helper.hpp> #include <airinv/command/InventoryManager.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

25.118 InventoryManager.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <exception>
00006 #include <algorithm> // To use min
00007 // Boost
00008 #include <boost/make_shared.hpp>
00009 // StdAir
00010 #include <stdair/basic/BasConst_Inventory.hpp>
00011 #include <stdair/basic/BasConst_BomDisplay.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomKeyManager.hpp>
00014 #include <stdair/bom/BomRoot.hpp>
00015 #include <stdair/bom/Inventory.hpp>
00016 #include <stdair/bom/FlightDate.hpp>
00017 #include <stdair/bom/SegmentDate.hpp>
00018 #include <stdair/bom/SegmentCabin.hpp>
00019 #include <stdair/bom/LegDate.hpp>

```

```

00020 #include <stdair/bom/LegCabin.hpp>
00021 #include <stdair/bom/FareFamily.hpp>
00022 #include <stdair/bom/BookingClass.hpp>
00023 #include <stdair/bom/GuillotineBlock.hpp>
00024 #include <stdair/bom/TravelSolutionStruct.hpp>
00025 #include <stdair/bom/FareOptionStruct.hpp>
00026 #include <stdair/bom/EventStruct.hpp>
00027 #include <stdair/bom/EventQueue.hpp>
00028 #include <stdair/bom/SnapshotStruct.hpp>
00029 #include <stdair/bom/RMEventStruct.hpp>
00030 #include <stdair/factory/FacBomManager.hpp>
00031 #include <stdair/factory/FacBom.hpp>
00032 #include <stdair/service/Logger.hpp>
00033 #include <stdair/bom/FareFamily.hpp> // Contains the definition of
    FareFamilyList_T
00034 #include <stdair/bom/BookingClass.hpp> //
00035 // AirInv
00036 #include <airinv/AIRINV_Types.hpp>
00037 #include <airinv/bom/BomRootHelper.hpp>
00038 #include <airinv/bom/InventoryHelper.hpp>
00039 #include <airinv/bom/FlightDateHelper.hpp>
00040 #include <airinv/command/InventoryManager.hpp>
00041
00042 namespace AIRINV {
00043
00044 // //////////////////////////////////////
00045 void InventoryManager::
00046     calculateAvailability (const stdair::BomRoot& iBomRoot,
00047                          stdair::TravelSolutionStruct& ioTravelSolution,
00048                          const stdair::PartnershipTechnique&
00049                          iPartnershipTechnique) {
00050     const stdair::PartnershipTechnique::EN_PartnershipTechnique&
00051     lPartnershipTechnique =
00052         iPartnershipTechnique.getTechnique();
00053     // Browse the list of segments and get the availability for the
00054     // children classes.
00055     const stdair::SegmentPath_T& lSegmentPath =
00056         ioTravelSolution.getSegmentPath();
00057     for (stdair::SegmentPath_T::const_iterator itSK = lSegmentPath.begin();
00058          itSK != lSegmentPath.end(); ++itSK) {
00059         const std::string& lSegmentKey = *itSK;
00060         const stdair::InventoryKey lInvKey =
00061             stdair::BomKeyManager::extractInventoryKey (lSegmentKey);
00062         stdair::Inventory& lInventory =
00063             stdair::BomManager::getObject<stdair::Inventory>(iBomRoot,
00064                                                             lInvKey.toString());
00065
00066         switch (lPartnershipTechnique) {
00067
00068             case stdair::PartnershipTechnique::NONE:{
00069                 InventoryHelper::calculateAvailability (lInventory, lSegmentKey,
00070                                                         ioTravelSolution);
00071                 break;
00072             }
00073             default:{
00074                 InventoryHelper::getYieldAndBidPrice (lInventory, lSegmentKey,
00075                                                         ioTravelSolution);
00076                 break;
00077             }
00078         }
00079     }
00080
00081     switch (lPartnershipTechnique) {
00082     case stdair::PartnershipTechnique::NONE:{
00083         // Compute the availability for each fare option using the AU's.
00084         calculateAvailabilityByAU (ioTravelSolution);
00085         break;
00086     }
00087     case stdair::PartnershipTechnique::RAE_DA:
00088     case stdair::PartnershipTechnique::RAE_YP:{
00089         // 1. Compute the availability for each fare option using RAE
00090         calculateAvailabilityByRAE (ioTravelSolution);

```

```

00091         break;
00092     }
00093     case stdair::PartnershipTechnique::IBP_DA:
00094     case stdair::PartnershipTechnique::IBP_YP:{
00095         // 2. Compute the availability for each fare option using protective IBP
00096         calculateAvailabilityByProtectiveIBP (ioTravelSolution);
00097         break;
00098     }
00099     case stdair::PartnershipTechnique::IBP_YP_U:
00100     case stdair::PartnershipTechnique::RMC:
00101     case stdair::PartnershipTechnique::A_RMC:{
00102         // 3. Compute the availability for each fare option using IBP
00103         calculateAvailabilityByIBP (ioTravelSolution);
00104         break;
00105     }
00106     default: {
00107         assert (false);
00108         break;
00109     }
00110 }
00111 }
00112
00113 // //////////////////////////////////////
00114 void InventoryManager::
00115 calculateAvailabilityByAU (stdair::TravelSolutionStruct& ioTravelSolution) {
00116
00117     // MODIF: segment path string for availability display
00118     std::ostringstream oStr;
00119     const stdair::SegmentPath_T& lsp = ioTravelSolution.getSegmentPath();
00120     for (stdair::SegmentPath_T::const_iterator itSP = lsp.begin();
00121          itSP != lsp.end(); itSP++) {
00122         oStr << *itSP << ";";
00123     }
00124
00125     // Browse the fare options
00126     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef();
00127
00128     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00129          itFO != lFOList.end(); ++itFO) {
00130
00131         stdair::FareOptionStruct& lFO = *itFO;
00132
00133         // Check the availability
00134         const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00135
00136         const stdair::ClassAvailabilityMapHolder_T& lClassAvailabilityMapHolder =
00137             ioTravelSolution.getClassAvailabilityMapHolder();
00138
00139         // Initialise the flag stating whether the availability is enough
00140         stdair::Availability_T lAvl =
00141             std::numeric_limits<stdair::Availability_T>::max();
00142
00143         // Sanity check: the travel solution must contain two lists,
00144         // one for the booking class availabilities, the other for the
00145         // fare options.
00146         assert (lClassAvailabilityMapHolder.empty() == false
00147             && lClassPath.empty() == false);
00148
00149         // List of booking class availability maps (one map per segment)
00150         stdair::ClassAvailabilityMapHolder_T::const_iterator itCAMH =
00151             lClassAvailabilityMapHolder.begin();
00152
00153         // List of fare options
00154         stdair::ClassList_StringList_T::const_iterator itClassList =
00155             lClassPath.begin();
00156
00157         // Browse both lists at the same time, i.e., one element per segment
00158         for (; itCAMH != lClassAvailabilityMapHolder.end()
00159             && itClassList != lClassPath.end(); ++itCAMH, ++itClassList) {
00160
00161             // Retrieve the booking class list for the current segment
00162             const stdair::ClassList_String_T& lCurrentClassList = *itClassList;
00163             assert (lCurrentClassList.size() > 0);

```



```

00164         // TODO: instead of just extracting the first booking class,
00165         //         perform a choice on the full list of classes.
00166         // Extract one booking class key (class code)
00167         stdair::ClassCode_T lFirstClass;
00168         lFirstClass.append (lCurrentClassList, 0, 1);
00169
00170         // Retrieve the booking class map for the current segment
00171         const stdair::ClassAvailabilityMap_T& lClassAvlMap = *itCAMH;
00172
00173         // Retrieve the availability of the chosen booking class
00174         const stdair::ClassAvailabilityMap_T::const_iterator itClassAvl =
00175             lClassAvlMap.find (lFirstClass);
00176
00177         if (itClassAvl == lClassAvlMap.end()) {
00178             // DEBUG
00179             STDAIR_LOG_DEBUG ("No availability has been set up for the class '"
00180                 << lFirstClass << "'. Travel solution: "
00181                 << ioTravelSolution.display());
00182         }
00183         assert (itClassAvl != lClassAvlMap.end());
00184
00185         const stdair::Availability_T& lCurrentAvl = itClassAvl->second;
00186         if (lAvl > lCurrentAvl) {
00187             lAvl = lCurrentAvl;
00188         }
00189     }
00190
00191     lFO.setAvailability (lAvl);
00192
00193     //MODIF: availability display
00194     STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00195         << "Availability " << lFO.getAvailability() << ", "
00196         << "Segment Path " << oStr.str());
00197 }
00198 }
00199
00200 // \todo: the following code must be either re-written or removed.
00201 //         There is indeed a lot of code duplication.
00202 // //////////////////////////////////////
00203 void InventoryManager::
00204 calculateAvailabilityByRAE (stdair::TravelSolutionStruct& ioTravelSolution) {
00205
00206     std::ostringstream oStr;
00207     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00208     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00209         itSP != lSP.end(); itSP++) {
00210         oStr << *itSP << ";";
00211     }
00212
00213     //Retrieve bid price vector and yield maps
00214     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00215         ioTravelSolution.getClassYieldMapHolder();
00216     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00217         ioTravelSolution.getClassBpvMapHolder();
00218
00219     //Retrieve the list of fare options and browse it
00220     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
;
00221     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00222         itFO != lFOList.end(); ++itFO) {
00223
00224         stdair::FareOptionStruct& lFO = *itFO;
00225
00226         stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00227             lClassYieldMapHolder.begin();
00228         stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00229             lClassBpvMapHolder.begin();
00230
00231         const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00232
00233         // Sanity checks
00234         assert (lClassPath.size() == lClassYieldMapHolder.size());
00235         assert (lClassPath.size() == lClassBpvMapHolder.size());
00236

```

```

00237
00238 // Browse class path, class-yield maps, class-(bid price vector) maps.
00239 // Each iteration corresponds to one segment.
00240
00241 std::ostringstream oCPStr;
00242 for (stdair::ClassList_StringList_T::const_iterator itCL =
00243      lClassPath.begin();
00244      itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00245
00246     // Class path determination
00247     if (itCL == lClassPath.begin()) {
00248         oCPStr << *itCL;
00249
00250     } else {
00251         oCPStr << "-" << *itCL;
00252     }
00253
00254     const stdair::ClassList_String_T& lCL = *itCL;
00255     stdair::ClassCode_T lCC;
00256     lCC.append (lCL, 0, 1);
00257
00258     const stdair::ClassYieldMap_T& lCYM = *itCYM;
00259     stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00260     assert (itCCCYM != lCYM.end());
00261
00262     const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00263     stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00264     assert (itCCCBPM != lCBPM.end());
00265
00266     const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00267     assert (lBidPriceVector_ptr != NULL);
00268
00269     // Initialization of fare option availability
00270     if (itCL == lClassPath.begin()) {
00271         lFO.setAvailability (lBidPriceVector_ptr->size());
00272     }
00273
00274     // Availability update
00275     if (lFO.getAvailability() > 0) {
00276
00277         //Segment availability calculation
00278         stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00279         std::reverse_copy (lBidPriceVector_ptr->begin(),
00280                          lBidPriceVector_ptr->end(),
00281                          lReverseBPV.begin());
00282
00283         const stdair::YieldValue_T& lYield = itCCCYM->second;
00284         stdair::BidPriceVector_T::const_iterator lBidPrice =
00285             std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00286
00287         const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00288
00289         // Availability update
00290         lFO.setAvailability (std::min (lFO.getAvailability(), lAvl));
00291     }
00292 }
00293
00294 // DEBUG
00295 STDAIR_LOG_DEBUG ("Fare option: " << lFO.describe() << ", "
00296                  << "Availability: " << lFO.getAvailability() << ", "
00297                  << "Segment Path: " << oStr.str() << ", ");
00298 }
00299 }
00300
00301 // \todo: the following code must be either re-written or removed.
00302 //       There is indeed a lot of code duplication.
00303 // //////////////////////////////////////
00304 void InventoryManager::
00305 calculateAvailabilityByIBP (stdair::TravelSolutionStruct& ioTravelSolution) {
00306     std::ostringstream oStr;
00307
00308     // Yield valuation coefficient for multi-segment travel solutions
00309     double alpha = 1.0;
00310

```

```

00311     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00312     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00313          itSP != lSP.end(); itSP++) {
00314         oStr << *itSP << ";";
00315     }
00316
00317     //Retrieve bid price vector and yield maps
00318     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00319         ioTravelSolution.getClassYieldMapHolder();
00320     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00321         ioTravelSolution.getClassBpvMapHolder();
00322
00323     // Retrieve the list of fare options and browse it
00324     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
;
00325     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00326          itFO != lFOList.end(); ++itFO) {
00327
00328         stdair::FareOptionStruct& lFO = *itFO;
00329
00330         stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00331             lClassYieldMapHolder.begin();
00332         stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00333             lClassBpvMapHolder.begin();
00334
00335         const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00336
00337         // Sanity checks
00338         assert (lClassPath.size() == lClassYieldMapHolder.size());
00339         assert (lClassPath.size() == lClassBpvMapHolder.size());
00340
00341         // Yield is taken to be equal to fare (connecting flights)
00342
00343         // \todo: take yield instead
00344         stdair::YieldValue_T lTotalYield = lFO.getFare();
00345         // Bid price initialisation
00346         stdair::BidPrice_T lTotalBidPrice = 0;
00347
00348         // Browse class path, class-yield maps, class-(bid price vector) maps.
00349         // Each iteration corresponds to one segment.
00350
00351         std::ostringstream oCPStr;
00352         for (stdair::ClassList_StringList_T::const_iterator itCL =
00353              lClassPath.begin();
00354              itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00355
00356             // Class path determination
00357             if (itCL == lClassPath.begin()) {
00358                 oCPStr << *itCL;
00359
00360             } else {
00361                 oCPStr << "-" << *itCL;
00362             }
00363
00364             const stdair::ClassList_String_T& lCL = *itCL;
00365             stdair::ClassCode_T lCC;
00366             lCC.append (lCL, 0, 1);
00367
00368             const stdair::ClassYieldMap_T& lCYM = *itCYM;
00369             stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00370             assert (itCCCYM != lCYM.end());
00371
00372             const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00373             stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00374             assert (itCCCBPM != lCBPM.end());
00375
00376             const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00377             assert (lBidPriceVector_ptr != NULL);
00378
00379             //Initialization of fare option availability
00380             if (itCL == lClassPath.begin()) {
00381                 lFO.setAvailability (lBidPriceVector_ptr->size());
00382             }
00383

```

```

00384         // Availability update
00385         if (lFO.getAvailability() > 0) {
00386             //Segment availability calculation
00387             stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00388             std::reverse_copy (lBidPriceVector_ptr->begin(),
00389                               lBidPriceVector_ptr->end(), lReverseBPV.begin());
00390
00391             const stdair::YieldValue_T& lYield = itCCCYM->second;
00392             stdair::BidPriceVector_T::const_iterator lBidPrice =
00393                 std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00394
00395             const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00396
00397             // Availability update
00398             lFO.setAvailability (std::min(lFO.getAvailability(), lAvl));
00399         }
00400
00401         // Total bid price calculation
00402         if (lBidPriceVector_ptr->size() > 0) {
00403             lTotalBidPrice += lBidPriceVector_ptr->back();
00404
00405         } else {
00406             lTotalBidPrice = std::numeric_limits<stdair::BidPrice_T>::max();
00407         }
00408
00409         // Total yield calculation (has been replaced by total fare).
00410         //lTotalYield += lYield;
00411     }
00412     // Multi-segment bid price control
00413
00414     if (lClassPath.size() > 1) {
00415         if (lFO.getAvailability() > 0) {
00416             const stdair::Availability_T lAvl =
00417                 alpha * lTotalYield >= lTotalBidPrice;
00418             lFO.setAvailability (lAvl * lFO.getAvailability());
00419
00420         } else {
00421             const stdair::Availability_T lAvl =
00422                 alpha * lTotalYield >= lTotalBidPrice;
00423             lFO.setAvailability (lAvl);
00424         }
00425
00426         // DEBUG
00427         STDAIR_LOG_DEBUG ("Class: " << oCPStr.str()
00428                           << ", " << "Yield: " << alpha*lTotalYield << ", "
00429                           << "Bid price: " << lTotalBidPrice << ", "
00430                           << "Remaining capacity: " << "Undefined" << " "
00431                           << "Segment date: " << oStr.str());
00432     }
00433
00434     // DEBUG
00435     STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00436                       << "Availability " << lFO.getAvailability() << ", "
00437                       << "Segment Path " << oStr.str() << ", ");
00438 }
00439 }
00440
00441 // \todo: the following code must be either re-written or removed.
00442 //       There is indeed a lot of code duplication.
00443 // //////////////////////////////////////
00444 void InventoryManager::
00445 calculateAvailabilityByProtectiveIBP (stdair::TravelSolutionStruct&
00446 ioTravelSolution) {
00447     std::ostringstream oStr;
00448
00449     // Yield valuation coefficient for multi-segment travel solutions
00450     double alpha = 1.0;
00451
00452     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00453     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00454          itSP != lSP.end(); itSP++) {
00455         oStr << *itSP << ";";
00456     }

```

```

00457 //Retrieve bid price vector and yield maps
00458 const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00459     ioTravelSolution.getClassYieldMapHolder();
00460 const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00461     ioTravelSolution.getClassBpvMapHolder();
00462
00463 //Retrieve the list of fare options and browse it
00464 stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef()
;
00465 for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00466      itFO != lFOList.end(); ++itFO) {
00467
00468     stdair::FareOptionStruct& lFO = *itFO;
00469
00470     stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00471         lClassYieldMapHolder.begin();
00472     stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00473         lClassBpvMapHolder.begin();
00474
00475     const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00476
00477     // Sanity checks
00478     assert (lClassPath.size() == lClassYieldMapHolder.size());
00479     assert (lClassPath.size() == lClassBpvMapHolder.size());
00480
00481     // Yield is taken to be equal to fare (connecting flights)
00482     // TODO : take yield instead
00483     stdair::YieldValue_T lTotalYield = lFO.getFare();
00484     // Bid price initialisation
00485     stdair::BidPrice_T lTotalBidPrice = 0;
00486     // Maximal bid price initialisation
00487     stdair::BidPrice_T lMaxBidPrice = 0;
00488
00489     //Browse class path, class-yield maps, class-(bid price vector) maps.
00490     //Each iteration corresponds to one segment.
00491
00492     std::ostringstream oCPStr;
00493     for (stdair::ClassList_StringList_T::const_iterator itCL =
00494          lClassPath.begin();
00495          itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00496
00497         // Class path determination
00498         if (itCL == lClassPath.begin()) {
00499             oCPStr << *itCL;
00500
00501         } else {
00502             oCPStr << "-" << *itCL;
00503         }
00504
00505         const stdair::ClassList_String_T& lCL = *itCL;
00506         stdair::ClassCode_T lCC;
00507         lCC.append (lCL, 0, 1);
00508
00509         const stdair::ClassYieldMap_T& lCYM = *itCYM;
00510         stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00511         assert (itCCCYM != lCYM.end());
00512
00513         const stdair::YieldValue_T& lYield = itCCCYM->second;
00514         const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00515         stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00516         assert (itCCCBPM != lCBPM.end());
00517
00518         const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00519         assert (lBidPriceVector_ptr != NULL);
00520
00521         // Initialization of fare option availability
00522         if (itCL == lClassPath.begin()) {
00523             lFO.setAvailability (lBidPriceVector_ptr->size());
00524         }
00525
00526         // Availability update
00527         if (lFO.getAvailability() > 0) {
00528
00529             //Segment availability calculation

```

```

00530         stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00531         std::reverse_copy (lBidPriceVector_ptr->begin(),
00532                             lBidPriceVector_ptr->end(), lReverseBPV.begin());
00533
00534         stdair::BidPriceVector_T::const_iterator lBidPrice =
00535             std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00536
00537         const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00538
00539         // Availability update
00540         lFO.setAvailability (std::min(lFO.getAvailability(), lAvl));
00541
00542     }
00543
00544     // Total bid price calculation
00545     if (lBidPriceVector_ptr->size() > 0) {
00546         lTotalBidPrice += lBidPriceVector_ptr->back();
00547
00548         if (lMaxBidPrice < lBidPriceVector_ptr->back()) {
00549             lMaxBidPrice = lBidPriceVector_ptr->back();
00550         }
00551
00552     } else {
00553         lTotalBidPrice = std::numeric_limits<stdair::BidPrice_T>::max();
00554     }
00555
00556     // Total yield calculation (has been replaced by total fare).
00557     //lTotalYield += lYield;
00558 }
00559 // Multi-segment bid price control
00560
00561 // Protective IBP (maximin): guarantees the minimal yield for each
airline
00562 // Proration factors are all equal to 1/{number of partners}.
00563
00564 lTotalBidPrice = std::max (lMaxBidPrice * lClassPath.size(),
00565                             lTotalBidPrice);
00566
00567 if (lClassPath.size() > 1) {
00568     if (lFO.getAvailability() > 0) {
00569         const stdair::Availability_T lAvl =
00570             alpha * lTotalYield >= lTotalBidPrice;
00571         lFO.setAvailability (lAvl * lFO.getAvailability());
00572     } else {
00573         const stdair::Availability_T lAvl =
00574             alpha * lTotalYield >= lTotalBidPrice;
00575         lFO.setAvailability (lAvl);
00576     }
00577 }
00578
00579 // DEBUG
00580 STDAIR_LOG_DEBUG ("Class: " << oCPStr.str()
00581                  << ", " << "Yield: " << alpha*lTotalYield << ", "
00582                  << "Bid price: " << lTotalBidPrice << ", "
00583                  << "Remaining capacity: " << "Undefined" << " "
00584                  << "Segment date: " << oStr.str());
00585 }
00586
00587 // DEBUG
00588 STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00589                  << "Availability " << lFO.getAvailability() << ", "
00590                  << "Segment Path " << oStr.str() << ", ");
00591 }
00592 }
00593
00594 //MODIF
00595 // //////////////////////////////////////
00596 void InventoryManager::setDefaultBidPriceVector (stdair::BomRoot& ioBomRoot)
00597 {
00598     const stdair::InventoryList_T& lInvList =
00599         stdair::BomManager::getList<stdair::Inventory> (ioBomRoot);
00600     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00601          itInv != lInvList.end(); ++itInv) {

```

```

00602     stdair::Inventory* lCurrentInv_ptr = *itInv;
00603     assert (lCurrentInv_ptr != NULL);
00604
00605     // Set the default bid price for own cabins.
00606     setDefaultBidPriceVector (*lCurrentInv_ptr);
00607
00608     // Check if the inventory contains images of partner inventories.
00609     // If so, set the default bid price for their cabins.
00610     if (stdair::BomManager::hasList<stdair::Inventory> (*lCurrentInv_ptr)) {
00611         const stdair::InventoryList_T& lPartnerInvList =
00612             stdair::BomManager::getList<stdair::Inventory> (*lCurrentInv_ptr);
00613
00614         for (stdair::InventoryList_T::const_iterator itPartnerInv =
00615             lPartnerInvList.begin();
00616             itPartnerInv != lPartnerInvList.end(); ++itPartnerInv) {
00617             stdair::Inventory* lCurrentPartnerInv_ptr = *itPartnerInv;
00618             assert (lCurrentPartnerInv_ptr != NULL);
00619
00620             setDefaultBidPriceVector (*lCurrentPartnerInv_ptr);
00621         }
00622     }
00623 }
00624 }
00625
00626 // //////////////////////////////////////
00627 void InventoryManager::
00628 setDefaultBidPriceVector (stdair::Inventory& ioInventory) {
00629
00630     const stdair::FlightDateList_T& lFlightDateList =
00631         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00632     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00633         lFlightDateList.begin();
00634         itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00635         stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00636         assert (lCurrentFlightDate_ptr != NULL);
00637
00638         // Check if the flight date holds a list of leg dates.
00639         // If so retrieve it and initialise the bid price vectors of their
00640         cabins.
00641         if (stdair::BomManager::hasList<stdair::LegDate> (*lCurrentFlightDate_ptr
00642     )) {
00643             const stdair::LegDateList_T& lLegDateList =
00644                 stdair::BomManager::getList<stdair::LegDate>
00645                 (*lCurrentFlightDate_ptr);
00646             for (stdair::LegDateList_T::const_iterator itLegDate =
00647                 lLegDateList.begin();
00648                 itLegDate != lLegDateList.end(); ++itLegDate) {
00649                 stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00650                 assert (lCurrentLegDate_ptr != NULL);
00651
00652                 const stdair::LegCabinList_T& lLegCabinList =
00653                     stdair::BomManager::getList<stdair::LegCabin>
00654                     (*lCurrentLegDate_ptr);
00655                 for (stdair::LegCabinList_T::const_iterator itLegCabin =
00656                     lLegCabinList.begin();
00657                     itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00658                     stdair::LegCabin* lCurrentLegCabin_ptr = *itLegCabin;
00659                     assert (lCurrentLegCabin_ptr != NULL);
00660
00661                     const stdair::CabinCapacity_T& lCabinCapacity =
00662                         lCurrentLegCabin_ptr->getPhysicalCapacity();
00663                     lCurrentLegCabin_ptr->emptyBidPriceVector();
00664
00665                     stdair::BidPriceVector_T& lBPV =
00666                         lCurrentLegCabin_ptr->getBidPriceVector();
00667
00668                     //for (stdair::CabinCapacity_T k = 0; k!=lCabinCapacity; k++)
00669                     {lBPV.push_back(400 + 300/sqrt(k+1));}
00670                     for (stdair::CabinCapacity_T k = 0; k != lCabinCapacity; k++) {
00671                         lBPV.push_back (400);
00672                     }
00673
00674                     lCurrentLegCabin_ptr->setPreviousBidPrice (lBPV.back());
00675                     lCurrentLegCabin_ptr->setCurrentBidPrice (lBPV.back());
00676

```

```

00671     }
00672     }
00673 }
00674 }
00675 }
00676
00677 // //////////////////////////////////////
00678 bool InventoryManager::sell (stdair::Inventory& ioInventory,
00679                             const std::string& iSegmentDateKey,
00680                             const stdair::ClassCode_T& iClassCode,
00681                             const stdair::PartySize_T& iPartySize) {
00682
00683     // Make the sale within the inventory.
00684     return InventoryHelper::sell (ioInventory, iSegmentDateKey,
00685                                   iClassCode, iPartySize);
00686 }
00687
00688 // //////////////////////////////////////
00689 bool InventoryManager::cancel (stdair::Inventory& ioInventory,
00690                               const std::string& iSegmentDateKey,
00691                               const stdair::ClassCode_T& iClassCode,
00692                               const stdair::PartySize_T& iPartySize) {
00693
00694     // Make the sale within the inventory.
00695     return InventoryHelper::cancel (ioInventory, iSegmentDateKey,
00696                                      iClassCode, iPartySize);
00697 }
00698
00699 // //////////////////////////////////////
00700 void InventoryManager::
00701 updateBookingControls (stdair::FlightDate& ioFlightDate) {
00702
00703     // Forward the call to FlightDateHelper.
00704     FlightDateHelper::updateBookingControls (ioFlightDate);
00705 }
00706
00707 // //////////////////////////////////////
00708 void InventoryManager::takeSnapshots(const stdair::Inventory& iInventory,
00709                                     const stdair::DateTime_T& iSnapshotTime)
00710 {
00711     // Make the snapshots within the inventory
00712     InventoryHelper::takeSnapshots (iInventory, iSnapshotTime);
00713 }
00714
00715 // //////////////////////////////////////
00716 void InventoryManager::
00717 createDirectAccesses (const stdair::BomRoot& iBomRoot) {
00718
00719     // Browse the list of inventories and create direct accesses
00720     // within each inventory.
00721     const stdair::InventoryList_T& lInvList =
00722         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00723     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00724          itInv != lInvList.end(); ++itInv) {
00725         stdair::Inventory* lCurrentInv_ptr = *itInv;
00726         assert (lCurrentInv_ptr != NULL);
00727
00728         createDirectAccesses (*lCurrentInv_ptr);
00729     }
00730
00731     // Fill some attributes of segment-date with the routing legs.
00732     BomRootHelper::fillFromRouting (iBomRoot);
00733 }
00734
00735 // //////////////////////////////////////
00736 void InventoryManager::
00737 createDirectAccesses (stdair::Inventory& ioInventory) {
00738
00739     // Browse the list of flight-dates and create direct accesses
00740     // within each flight-date.
00741     const stdair::FlightDateList_T& lFlightDateList =
00742         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00743     for (stdair::FlightDateList_T::const_iterator itFlightDate =

```



```

00744         lFlightDateList.begin();
00745         itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00746             stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00747             assert (lCurrentFlightDate_ptr != NULL);
00748
00749             createDirectAccesses (*lCurrentFlightDate_ptr);
00750         }
00751     }
00752
00753     // ////////////////////////////////////////
00754     void InventoryManager::
00755     createDirectAccesses (stdair::FlightDate& ioFlightDate) {
00756
00757         // Browse the list of segment-dates and create direct accesses
00758         // within each segment-date.
00759         const stdair::SegmentDateList_T& lSegmentDateList =
00760             stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00761         for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00762             lSegmentDateList.begin();
00763             itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00764
00765             stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00766             assert (lCurrentSegmentDate_ptr != NULL);
00767
00768             /*
00769             * If the segment is just marketed by this carrier,
00770             * retrieve the operating segment and call the createDirectAcces
00771             * method on its parent (flight date).
00772             */
00773             const stdair::SegmentDate* lOperatingSegmentDate_ptr =
00774                 lCurrentSegmentDate_ptr->getOperatingSegmentDate ();
00775             if (lOperatingSegmentDate_ptr != NULL) {
00776                 // Then get the (parent) flight date and create direct access.
00777                 stdair::FlightDate* lOperatingFlightDate_ptr =
00778                     stdair::BomManager::getParentPtr<stdair::FlightDate>
00779                     (*lOperatingSegmentDate_ptr);
00780                 assert (lOperatingFlightDate_ptr != NULL);
00781                 createDirectAccesses (*lOperatingFlightDate_ptr);
00782             } else {
00783
00784                 const stdair::AirportCode_T& lBoardingPoint =
00785                     lCurrentSegmentDate_ptr->getBoardingPoint();
00786
00787                 stdair::AirportCode_T currentBoardingPoint = lBoardingPoint;
00788                 const stdair::AirportCode_T& lOffPoint =
00789                     lCurrentSegmentDate_ptr->getOffPoint();
00790
00791                 // Add a sanity check so as to ensure that the loop stops. If
00792                 // there are more than MAXIMAL_NUMBER_OF_LEGS legs, there is
00793                 // an issue somewhere in the code (not in the parser, as the
00794                 // segments are derived from the legs thanks to the
00795                 // FlightPeriodStruct::buildSegments() method).
00796                 unsigned short i = 1;
00797                 while (currentBoardingPoint != lOffPoint
00798                     && i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT) {
00799                     // Retrieve the (unique) LegDate getting that Boarding Point
00800                     stdair::LegDate& lLegDate = stdair::BomManager::
00801                         getObject<stdair::LegDate> (ioFlightDate, currentBoardingPoint);
00802
00803                     // Link the SegmentDate and LegDate together
00804                     stdair::FacBomManager::addToListAndMap (*lCurrentSegmentDate_ptr,
00805                                                         lLegDate);
00806                     stdair::FacBomManager::addToListAndMap (lLegDate,
00807                                                         *lCurrentSegmentDate_ptr);
00808
00809                     // Prepare the next iteration
00810                     currentBoardingPoint = lLegDate.getOffPoint();
00811                     ++i;
00812                 }
00813                 assert (i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT);
00814
00815                 // Create the routing for the leg- and segment-cabins.
00816                 // At the same time, set the SegmentDate attributes derived from
00817                 // its routing legs (e.g., boarding and off dates).

```

```

00817         createDirectAccesses (*lCurrentSegmentDate_ptr);
00818     }
00819 }
00820 }
00821
00822 // //////////////////////////////////////
00823 void InventoryManager::
00824 createDirectAccesses (stdair::SegmentDate& ioSegmentDate) {
00825
00826     // Browse the list of segment-cabins and create direct accesses
00827     // within each segment-cabin.
00828     const stdair::SegmentCabinList_T& lSegmentCabinList =
00829         stdair::BomManager::getList<stdair::SegmentCabin> (ioSegmentDate);
00830     for (stdair::SegmentCabinList_T::const_iterator itSegmentCabin =
00831         lSegmentCabinList.begin();
00832         itSegmentCabin != lSegmentCabinList.end(); ++itSegmentCabin) {
00833
00834         //
00835         stdair::SegmentCabin* lCurrentSegmentCabin_ptr = *itSegmentCabin;
00836         assert (lCurrentSegmentCabin_ptr != NULL);
00837
00838         //
00839         const stdair::CabinCode_T& lCabinCode =
00840             lCurrentSegmentCabin_ptr->getCabinCode();
00841
00842         // Iterate on the routing legs
00843         const stdair::LegDateList_T& lLegDateList =
00844             stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00845         for (stdair::LegDateList_T::const_iterator itLegDate =
00846             lLegDateList.begin();
00847             itLegDate != lLegDateList.end(); ++itLegDate) {
00848
00849             const stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00850             assert (lCurrentLegDate_ptr != NULL);
00851
00852             // Retrieve the LegCabin getting the same class of service
00853             // (cabin code) as the SegmentCabin.
00854             stdair::LegCabin& lLegCabin = stdair::BomManager::
00855                 getObject<stdair::LegCabin> (*lCurrentLegDate_ptr, lCabinCode);
00856
00857             stdair::FacBomManager::addToListAndMap (*lCurrentSegmentCabin_ptr,
00858                 lLegCabin,
00859                 lLegCabin.getFullerKey());
00860
00861             stdair::FacBomManager::
00862                 addToListAndMap (lLegCabin, *lCurrentSegmentCabin_ptr,
00863                     lCurrentSegmentCabin_ptr->getFullerKey());
00864         }
00865     }
00866 }
00867
00868 // //////////////////////////////////////
00869 void InventoryManager::
00870 buildSimilarSegmentCabinSets (const stdair::BomRoot& iBomRoot) {
00871     // Browse the list of inventories and create direct accesses
00872     // within each inventory.
00873     const stdair::InventoryList_T& lInvList =
00874         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00875     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00876         itInv != lInvList.end(); ++itInv) {
00877         stdair::Inventory* lCurrentInv_ptr = *itInv;
00878         assert (lCurrentInv_ptr != NULL);
00879
00880         buildSimilarSegmentCabinSets (*lCurrentInv_ptr);
00881     }
00882 }
00883
00884 // //////////////////////////////////////
00885 void InventoryManager::
00886 buildSimilarSegmentCabinSets (stdair::Inventory& ioInventory) {
00887     // For instance, we consider two flight-dates are
00888     // similar if they have the same flight number and the same
00889     // day-of-the-week departure.
00890 }

```

```

00911 // Browse the segment-cabin list and build the sets of segment-cabin
00912 // which have the same flight number and origin-destination
00913 SimilarSegmentCabinSetMap_T lSSCSM;
00914
00915 // Browsing the flight-date list
00916 const stdair::FlightDateList_T& lFlightDateList =
00917     stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00918 for (stdair::FlightDateList_T::const_iterator itFD= lFlightDateList.begin()
;
00919     itFD != lFlightDateList.end(); ++itFD) {
00920     const stdair::FlightDate* lFD_ptr = *itFD;
00921     assert (lFD_ptr != NULL);
00922     const stdair::FlightNumber_T& lFlightNumber = lFD_ptr->getFlightNumber();
00923
00924     // Browsing the segment-date list and retrieve the departure
00925     // date, the origine and the destination of the segment
00926     const stdair::SegmentDateList_T& lSegmentDateList =
00927         stdair::BomManager::getList<stdair::SegmentDate> (*lFD_ptr);
00928     for (stdair::SegmentDateList_T::const_iterator itSD =
00929         lSegmentDateList.begin(); itSD != lSegmentDateList.end(); ++itSD)
    {
00930         const stdair::SegmentDate* lSD_ptr = *itSD;
00931         assert (lSD_ptr != NULL);
00932
00933         const stdair::Date_T& lDepartureDate = lSD_ptr->getBoardingDate();
00934         const stdair::AirportCode_T& lOrigin = lSD_ptr->getBoardingPoint();
00935         const stdair::AirportCode_T& lDestination = lSD_ptr->getOffPoint();
00936
00937         // Browsing the segment-cabin list and retrieve the cabin code and
00938         // build the corresponding key map.
00939         const stdair::SegmentCabinList_T& lSegmentCabinList =
00940             stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
00941         for (stdair::SegmentCabinList_T::const_iterator itSC =
00942             lSegmentCabinList.begin();
00943             itSC != lSegmentCabinList.end(); ++itSC) {
00944             stdair::SegmentCabin* lSC_ptr = *itSC;
00945             assert (lSC_ptr != NULL);
00946
00947             std::ostringstream oStr;
00948             oStr << lFlightNumber << lDepartureDate.day_of_week()
00949                 << lOrigin << lDestination << lSC_ptr->getCabinCode();
00950             const std::string lMapKey = oStr.str();
00951
00952             // Add the segment cabin to the similar segment cabin set map.
00953             SimilarSegmentCabinSetMap_T::iterator itSSCS = lSSCSM.find (lMapKey);
00954             if (itSSCS == lSSCSM.end()) {
00955                 DepartureDateSegmentCabinMap_T lDDSCMap;
00956                 lDDSCMap.insert (DepartureDateSegmentCabinMap_T::
00957                     value_type (lDepartureDate, lSC_ptr));
00958                 lSSCSM.insert (SimilarSegmentCabinSetMap_T::
00959                     value_type (lMapKey, lDDSCMap));
00960             } else {
00961                 DepartureDateSegmentCabinMap_T& lDDSCMap = itSSCS->second;
00962                 lDDSCMap.insert (DepartureDateSegmentCabinMap_T::
00963                     value_type (lDepartureDate, lSC_ptr));
00964             }
00965         }
00966     }
00967 }
00968
00969 // Initialise the guillotine blocks.
00970 stdair::GuillotineNumber_T lGuillotineNumber = 1;
00971 for (SimilarSegmentCabinSetMap_T::const_iterator itSSCS = lSSCSM.begin();
00972     itSSCS != lSSCSM.end(); ++itSSCS, ++lGuillotineNumber) {
00973     const DepartureDateSegmentCabinMap_T& lDDSCMap = itSSCS->second;
00974
00975     buildGuillotineBlock (ioInventory, lGuillotineNumber, lDDSCMap);
00976 }
00977 }
00978
00979 // ////////////////////////////////////////
00980 void InventoryManager::
00981 buildGuillotineBlock (stdair::Inventory& ioInventory,
00982     const stdair::GuillotineNumber_T& iGuillotineNumber,

```

```

00983         const DepartureDateSegmentCabinMap_T& iDDSCMap) {
00984     // Build an empty guillotine block.
00985     const stdair::GuillotineBlockKey lKey (iGuillotineNumber);
00986     stdair::GuillotineBlock& lGuillotineBlock =
00987         stdair::FacBom<stdair::GuillotineBlock>::instance().create (lKey);
00988     stdair::FacBomManager::addToListAndMap (ioInventory, lGuillotineBlock);
00989
00990     // Build the value type index map.
00991     DepartureDateSegmentCabinMap_T::const_iterator itDDSC = iDDSCMap.begin();
00992     assert (itDDSC != iDDSCMap.end());
00993     const stdair::SegmentCabin* lSegmentCabin_ptr = itDDSC->second;
00994
00995     // Browse the booking class list and build the value type for the classes
00996     // as well as for the cabin (Q-equivalent).
00997     stdair::ValueTypeIndexMap_T lValueTypeIndexMap;
00998     stdair::BlockIndex_T lBlockIndex = 0;
00999     std::ostream lSCMapKey;
01000     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
01001         << lSegmentCabin_ptr->describeKey();
01002     lValueTypeIndexMap.insert (stdair::ValueTypeIndexMap_T::
01003         value_type (lSCMapKey.str(), lBlockIndex));
01004     ++lBlockIndex;
01005
01006     // Browse the booking class list
01007     const stdair::BookingClassList_T& lBCList =
01008         stdair::BomManager::getList<stdair::BookingClass>(*lSegmentCabin_ptr);
01009     for (stdair::BookingClassList_T::const_iterator itBC= lBCList.begin();
01010         itBC != lBCList.end(); ++itBC) {
01011         const stdair::BookingClass* lBookingClass_ptr = *itBC;
01012         assert (lBookingClass_ptr != NULL);
01013         lValueTypeIndexMap.
01014             insert (stdair::ValueTypeIndexMap_T::
01015                 value_type (lBookingClass_ptr->describeKey(), lBlockIndex));
01016         ++lBlockIndex;
01017     }
01018
01019     // Build the segment-cabin index map
01020     stdair::SegmentCabinIndexMap_T lSegmentCabinIndexMap;
01021     stdair::BlockNumber_T lBlockNumber = 0;
01022     for (; itDDSC != iDDSCMap.end(); ++itDDSC, ++lBlockNumber) {
01023         stdair::SegmentCabin* lCurrentSC_ptr = itDDSC->second;
01024         assert (lCurrentSC_ptr != NULL);
01025         lSegmentCabinIndexMap.
01026             insert (stdair::SegmentCabinIndexMap_T::value_type (lCurrentSC_ptr,
01027                 lBlockNumber));
01028
01029         // Added the guillotine to the segment-cabin.
01030         lCurrentSC_ptr->setGuillotineBlock (lGuillotineBlock);
01031     }
01032
01033     // Initialise the guillotine block.
01034     lGuillotineBlock.initSnapshotBlocks (lSegmentCabinIndexMap,
01035         lValueTypeIndexMap);
01036 }
01037
01038 // //////////////////////////////////////
01039 void InventoryManager::initSnapshotEvents (const stdair::Date_T& iStartDate,
01040     const stdair::Date_T& iEndDate,
01041     stdair::EventQueue& ioQueue) {
01042     const stdair::Duration_T lTimeZero (0, 0, 0);
01043     const stdair::Duration_T lOneDayDuration (24, 0, 0);
01044     const stdair::DateTime_T lBeginSnapshotTime (iStartDate, lTimeZero);
01045     const stdair::DateTime_T lEndSnapshotTime (iEndDate, lTimeZero);
01046
01047     // TODO: remove the default airline code.
01048     stdair::NbOfEvents_T lNbOfSnapshots = 0.0;
01049     for (stdair::DateTime_T lSnapshotTime = lBeginSnapshotTime;
01050         lSnapshotTime < lEndSnapshotTime; lSnapshotTime += lOneDayDuration) {
01051         // Create the snapshot event structure
01052         stdair::SnapshotPtr_T lSnapshotStruct =
01053             boost::make_shared<stdair::SnapshotStruct> (stdair::DEFAULT_AIRLINE_CODE
01054                 ,
01055                 lSnapshotTime);
01056         // Create the event structure

```

```

01056         stdair::EventStruct lEventStruct (stdair::EventType::SNAPSHOT,
01057                                           lSnapshotStruct);
01058
01066         ioQueue.addEvent (lEventStruct);
01067         ++lNbOfSnapshots;
01068     }
01069
01070     ioQueue.addStatus (stdair::EventType::SNAPSHOT, lNbOfSnapshots);
01071 }
01072
01073 // //////////////////////////////////////
01074 void InventoryManager::
01075 initRMEvents (const stdair::Inventory& iInventory,
01076              stdair::RMEventList_T& ioRMEventList,
01077              const stdair::Date_T& iStartDate,
01078              const stdair::Date_T& iEndDate) {
01079     const stdair::Duration_T lTimeZero (0, 0, 0);
01080     const stdair::Duration_T lTime (0, 0, 10);
01081     const stdair::Duration_T lOneDayDuration (24, 0, 0);
01082     const stdair::DateTime_T lEarliestEventTime (iStartDate, lTimeZero);
01083     const stdair::DateTime_T lLatestEventTime (iEndDate, lTimeZero);
01084
01085     const stdair::AirlineCode_T& lAirlineCode = iInventory.getAirlineCode();
01086
01087     // Browse the list of flight-dates and initialise the RM events for
01088     // each flight-date.
01089     const stdair::FlightDateList_T& lFDList =
01090         stdair::BomManager::getList<stdair::FlightDate> (iInventory);
01091     for (stdair::FlightDateList_T::const_iterator itFD = lFDList.begin();
01092          itFD != lFDList.end(); ++itFD) {
01093         const stdair::FlightDate* lFD_ptr = *itFD;
01094         assert (lFD_ptr != NULL);
01095
01096         // Retrieve the departure date and initialise the RM events with
01097         // the data collection points of the inventory.
01098         const stdair::Date_T& lDepartureDate = lFD_ptr->getDepartureDate();
01099         const stdair::DateTime_T lDepartureDateTime (lDepartureDate, lTime);
01100         for (stdair::DCPLIST_T::const_iterator itDCP =
01101              stdair::DEFAULT_DCP_LIST.begin();
01102              itDCP != stdair::DEFAULT_DCP_LIST.end(); ++itDCP) {
01103             const stdair::DCP_T& lDCP = *itDCP;
01104
01105             // Create the event time and check if it is in the validate interval
01106             const stdair::DateTime_T lEventTime =
01107                 lDepartureDateTime - lOneDayDuration * lDCP;
01108             if (lEventTime >= lEarliestEventTime && lEventTime <= lLatestEventTime)
01109             {
01110                 const stdair::KeyDescription_T lKeyDes = lFD_ptr->describeKey();
01111                 stdair::RMEventStruct lRMEvent (lAirlineCode, lKeyDes, lEventTime);
01112                 ioRMEventList.push_back (lRMEvent);
01113             }
01114         }
01115     }
01116
01117 // //////////////////////////////////////
01118 void InventoryManager::
01119 addRMEventsToEventQueue (stdair::EventQueue& ioQueue,
01120                          stdair::RMEventList_T& ioRMEventList) {
01121     // Browse the RM event list and add them to the queue.
01122     for (stdair::RMEventList_T::iterator itRMEvent = ioRMEventList.begin();
01123          itRMEvent != ioRMEventList.end(); ++itRMEvent) {
01124         stdair::RMEventStruct& lRMEvent = *itRMEvent;
01125         stdair::RMEventPtr_T lRMEventPtr =
01126             boost::make_shared<stdair::RMEventStruct> (lRMEvent);
01127         stdair::EventStruct lEventStruct (stdair::EventType::RM, lRMEventPtr);
01128         ioQueue.addEvent (lEventStruct);
01129     }
01130
01131     // Update the status of RM events within the event queue.
01132     ioQueue.updateStatus (stdair::EventType::RM, ioRMEventList.size());
01133 }
01134 }

```

25.119 airinv/command/InventoryManager.hpp File Reference

```
#include <string>    #include <stdair/stdair_basic_types.-
hpp>    #include <stdair/bom/RMEventTypes.hpp>    #include
<stdair/basic/PartnershipTechnique.hpp>
```

Classes

- class [AIRINV::InventoryManager](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

Typedefs

- typedef [std::map< const stdair::Date_T, stdair::SegmentCabin * >](#) [AIRINV::DepartureDateSegmentCabinMap_T](#)
- typedef [std::map< const std::string, DepartureDateSegmentCabinMap_T >](#) [AIRINV::SimilarSegmentCabinSetMap_T](#)

25.120 InventoryManager.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYMANAGER_HPP
00002 #define __AIRINV_CMD_INVENTORYMANAGER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // STDAIR
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/bom/RMEventTypes.hpp>
00012 #include <stdair/basic/PartnershipTechnique.hpp>
00013
00014 // Forward declarations
00015 namespace stdair {
00016     class BomRoot;
00017     class Inventory;
00018     class FlightDate;
00019     class SegmentDate;
00020     class SegmentCabin;
00021     class EventQueue;
00022     struct TravelSolutionStruct;
00023 }
00024
00025 namespace AIRINV {
00026
00027 // ////////////////////////////////// Type definitions //////////////////////////////////
00028 typedef std::map<const stdair::Date_T,
00029                 stdair::SegmentCabin*> DepartureDateSegmentCabinMap_T;
00030 typedef std::map<const std::string,
00031                 DepartureDateSegmentCabinMap_T> SimilarSegmentCabinSetMap_T;
00032
```

```

00034 class InventoryManager {
00035     friend class AIRINV_Master_Service;
00036     friend class AIRINV_Service;
00037
00038 private:
00040     static void initSnapshotEvents (const stdair::Date_T&,
00041                                     const stdair::Date_T&,
00042                                     stdair::EventQueue&);
00043
00045     static void initRMEvents (const stdair::Inventory&, stdair::RMEventList_T&,
00046                               const stdair::Date_T&, const stdair::Date_T&);
00047
00049     static void addRMEventsToEventQueue (stdair::EventQueue&,
00050                                           stdair::RMEventList_T&);
00051
00053     static void calculateAvailability (const stdair::BomRoot&,
00054                                       stdair::TravelSolutionStruct&,
00055                                       const stdair::PartnershipTechnique&);
00056
00058     static void calculateAvailabilityByAU (stdair::TravelSolutionStruct&);
00059
00061     static void calculateAvailabilityByRAE (stdair::TravelSolutionStruct&);
00062
00064     static void calculateAvailabilityByIBP (stdair::TravelSolutionStruct&);
00065
00067     static void calculateAvailabilityByProtectiveIBP (
00075         stdair::TravelSolutionStruct&);
00076
00078     static bool sell (stdair::Inventory&, const std::string& iSegmentDateKey,
00079                     const stdair::ClassCode_T&, const stdair::PartySize_T&);
00080
00082     static bool cancel (stdair::Inventory&, const std::string& iSegmentDateKey,
00083                        const stdair::ClassCode_T&, const stdair::PartySize_T&);
00084 ;
00086     static void takeSnapshots (const stdair::Inventory&,
00087                               const stdair::DateTime_T&);
00088
00090     static void updateBookingControls (stdair::FlightDate&);
00091
00092 public:
00095     static void createDirectAccesses (const stdair::BomRoot&);
00096     static void createDirectAccesses (stdair::Inventory&);
00097     static void createDirectAccesses (stdair::FlightDate&);
00098     static void createDirectAccesses (stdair::SegmentDate&);
00099
00103     static void buildSimilarSegmentCabinSets (const stdair::BomRoot&);
00104     static void buildSimilarSegmentCabinSets (stdair::Inventory&);
00105     static void buildGuillotineBlock (stdair::Inventory&,
00106                                       const stdair::GuillotineNumber_T&,
00107                                       const DepartureDateSegmentCabinMap_T&);
00108
00109     static void setDefaultBidPriceVector (stdair::BomRoot&);
00112     static void setDefaultBidPriceVector (stdair::Inventory&);
00113
00114 private:
00116     InventoryManager() {}
00117     InventoryManager(const InventoryManager&) {}
00119     ~InventoryManager() {}
00120 };
00121
00122 }
00123 #endif // __AIRINV_CMD_INVENTORYMANAGER_HPP

```

25.121 airinv/command/InventoryParser.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasFileMgr.hpp> #include <stdair/bom/BomRoot.hpp> #include

```

```
<stdair/service/Logger.hpp>    #include <airinv/command/-
InventoryParserHelper.hpp>    #include <airinv/command/-
InventoryParser.hpp>    #include <airinv/command/Inventory-
Manager.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.122 InventoryParser.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // Airinv
00012 #include <airinv/command/InventoryParserHelper.hpp>
00013 #include <airinv/command/InventoryParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp>
00015
00016 namespace AIRINV {
00017
00018 // //////////////////////////////////////
00019 void InventoryParser::
00020 buildInventory (const stdair::Filename_T& iInventoryFilename,
00021               stdair::BomRoot& ioBomRoot) {
00022
00023     // Check that the file path given as input corresponds to an actual file
00024     const bool doesExistAndIsReadable =
00025         stdair::BasFileMgr::doesExistAndIsReadable (iInventoryFilename);
00026     if (doesExistAndIsReadable == false) {
00027         std::ostringstream oMessage;
00028         oMessage << "The inventory input file, '" << iInventoryFilename
00029             << "', can not be retrieved on the file-system";
00030         STDAIR_LOG_ERROR (oMessage.str());
00031         throw InventoryInputFileNotFoundException (oMessage.str());
00032     }
00033
00034     // Initialise the inventory file parser.
00035     InventoryFileParser lInventoryParser (ioBomRoot, iInventoryFilename);
00036
00037     // Parse the CSV-formatted inventory input file, and generate the
00038     // corresponding Inventory-related objects.
00039     lInventoryParser.buildInventory();
00040
00041     // Complete the BomRoot BOM building: create the routings for all
00042     // the inventories.
00043     InventoryManager::createDirectAccesses (ioBomRoot);
00044 }
00045
00046 }
```

25.123 airinv/command/InventoryParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp> #include <stdair/command/-
CmdAbstract.hpp>
```


Classes

- class [AIRINV::InventoryParser](#)
Class wrapping the parser entry point.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.124 InventoryParser.hpp

```

00001 #ifndef __AIRINV_CMD_INVENTORYPARSER_HPP
00002 #define __AIRINV_CMD_INVENTORYPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00021     class InventoryParser : public stdair::CmdAbstract {
00022     public:
00032         static void buildInventory (const stdair::Filename_T& iInventoryFilename,
00033                                     stdair::BomRoot&);
00034     };
00035 }
00036 #endif // __AIRINV_CMD_INVENTORYPARSER_HPP

```

25.125 airinv/command/InventoryParserHelper.cpp File Reference

```

#include <cassert>          #include <stdair/service/Logger.-
hpp> #include <stdair/stdair_exceptions.hpp> #include
<airinv/command/InventoryBuilder.hpp> #include <airinv/command/-
InventoryParserHelper.hpp>

```

Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::InventoryParserHelper](#)

Functions

- repeat_p_t [AIRINV::InventoryParserHelper::airline_code_p](#) (chset_t("0-9A-Z").-
derived(), 2, 3)

- bounded1_4_p_t AIRINV::InventoryParserHelper::flight_number_p (uint1_4_p.-derived(), 0u, 9999u)
- bounded2_p_t AIRINV::InventoryParserHelper::year_p (uint2_p.derived(), 0u, 99u)
- bounded2_p_t AIRINV::InventoryParserHelper::month_p (uint2_p.derived(), 1u, 12u)
- bounded2_p_t AIRINV::InventoryParserHelper::day_p (uint2_p.derived(), 1u, 31u)
- repeat_p_t AIRINV::InventoryParserHelper::dow_p (chset_t("0-1").derived().derived(), 7, 7)
- repeat_p_t AIRINV::InventoryParserHelper::airport_p (chset_t("0-9A-Z").-derived(), 3, 3)
- bounded1_2_p_t AIRINV::InventoryParserHelper::hours_p (uint1_2_p.derived(), 0u, 24u)
- bounded2_p_t AIRINV::InventoryParserHelper::minutes_p (uint2_p.derived(), 0u, 59u)
- bounded2_p_t AIRINV::InventoryParserHelper::seconds_p (uint2_p.derived(), 0u, 59u)
- chset_t AIRINV::InventoryParserHelper::cabin_code_p ("A-Z")
- chset_t AIRINV::InventoryParserHelper::class_code_p ("A-Z")
- chset_t AIRINV::InventoryParserHelper::passenger_type_p ("A-Z")
- repeat_p_t AIRINV::InventoryParserHelper::class_code_list_p (chset_t("A--Z").derived(), 1, 26)
- bounded1_3_p_t AIRINV::InventoryParserHelper::stay_duration_p (uint1_3_p.-derived(), 0u, 999u)

Variables

- int1_p_t AIRINV::InventoryParserHelper::int1_p
- uint2_p_t AIRINV::InventoryParserHelper::uint2_p
- uint1_2_p_t AIRINV::InventoryParserHelper::uint1_2_p
- uint1_3_p_t AIRINV::InventoryParserHelper::uint1_3_p
- uint4_p_t AIRINV::InventoryParserHelper::uint4_p
- uint1_4_p_t AIRINV::InventoryParserHelper::uint1_4_p
- int1_p_t AIRINV::InventoryParserHelper::family_code_p

25.126 InventoryParserHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/Logger.hpp>
00008 #include <stdair/stdair_exceptions.hpp>
00009 // Airinv
00010 #include <airinv/command/InventoryBuilder.hpp>
00011 // #define BOOST_SPIRIT_DEBUG
00012 #include <airinv/command/InventoryParserHelper.hpp>
00013

```

```

00014 //
00015 namespace bsc = boost::spirit::classic;
00016
00017 namespace AIRINV {
00018
00019     namespace InventoryParserHelper {
00020
00021         // //////////////////////////////////////
00022         // Semantic actions
00023         // //////////////////////////////////////
00024
00025         ParserSemanticAction::
00026         ParserSemanticAction (FlightDateStruct& ioFlightDate)
00027             : _flightDate (ioFlightDate) {
00028         }
00029
00030         // //////////////////////////////////////
00031         storeSnapshotDate::
00032         storeSnapshotDate (FlightDateStruct& ioFlightDate)
00033             : ParserSemanticAction (ioFlightDate) {
00034         }
00035
00036         // //////////////////////////////////////
00037         void storeSnapshotDate::operator() (iterator_t iStr,
00038             iterator_t iStrEnd) const {
00039             _flightDate._flightDate = _flightDate.getDate();
00040         }
00041
00042         // //////////////////////////////////////
00043         storeAirlineCode::
00044         storeAirlineCode (FlightDateStruct& ioFlightDate)
00045             : ParserSemanticAction (ioFlightDate) {
00046         }
00047
00048         // //////////////////////////////////////
00049         void storeAirlineCode::operator() (iterator_t iStr,
00050             iterator_t iStrEnd) const {
00051             const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00052             _flightDate._airlineCode = lAirlineCode;
00053
00054             // As that's the beginning of a new flight, all the list must be reset
00055             // 1. Leg branch of the tree
00056             _flightDate._legList.clear();
00057             _flightDate._itLeg._cabinList.clear();
00058             _flightDate._itLegCabin._bucketList.clear();
00059             _flightDate._itBucket._yieldRangeUpperValue = 0.0;
00060
00061             // 2. Segment branch of the tree
00062             _flightDate._segmentList.clear();
00063             _flightDate._itSegment._cabinList.clear();
00064             _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00065             _flightDate._itSegmentCabin._fareFamilies.clear();
00066             _flightDate._itBookingClass._classCode = "";
00067         }
00068
00069         // //////////////////////////////////////
00070         storeFlightNumber::storeFlightNumber (FlightDateStruct& ioFlightDate)
00071             : ParserSemanticAction (ioFlightDate) {
00072         }
00073
00074         // //////////////////////////////////////
00075         void storeFlightNumber::operator() (unsigned int iNumber) const {
00076             _flightDate._flightNumber = iNumber;
00077         }
00078
00079         // //////////////////////////////////////
00080         storeFlightDate::storeFlightDate (FlightDateStruct& ioFlightDate)
00081             : ParserSemanticAction (ioFlightDate) {
00082         }
00083
00084         // //////////////////////////////////////
00085         void storeFlightDate::operator() (iterator_t iStr,
00086             iterator_t iStrEnd) const {
00087             _flightDate._flightDate = _flightDate.getDate();

```

```

00088     }
00089
00090     // //////////////////////////////////////
00091     storeFlightTypeCode::storeFlightTypeCode (FlightDateStruct& ioFlightDate)
00092         : ParserSemanticAction (ioFlightDate) {
00093     }
00094
00095     // //////////////////////////////////////
00096     void storeFlightTypeCode::operator() (iterator_t iStr,
00097                                           iterator_t iStrEnd) const {
00098         const std::string lFlightTypeCodeStr (iStr, iStrEnd);
00099         const FlightTypeCode lFlightTypeCode (lFlightTypeCodeStr);
00100         _flightDate._flightTypeCode = lFlightTypeCode.getCode();
00101         //STDAIR_LOG_DEBUG ("FlightType code: " << lFlightTypeCode);
00102     }
00103
00104     // //////////////////////////////////////
00105     storeFlightVisibilityCode::
00106     storeFlightVisibilityCode (FlightDateStruct& ioFlightDate)
00107         : ParserSemanticAction (ioFlightDate) {
00108     }
00109
00110     // //////////////////////////////////////
00111     void storeFlightVisibilityCode::operator() (iterator_t iStr,
00112                                                iterator_t iStrEnd) const {
00113         const std::string lFlightVisibilityCodeStr (iStr, iStrEnd);
00114         const FlightVisibilityCode lFlightVisibilityCode (lFlightVisibilityCodeStr
00115 );
00116         _flightDate._flightVisibilityCode = lFlightVisibilityCode.getCode();
00117         //STDAIR_LOG_DEBUG ("FlightVisibility code: " << lFlightVisibilityCode);
00118     }
00119
00120     // //////////////////////////////////////
00121     storeLegBoardingPoint::
00122     storeLegBoardingPoint (FlightDateStruct& ioFlightDate)
00123         : ParserSemanticAction (ioFlightDate) {
00124     }
00125
00126     // //////////////////////////////////////
00127     void storeLegBoardingPoint::operator() (iterator_t iStr,
00128                                           iterator_t iStrEnd) const {
00129         stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00130
00131         // //////////////////////////////////
00132         // If this is not the first leg-date of the flight-date,
00133         // the already parsed leg-date must be added to the flight-date.
00134         if (_flightDate._itLeg._cabinList.empty() == false) {
00135             _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00136             _flightDate._itLeg._cabinList.push_back (_flightDate._itLegCabin);
00137             _flightDate._legList.push_back (_flightDate._itLeg);
00138         }
00139
00140         // As that's the beginning of a new leg-date,
00141         // (re-)initialise the leg-cabin branch of the tree
00142         _flightDate._itLeg._cabinList.clear();
00143         _flightDate._itLegCabin._cabinCode = "";
00144         _flightDate._itLegCabin._bucketList.clear();
00145         _flightDate._itBucket._yieldRangeUpperValue = 0.0;
00146
00147         // //////////////////////////////////
00148         // Set the (new) boarding point
00149         _flightDate._itLeg._boardingPoint = lBoardingPoint;
00150
00151         // Add the airport code if it is not already stored in the airport lists
00152         _flightDate.addAirport (lBoardingPoint);
00153     }
00154
00155     // //////////////////////////////////////
00156     storeLegOffPoint::
00157     storeLegOffPoint (FlightDateStruct& ioFlightDate)
00158         : ParserSemanticAction (ioFlightDate) {
00159     }
00160

```

```

00161 // //////////////////////////////////////
00162 void storeLegOffPoint::operator() (iterator_t iStr,
00163                                   iterator_t iStrEnd) const {
00164     stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00165     _flightDate._itLeg._offPoint = lOffPoint;
00166
00167     // Add the airport code if it is not already stored in the airport lists
00168     _flightDate.addAirport (lOffPoint);
00169 }
00170
00171 // //////////////////////////////////////
00172 storeBoardingDate::storeBoardingDate (FlightDateStruct& ioFlightDate)
00173     : ParserSemanticAction (ioFlightDate) {
00174 }
00175
00176 // //////////////////////////////////////
00177 void storeBoardingDate::operator() (iterator_t iStr,
00178                                   iterator_t iStrEnd) const {
00179     _flightDate._itLeg._boardingDate = _flightDate.getDate();
00180 }
00181
00182 // //////////////////////////////////////
00183 storeBoardingTime::storeBoardingTime (FlightDateStruct& ioFlightDate)
00184     : ParserSemanticAction (ioFlightDate) {
00185 }
00186
00187 // //////////////////////////////////////
00188 void storeBoardingTime::operator() (iterator_t iStr,
00189                                   iterator_t iStrEnd) const {
00190     _flightDate._itLeg._boardingTime = _flightDate.getTime();
00191
00192     // Reset the number of seconds
00193     _flightDate._itSeconds = 0;
00194
00195     // Reset the date off-set
00196     _flightDate._dateOffSet = 0;
00197 }
00198
00199 // //////////////////////////////////////
00200 storeOffDate::storeOffDate (FlightDateStruct& ioFlightDate)
00201     : ParserSemanticAction (ioFlightDate) {
00202 }
00203
00204 // //////////////////////////////////////
00205 void storeOffDate::operator() (iterator_t iStr, iterator_t iStrEnd) const {
00206     _flightDate._itLeg._offDate = _flightDate.getDate();
00207 }
00208
00209 // //////////////////////////////////////
00210 storeOffTime::storeOffTime (FlightDateStruct& ioFlightDate)
00211     : ParserSemanticAction (ioFlightDate) {
00212 }
00213
00214 // //////////////////////////////////////
00215 void storeOffTime::operator() (iterator_t iStr, iterator_t iStrEnd) const {
00216     _flightDate._itLeg._offTime = _flightDate.getTime();
00217
00218     // Reset the number of seconds
00219     _flightDate._itSeconds = 0;
00220 }
00221
00222 // //////////////////////////////////////
00223 storeLegCabinCode::storeLegCabinCode (FlightDateStruct& ioFlightDate)
00224     : ParserSemanticAction (ioFlightDate) {
00225 }
00226
00227 // //////////////////////////////////////
00228 void storeLegCabinCode::operator() (char iChar) const {
00229
00230     // //////////////////////////////////
00231     // If this is not the first leg-cabin of the leg-date,
00232     // the already parsed leg-cabin must be added to the leg-date.
00233     if (_flightDate._itLegCabin._cabinCode != "") {
00234         if (_flightDate._itLegCabin._bucketList.empty() == false) {

```

```

00235         _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket)
00236     };
00237     _flightDate._itLeg._cabinList.push_back (_flightDate._itLegCabin);
00238 }
00239
00240 // (Re-)initialise the leg-cabin branch of the tree
00241 _flightDate._itLegCabin._bucketList.clear();
00242 _flightDate._itBucket._yieldRangeUpperValue = 0.0;
00243
00244
00245 // ///////////////////////////////////
00246 _flightDate._itLegCabin._cabinCode = iChar;
00247 //std::cout << "Cabin code: " << iChar << std::endl;
00248 }
00249
00250 // ///////////////////////////////////
00251 storeSaleableCapacity::
00252 storeSaleableCapacity (FlightDateStruct& ioFlightDate)
00253 : ParserSemanticAction (ioFlightDate) {
00254 }
00255
00256 // ///////////////////////////////////
00257 void storeSaleableCapacity::operator() (double iReal) const {
00258     _flightDate._itLegCabin._saleableCapacity = iReal;
00259     //std::cout << "Saleable capacity: " << iReal << std::endl;
00260 }
00261
00262 // ///////////////////////////////////
00263 storeAU::storeAU (FlightDateStruct& ioFlightDate)
00264 : ParserSemanticAction (ioFlightDate) {
00265 }
00266
00267 // ///////////////////////////////////
00268 void storeAU::operator() (double iReal) const {
00269     _flightDate._itLegCabin._au = iReal;
00270     //std::cout << "AU: " << iReal << std::endl;
00271 }
00272
00273 // ///////////////////////////////////
00274 storeUPR::storeUPR (FlightDateStruct& ioFlightDate)
00275 : ParserSemanticAction (ioFlightDate) {
00276 }
00277
00278 // ///////////////////////////////////
00279 void storeUPR::operator() (double iReal) const {
00280     _flightDate._itLegCabin._upr = iReal;
00281     //std::cout << "UPR: " << iReal << std::endl;
00282 }
00283
00284 // ///////////////////////////////////
00285 storeBookingCounter::storeBookingCounter (FlightDateStruct& ioFlightDate)
00286 : ParserSemanticAction (ioFlightDate) {
00287 }
00288
00289 // ///////////////////////////////////
00290 void storeBookingCounter::operator() (double iReal) const {
00291     _flightDate._itLegCabin._nbOfBookings = iReal;
00292     //std::cout << "Nb of bookings: " << iReal << std::endl;
00293 }
00294
00295 // ///////////////////////////////////
00296 storeNAV::storeNAV (FlightDateStruct& ioFlightDate)
00297 : ParserSemanticAction (ioFlightDate) {
00298 }
00299
00300 // ///////////////////////////////////
00301 void storeNAV::operator() (double iReal) const {
00302     _flightDate._itLegCabin._nav = iReal;
00303     //std::cout << "NAV: " << iReal << std::endl;
00304 }
00305
00306 // ///////////////////////////////////
00307 storeGAV::storeGAV (FlightDateStruct& ioFlightDate)

```

```

00308         : ParserSemanticAction (ioFlightDate) {
00309     }
00310
00311     // //////////////////////////////////////
00312 void storeGAV::operator() (double iReal) const {
00313     _flightDate._itLegCabin._gav = iReal;
00314     //std::cout << "GAV: " << iReal << std::endl;
00315 }
00316
00317     // //////////////////////////////////////
00318 storeACP::storeACP (FlightDateStruct& ioFlightDate)
00319     : ParserSemanticAction (ioFlightDate) {
00320     }
00321
00322     // //////////////////////////////////////
00323 void storeACP::operator() (double iReal) const {
00324     _flightDate._itLegCabin._acp = iReal;
00325     //std::cout << "ACP: " << iReal << std::endl;
00326 }
00327
00328     // //////////////////////////////////////
00329 storeETB::storeETB (FlightDateStruct& ioFlightDate)
00330     : ParserSemanticAction (ioFlightDate) {
00331     }
00332
00333     // //////////////////////////////////////
00334 void storeETB::operator() (double iReal) const {
00335     _flightDate._itLegCabin._etb = iReal;
00336     //std::cout << "ETB: " << iReal << std::endl;
00337 }
00338
00339     // //////////////////////////////////////
00340 storeYieldUpperRange::storeYieldUpperRange(FlightDateStruct& ioFlightDate)
00341     : ParserSemanticAction (ioFlightDate) {
00342     }
00343
00344     // //////////////////////////////////////
00345 void storeYieldUpperRange::operator() (double iReal) const {
00346     // If this is not the first bucket of the leg-cabin,
00347     // the already parsed bucket must be added to the leg-cabin.
00348     if (_flightDate._itBucket._yieldRangeUpperValue != 0.0) {
00349         _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00350     }
00351
00352
00353     // //////////////////////////////////
00354     _flightDate._itBucket._yieldRangeUpperValue = iReal;
00355     //std::cout << "Yield Upper Range Value: " << iReal << std::endl;
00356 }
00357
00358     // //////////////////////////////////////
00359 storeBucketAvaibility::
00360 storeBucketAvaibility (FlightDateStruct& ioFlightDate)
00361     : ParserSemanticAction (ioFlightDate) {
00362     }
00363
00364     // //////////////////////////////////////
00365 void storeBucketAvaibility::operator() (double iReal) const {
00366     _flightDate._itBucket._availability = iReal;
00367     //std::cout << "Availability: " << iReal << std::endl;
00368 }
00369
00370     // //////////////////////////////////////
00371 storeSeatIndex::storeSeatIndex (FlightDateStruct& ioFlightDate)
00372     : ParserSemanticAction (ioFlightDate) {
00373     }
00374
00375     // //////////////////////////////////////
00376 void storeSeatIndex::operator() (double iReal) const {
00377     _flightDate._itBucket._seatIndex = iReal;
00378     //std::cout << "Seat Index: " << iReal << std::endl;
00379 }
00380
00381     // //////////////////////////////////////

```

```

00382     storeSegmentBoardingPoint::
00383     storeSegmentBoardingPoint (FlightDateStruct& ioFlightDate)
00384     : ParserSemanticAction (ioFlightDate) {
00385     }
00386
00387     // //////////////////////////////////////
00388     void storeSegmentBoardingPoint::operator() (iterator_t iStr,
00389     iterator_t iStrEnd) const {
00390         stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00391
00392         // //////////////////////////////////
00393         // When the first segment-date is read, it means that the leg section
00394         // is over. The parsed leg can therefore be added to the list.
00395         if (_flightDate._itLeg._cabinList.empty() == false) {
00396             _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00397             _flightDate._itLeg._cabinList.push_back (_flightDate._itLegCabin);
00398             _flightDate._legList.push_back (_flightDate._itLeg);
00399
00400             // (Re-)initialise the leg-date branch of the tree
00401             _flightDate._itLeg._cabinList.clear();
00402             _flightDate._itLegCabin._cabinCode = "";
00403             _flightDate._itLeg._cabinList.clear();
00404             _flightDate._itLegCabin._bucketList.clear();
00405         }
00406
00407         // //////////////////////////////////
00408         // If this is not the first segment-date of the flight-date,
00409         // the already parsed segment-date must be added to the flight-date.
00410         if (_flightDate._itSegment._cabinList.empty() == false) {
00411             _flightDate._itSegmentCabin._itFareFamily._classList.push_back (
00412             _flightDate._itBookingClass);
00413             _flightDate._itSegmentCabin._fareFamilies.push_back (_flightDate.
00414             _itSegmentCabin._itFareFamily);
00415             _flightDate._itSegment._cabinList.push_back (_flightDate._itSegmentCabin
00416             );
00417             _flightDate._segmentList.push_back (_flightDate._itSegment);
00418         }
00419         // As that's the beginning of a new segment-date,
00420         // (re-)initialise the segment-cabin branch of the tree
00421         _flightDate._itSegment._cabinList.clear();
00422         _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00423         _flightDate._itSegmentCabin._fareFamilies.clear();
00424         _flightDate._itBookingClass._classCode = "";
00425
00426         // //////////////////////////////////
00427         _flightDate._itSegment._boardingPoint = lBoardingPoint;
00428         //std::cout << "Board point: " << lBoardingPoint << std::endl;
00429     }
00430
00431     // //////////////////////////////////////
00432     storeSegmentOffPoint::storeSegmentOffPoint (FlightDateStruct& ioFlightDate)
00433     : ParserSemanticAction (ioFlightDate) {
00434     }
00435
00436     // //////////////////////////////////////
00437     void storeSegmentOffPoint::operator() (iterator_t iStr,
00438     iterator_t iStrEnd) const {
00439         stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00440         _flightDate._itSegment._offPoint = lOffPoint;
00441         //std::cout << "Off point: " << lOffPoint << std::endl;
00442     }
00443
00444     // //////////////////////////////////////
00445     storeSegmentCabinCode::
00446     storeSegmentCabinCode (FlightDateStruct& ioFlightDate)
00447     : ParserSemanticAction (ioFlightDate) {
00448     }
00449
00450     // //////////////////////////////////////
00451     void storeSegmentCabinCode::operator() (char iChar) const {
00452

```



```

00453 // Reset the list of fare families, as it is a new segment-cabin
00454 _flightDate._itSegmentCabin._fareFamilies.clear();
00455
00456 // //////////////////////////////////
00457 // If this is not the first segment-cabin of the segment-date,
00458 // the already parsed segment-cabin must be added to the segment-date.
00459 if (_flightDate._itSegmentCabin._itFareFamily._classList.empty() == false
) {
00460     _flightDate._itSegmentCabin._itFareFamily._classList.
00461     push_back (_flightDate._itBookingClass);
00462     _flightDate._itSegmentCabin._fareFamilies.
00463     push_back (_flightDate._itSegmentCabin._itFareFamily);
00464     _flightDate._itSegment._cabinList.
00465     push_back (_flightDate._itSegmentCabin);
00466 }
00467
00468 // (Re-)initialise the booking-class branch of the tree
00469 _flightDate._itSegmentCabin._fareFamilies.clear();
00470 _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00471 _flightDate._itBookingClass._classCode = "";
00472
00473
00474 // //////////////////////////////////
00475 _flightDate._itSegmentCabin._cabinCode = iChar;
00476 //std::cout << "Segment-cabin code: " << iChar << std::endl;
00477 }
00478
00479 // //////////////////////////////////
00480 storeSegmentCabinBookingCounter::
00481 storeSegmentCabinBookingCounter (FlightDateStruct& ioFlightDate)
00482 : ParserSemanticAction (ioFlightDate) {
00483 }
00484
00485 // //////////////////////////////////
00486 void storeSegmentCabinBookingCounter::operator() (double iReal) const {
00487     _flightDate._itSegmentCabin._nbOfBookings = iReal;
00488     //std::cout << "Nb of bookings: " << iReal << std::endl;
00489 }
00490
00491 // //////////////////////////////////
00492 storeClassCode::storeClassCode (FlightDateStruct& ioFlightDate)
00493 : ParserSemanticAction (ioFlightDate) {
00494 }
00495
00496 // //////////////////////////////////
00497 void storeClassCode::operator() (char iChar) const {
00498     // If this is not the first booking-class of the segment-cabin,
00499     // the already parsed booking-class must be added to the segment-cabin.
00500     if (_flightDate._itBookingClass._classCode != "") {
00501         _flightDate._itSegmentCabin._itFareFamily._classList.
00502         push_back (_flightDate._itBookingClass);
00503     }
00504
00505     // //////////////////////////////////
00506     _flightDate._itBookingClass._classCode = iChar;
00507     //std::cout << "Booking class code: " << iChar << std::endl;
00508 }
00509
00510 // //////////////////////////////////
00511 storeSubclassCode::storeSubclassCode (FlightDateStruct& ioFlightDate)
00512 : ParserSemanticAction (ioFlightDate) {
00513 }
00514
00515 // //////////////////////////////////
00516 void storeSubclassCode::operator() (unsigned int iNumber) const {
00517     _flightDate._itBookingClass._subclassCode = iNumber;
00518     //std::cout << "Sub-class code: " << iNumber << std::endl;
00519 }
00520
00521 // //////////////////////////////////
00522 storeParentClassCode::
00523 storeParentClassCode (FlightDateStruct& ioFlightDate)
00524 : ParserSemanticAction (ioFlightDate) {
00525 }

```

```

00526
00527 // ////////////////////////////////////////
00528 void storeParentClassCode::operator() (char iChar) const {
00529     _flightDate._itBookingClass._parentClassCode = iChar;
00530     //std::cout << "Parent booking class code: " << iChar << std::endl;
00531 }
00532
00533 // ////////////////////////////////////////
00534 storeParentSubclassCode::
00535 storeParentSubclassCode (FlightDateStruct& ioFlightDate)
00536     : ParserSemanticAction (ioFlightDate) {
00537 }
00538
00539 // ////////////////////////////////////////
00540 void storeParentSubclassCode::operator() (unsigned int iNumber) const {
00541     _flightDate._itBookingClass._parentSubclassCode = iNumber;
00542     //std::cout << "Parent sub-class code: " << iNumber << std::endl;
00543 }
00544
00545 // ////////////////////////////////////////
00546 storeCumulatedProtection::
00547 storeCumulatedProtection (FlightDateStruct& ioFlightDate)
00548     : ParserSemanticAction (ioFlightDate) {
00549 }
00550
00551 // ////////////////////////////////////////
00552 void storeCumulatedProtection::operator() (double iReal) const {
00553     _flightDate._itBookingClass._cumulatedProtection = iReal;
00554     //std::cout << "Cumulated protection: " << iReal << std::endl;
00555 }
00556
00557 // ////////////////////////////////////////
00558 storeProtection::storeProtection (FlightDateStruct& ioFlightDate)
00559     : ParserSemanticAction (ioFlightDate) {
00560 }
00561
00562 // ////////////////////////////////////////
00563 void storeProtection::operator() (double iReal) const {
00564     _flightDate._itBookingClass._protection = iReal;
00565     //std::cout << "Protection: " << iReal << std::endl;
00566 }
00567
00568 // ////////////////////////////////////////
00569 storeNego::storeNego (FlightDateStruct& ioFlightDate)
00570     : ParserSemanticAction (ioFlightDate) {
00571 }
00572
00573 // ////////////////////////////////////////
00574 void storeNego::operator() (double iReal) const {
00575     _flightDate._itBookingClass._nego = iReal;
00576     //std::cout << "Negotiated allotment: " << iReal << std::endl;
00577 }
00578
00579 // ////////////////////////////////////////
00580 storeNoShow::storeNoShow (FlightDateStruct& ioFlightDate)
00581     : ParserSemanticAction (ioFlightDate) {
00582 }
00583
00584 // ////////////////////////////////////////
00585 void storeNoShow::operator() (double iReal) const {
00586     _flightDate._itBookingClass._noShowPercentage = iReal;
00587     //std::cout << "No-Show percentage: " << iReal << std::endl;
00588 }
00589
00590 // ////////////////////////////////////////
00591 storeOverbooking::storeOverbooking (FlightDateStruct& ioFlightDate)
00592     : ParserSemanticAction (ioFlightDate) {
00593 }
00594
00595 // ////////////////////////////////////////
00596 void storeOverbooking::operator() (double iReal) const {
00597     _flightDate._itBookingClass._overbookingPercentage = iReal;
00598     //std::cout << "Overbooking percentage: " << iReal << std::endl;
00599 }

```

```

00600
00601 // //////////////////////////////////////
00602 storeNbOfBkgs::storeNbOfBkgs (FlightDateStruct& ioFlightDate)
00603 : ParserSemanticAction (ioFlightDate) {
00604 }
00605
00606 // //////////////////////////////////////
00607 void storeNbOfBkgs::operator() (double iReal) const {
00608     _flightDate._itBookingClass._nbOfBookings = iReal;
00609     //std::cout << "Nb of bookings: " << iReal << std::endl;
00610 }
00611
00612 // //////////////////////////////////////
00613 storeNbOfGroupBkgs::storeNbOfGroupBkgs (FlightDateStruct& ioFlightDate)
00614 : ParserSemanticAction (ioFlightDate) {
00615 }
00616
00617 // //////////////////////////////////////
00618 void storeNbOfGroupBkgs::operator() (double iReal) const {
00619     _flightDate._itBookingClass._nbOfGroupBookings = iReal;
00620     //std::cout << "Nb of group bookings: " << iReal << std::endl;
00621 }
00622
00623 // //////////////////////////////////////
00624 storeNbOfPendingGroupBkgs::
00625 storeNbOfPendingGroupBkgs (FlightDateStruct& ioFlightDate)
00626 : ParserSemanticAction (ioFlightDate) {
00627 }
00628
00629 // //////////////////////////////////////
00630 void storeNbOfPendingGroupBkgs::operator() (double iReal) const {
00631     _flightDate._itBookingClass._nbOfPendingGroupBookings = iReal;
00632     //std::cout << "Nb of pending group bookings: " << iReal << std::endl;
00633 }
00634
00635 // //////////////////////////////////////
00636 storeNbOfStaffBkgs::storeNbOfStaffBkgs (FlightDateStruct& ioFlightDate)
00637 : ParserSemanticAction (ioFlightDate) {
00638 }
00639
00640 // //////////////////////////////////////
00641 void storeNbOfStaffBkgs::operator() (double iReal) const {
00642     _flightDate._itBookingClass._nbOfStaffBookings = iReal;
00643     //std::cout << "Nb of staff bookings: " << iReal << std::endl;
00644 }
00645
00646 // //////////////////////////////////////
00647 storeNbOfWLBkgs::storeNbOfWLBkgs (FlightDateStruct& ioFlightDate)
00648 : ParserSemanticAction (ioFlightDate) {
00649 }
00650
00651 // //////////////////////////////////////
00652 void storeNbOfWLBkgs::operator() (double iReal) const {
00653     _flightDate._itBookingClass._nbOfWLBkgs = iReal;
00654     //std::cout << "Nb of wait-list bookings: " << iReal << std::endl;
00655 }
00656
00657 // //////////////////////////////////////
00658 storeClassETB::storeClassETB (FlightDateStruct& ioFlightDate)
00659 : ParserSemanticAction (ioFlightDate) {
00660 }
00661
00662 // //////////////////////////////////////
00663 void storeClassETB::operator() (double iReal) const {
00664     _flightDate._itBookingClass._etb = iReal;
00665     //std::cout << "Class-level ETB: " << iReal << std::endl;
00666 }
00667
00668 // //////////////////////////////////////
00669 storeClassAvailability::
00670 storeClassAvailability (FlightDateStruct& ioFlightDate)
00671 : ParserSemanticAction (ioFlightDate) {
00672 }
00673

```

```

00674 ///////////////////////////////////////////////////////////////////
00675 void storeClassAvailability::operator() (double iReal) const {
00676     _flightDate._itBookingClass._netClassAvailability = iReal;
00677     //std::cout << "Net class availability: " << iReal << std::endl;
00678 }
00679
00680 ///////////////////////////////////////////////////////////////////
00681 storeSegmentAvailability::
00682 storeSegmentAvailability (FlightDateStruct& ioFlightDate)
00683     : ParserSemanticAction (ioFlightDate) {
00684 }
00685
00686 ///////////////////////////////////////////////////////////////////
00687 void storeSegmentAvailability::operator() (double iReal) const {
00688     _flightDate._itBookingClass._segmentAvailability = iReal;
00689     //std::cout << "Segment availability: " << iReal << std::endl;
00690 }
00691
00692 ///////////////////////////////////////////////////////////////////
00693 storeRevenueAvailability::
00694 storeRevenueAvailability (FlightDateStruct& ioFlightDate)
00695     : ParserSemanticAction (ioFlightDate) {
00696 }
00697
00698 ///////////////////////////////////////////////////////////////////
00699 void storeRevenueAvailability::operator() (double iReal) const {
00700     _flightDate._itBookingClass._netRevenueAvailability = iReal;
00701     //std::cout << "Net revenue availability: " << iReal << std::endl;
00702 }
00703
00704 ///////////////////////////////////////////////////////////////////
00705 storeFamilyCode::storeFamilyCode (FlightDateStruct& ioFlightDate)
00706     : ParserSemanticAction (ioFlightDate) {
00707 }
00708
00709 ///////////////////////////////////////////////////////////////////
00710 void storeFamilyCode::operator() (int iCode) const {
00711     std::ostringstream ostr;
00712     ostr << iCode;
00713     _flightDate._itSegmentCabin._itFareFamily._familyCode = ostr.str();
00714 }
00715
00716 ///////////////////////////////////////////////////////////////////
00717 storeFClasses::storeFClasses (FlightDateStruct& ioFlightDate)
00718     : ParserSemanticAction (ioFlightDate) {
00719 }
00720
00721 ///////////////////////////////////////////////////////////////////
00722 void storeFClasses::operator() (iterator_t iStr,
00723     iterator_t iStrEnd) const {
00724     std::string lClasses (iStr, iStrEnd);
00725     _flightDate._itSegmentCabin._itFareFamily._classes = lClasses;
00726
00727     // The list of classes is the last (according to the arrival order
00728     // within the schedule input file) detail of the segment cabin. Hence,
00729     // when a list of classes is parsed, it means that the full segment
00730     // cabin details have already been parsed as well: the segment cabin
00731     // can thus be added to the segment.
00732     _flightDate._itSegmentCabin._itFareFamily._classList.
00733         push_back (_flightDate._itBookingClass);
00734     _flightDate._itSegmentCabin._fareFamilies.
00735         push_back (_flightDate._itSegmentCabin._itFareFamily);
00736     _flightDate._itSegment._cabinList.push_back (_flightDate._itSegmentCabin)
00737 ;
00738
00739 // As that's the beginning of a new segment-cabin,
00740 // (re-)initialise the segment-cabin branch of the tree
00741 _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00742 _flightDate._itSegmentCabin._fareFamilies.clear();
00743 _flightDate._itBookingClass._classCode = "";
00744 }
00745
00746 ///////////////////////////////////////////////////////////////////
00746 doEndFlightDate::doEndFlightDate (stdair::BomRoot& ioBomRoot,

```

```

00747                                     FlightDateStruct& ioFlightDate,
00748                                     unsigned int& ioNbOfFlights)
00749 : ParserSemanticAction (ioFlightDate), _bomRoot (ioBomRoot),
00750   _nbOfFlights (ioNbOfFlights) {
00751 }
00752
00753 // //////////////////////////////////////
00754 // void doEndFlightDate::operator() (char iChar) const {
00755 void doEndFlightDate::operator() (iterator_t iStr,
00756                                   iterator_t iStrEnd) const {
00757
00758     // //////////////////////////////////
00759     // The segment-date section is now over. It means that the
00760     // already parsed segment-date must be added to the flight-date.
00761     if (_flightDate._itSegment._cabinList.empty() == false) {
00762         _flightDate._segmentList.push_back (_flightDate._itSegment);
00763     }
00764
00765     // As that's the beginning of a new flight-date,
00766     // (re-)initialise the segment-cabin branch of the tree
00767     _flightDate._itSegment._cabinList.clear();
00768
00769
00770     // //////////////////////////////////
00771     //if (_nbOfFlights % 1000 == 0) {
00772     //    DEBUG: Display the result
00773     //    STDAIR_LOG_DEBUG ("FlightDate #" << _nbOfFlights
00774     //                      << ": " << _flightDate.describe());
00775     //}
00776
00777     // Build the FlightDate BOM objects
00778     InventoryBuilder::buildInventory (_bomRoot, _flightDate);
00779
00780     //
00781     ++_nbOfFlights;
00782 }
00783
00784
00785 // //////////////////////////////////////
00786 //
00787 // Utility Parsers
00788 //
00789 // //////////////////////////////////////
00791 int1_p_t int1_p;
00792
00794 uint2_p_t uint2_p;
00795
00797 uint1_2_p_t uint1_2_p;
00798
00800 uint1_3_p_t uint1_3_p;
00801
00803 uint4_p_t uint4_p;
00804
00806 uint1_4_p_t uint1_4_p;
00807
00809 repeat_p_t airline_code_p (chset_t("0-9A-Z").derived(), 2, 3);
00810
00812 bounded1_4_p_t flight_number_p (uint1_4_p.derived(), 0u, 9999u);
00813
00815 bounded2_p_t year_p (uint2_p.derived(), 0u, 99u);
00816
00818 bounded2_p_t month_p (uint2_p.derived(), 1u, 12u);
00819
00821 bounded2_p_t day_p (uint2_p.derived(), 1u, 31u);
00822
00824 repeat_p_t dow_p (chset_t("0-1").derived().derived(), 7, 7);
00825
00827 repeat_p_t airport_p (chset_t("0-9A-Z").derived(), 3, 3);
00828
00830 bounded1_2_p_t hours_p (uint1_2_p.derived(), 0u, 24u);
00831
00833 bounded2_p_t minutes_p (uint2_p.derived(), 0u, 59u);
00834
00836 bounded2_p_t seconds_p (uint2_p.derived(), 0u, 59u);

```

```

00837     chset_t cabin_code_p ("A-Z");
00839
00840
00842     chset_t class_code_p ("A-Z");
00843
00845     chset_t passenger_type_p ("A-Z");
00846
00848     intl_p_t family_code_p;
00849
00851     repeat_p_t class_code_list_p (chset_t("A-Z").derived(), 1, 26);
00852
00854     bounded1_3_p_t stay_duration_p (uint1_3_p.derived(), 0u, 999u);
00855
00856
00857     // //////////////////////////////////////
00858     // (Boost Spirit) Grammar Definition
00859     // //////////////////////////////////////
00860
00861     // //////////////////////////////////////
00862     InventoryParser::InventoryParser (stdair::BomRoot& ioBomRoot,
00863                                       FlightDateStruct& ioFlightDate,
00864                                       unsigned int& ioNbOfFlights)
00865     : _bomRoot (ioBomRoot), _flightDate (ioFlightDate),
00866       _nbOfFlights (ioNbOfFlights) {
00867     }
00868
00869     // //////////////////////////////////////
00870     template<typename ScannerT>
00871     InventoryParser::definition<ScannerT>::
00872     definition (InventoryParser const& self) {
00873
00874         flight_date_list = *( not_to_be_parsed | flight_date )
00875         ;
00876
00877         not_to_be_parsed =
00878             bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00879                           | bsc::space_p ]
00880         ;
00881
00882         flight_date = flight_key
00883             >> leg_list
00884             >> segment_list
00885             >> flight_date_end[doEndFlightDate (self._bomRoot, self._flightDate,
00886                                                self._nbOfFlights)]
00887         ;
00888
00889         flight_date_end = bsc::ch_p(';')
00890         ;
00891
00892         flight_key = date[storeSnapshotDate(self._flightDate)]
00893             >> '/' >> airline_code
00894             >> '/' >> flight_number
00895             >> '/' >> date[storeFlightDate(self._flightDate)]
00896             >> '/' >> flight_type_code[storeFlightTypeCode(self._flightDate)]
00897             >> !( '/' >> flight_visibility_code[storeFlightVisibilityCode(self.
_flightDate)])
00898         ;
00899
00900         airline_code =
00901             bsc::lexeme_d[ (airline_code_p) [storeAirlineCode(self._flightDate)] ]
00902         ;
00903
00904         flight_number =
00905             bsc::lexeme_d[ (flight_number_p) [storeFlightNumber(self._flightDate)] ]
00906         ;
00907
00908         date =
00909             bsc::lexeme_d[ (day_p) [bsc::assign_a(self._flightDate._itDay)]
00910                           >> (month_p) [bsc::assign_a(self._flightDate._itMonth)]
00911                           >> (year_p) [bsc::assign_a(self._flightDate._itYear)] ]
00912         ;
00913
00914         flight_type_code =
00915             ( bsc::chseq_p("INT") | bsc::chseq_p("DOM") | bsc::chseq_p("GRD") )

```

```

00916         ;
00917
00918     flight_visibility_code =
00919     ( bsc::chseq_p("HID") | bsc::chseq_p("PSD") )
00920     ;
00921
00922     leg_list = +( '/' >> leg )
00923     ;
00924
00925     leg = leg_key >> ';' >> leg_details >> leg_cabin_list
00926     ;
00927
00928     leg_key = (airport_p)[storeLegBoardingPoint(self._flightDate)]
00929     >> ';' >> (airport_p)[storeLegOffPoint(self._flightDate)]
00930     ;
00931
00932     leg_details = date[storeBoardingDate(self._flightDate)]
00933     >> ';' >> time[storeBoardingTime(self._flightDate)]
00934     >> ';' >> date[storeOffDate(self._flightDate)]
00935     >> ';' >> time[storeOffTime(self._flightDate)]
00936     ;
00937
00938     leg_cabin_list = +( ';' >> leg_cabin_details >> !bucket_list )
00939     ;
00940
00941     leg_cabin_details = (cabin_code_p)[storeLegCabinCode(self._flightDate)]
00942     >> ',' >> (bsc::ureal_p)[storeSaleableCapacity(self._flightDate)]
00943     >> ',' >> (bsc::real_p)[storeAU(self._flightDate)]
00944     >> ',' >> (bsc::real_p)[storeUPR(self._flightDate)]
00945     >> ',' >> (bsc::real_p)[storeBookingCounter(self._flightDate)]
00946     >> ',' >> (bsc::real_p)[storeNAV(self._flightDate)]
00947     >> ',' >> (bsc::real_p)[storeGAV(self._flightDate)]
00948     >> ',' >> (bsc::ureal_p)[storeACP(self._flightDate)]
00949     >> ',' >> (bsc::real_p)[storeETB(self._flightDate)]
00950     ;
00951
00952     time =
00953     bsc::lexeme_d[
00954     (hours_p)[bsc::assign_a(self._flightDate._itHours)]
00955     >> (minutes_p)[bsc::assign_a(self._flightDate._itMinutes)]
00956     >> !((seconds_p)[bsc::assign_a(self._flightDate._itSeconds)]]
00957     ]
00958     ;
00959
00960     bucket_list = +( ',' >> bucket_details )
00961     ;
00962
00963     bucket_details =
00964     (bsc::ureal_p)[storeYieldUpperRange(self._flightDate)]
00965     >> ':' >> (bsc::real_p)[storeBucketAvaibility(self._flightDate)]
00966     >> ':' >> (uint1_3_p)[storeSeatIndex(self._flightDate)];
00967
00968     segment_list = +( '/' >> segment )
00969     ;
00970
00971     segment = segment_key >> segment_cabin_list
00972     ;
00973
00974     segment_key = (airport_p)[storeSegmentBoardingPoint(self._flightDate)]
00975     >> ';' >> (airport_p)[storeSegmentOffPoint(self._flightDate)]
00976     ;
00977
00978     segment_cabin_list =
00979     +( ';' >> segment_cabin_key >> ','
00980     >> segment_cabin_details >> class_list >> family_cabin_list )
00981     ;
00982
00983     family_cabin_list =
00984     +( ';' >> family_cabin_details )
00985     ;
00986
00987     segment_cabin_key =
00988     (cabin_code_p)[storeSegmentCabinCode(self._flightDate)]
00989     ;

```

```

00990
00991     segment_cabin_details =
00992         (bsc::ureal_p)[storeSegmentCabinBookingCounter(self._flightDate)]
00993         ;
00994
00995     class_list = +( ' ,' >> class_key >> '|' >> class_details )
00996         ;
00997
00998     class_key = (class_code_p)[storeClassCode(self._flightDate)]
00999         ;
01000
01001     parent_subclass_code =
01002         (class_code_p)[storeParentClassCode(self._flightDate)]
01003         >> (uint1_2_p)[storeParentSubclassCode(self._flightDate)]
01004         ;
01005
01006     class_protection =
01007         (bsc::ureal_p)[storeProtection(self._flightDate)]
01008         ;
01009
01010     class_nego =
01011         (bsc::ureal_p)[storeNego(self._flightDate)]
01012         ;
01013
01014     class_details = (uint1_2_p)[storeSubclassCode(self._flightDate)]
01015         >> ':' >> (bsc::ureal_p)[storeCumulatedProtection(self._flightDate)]
01016         >> ':' >> !( parent_subclass_code )
01017         >> ':' >> !( class_protection )
01018         >> ':' >> (bsc::ureal_p)[storeNoShow(self._flightDate)]
01019         >> ':' >> (bsc::ureal_p)[storeOverbooking(self._flightDate)]
01020         >> ':' >> (bsc::ureal_p)[storeNbOfBkgs(self._flightDate)]
01021         >> ':' >> (bsc::ureal_p)[storeNbOfGroupBkgs(self._flightDate)]
01022         >> ':' >> (bsc::ureal_p)[storeNbOfPendingGroupBkgs(self._flightDate)]
01023         >> ':' >> (bsc::ureal_p)[storeNbOfStaffBkgs(self._flightDate)]
01024         >> ':' >> (bsc::ureal_p)[storeNbOfWLBkgs(self._flightDate)]
01025         >> ':' >> (bsc::ureal_p)[storeClassETB(self._flightDate)]
01026         >> ':' >> !( class_nego )
01027         >> ':' >> (bsc::real_p)[storeClassAvailability(self._flightDate)]
01028         >> ':' >> (bsc::real_p)[storeSegmentAvailability(self._flightDate)]
01029         >> ':' >> (bsc::real_p)[storeRevenueAvailability(self._flightDate)]
01030         ;
01031
01032     family_cabin_details =
01033         (family_code_p)[storeFamilyCode(self._flightDate)]
01034         >> ';'
01035         >> (class_code_list_p)[storeFClasses(self._flightDate)]
01036         ;
01037
01038     // BOOST_SPIRIT_DEBUG_NODE (InventoryParser);
01039     BOOST_SPIRIT_DEBUG_NODE (flight_date_list);
01040     BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
01041     BOOST_SPIRIT_DEBUG_NODE (flight_date);
01042     BOOST_SPIRIT_DEBUG_NODE (flight_date_end);
01043     BOOST_SPIRIT_DEBUG_NODE (flight_key);
01044     BOOST_SPIRIT_DEBUG_NODE (airline_code);
01045     BOOST_SPIRIT_DEBUG_NODE (flight_number);
01046     BOOST_SPIRIT_DEBUG_NODE (flight_type_code);
01047     BOOST_SPIRIT_DEBUG_NODE (flight_visibility_code);
01048     BOOST_SPIRIT_DEBUG_NODE (date);
01049     BOOST_SPIRIT_DEBUG_NODE (leg_list);
01050     BOOST_SPIRIT_DEBUG_NODE (leg);
01051     BOOST_SPIRIT_DEBUG_NODE (leg_key);
01052     BOOST_SPIRIT_DEBUG_NODE (leg_details);
01053     BOOST_SPIRIT_DEBUG_NODE (leg_cabin_list);
01054     BOOST_SPIRIT_DEBUG_NODE (leg_cabin_details);
01055     BOOST_SPIRIT_DEBUG_NODE (bucket_list);
01056     BOOST_SPIRIT_DEBUG_NODE (bucket_details);
01057     BOOST_SPIRIT_DEBUG_NODE (time);
01058     BOOST_SPIRIT_DEBUG_NODE (segment_list);
01059     BOOST_SPIRIT_DEBUG_NODE (segment);
01060     BOOST_SPIRIT_DEBUG_NODE (segment_key);
01061     BOOST_SPIRIT_DEBUG_NODE (full_segment_cabin_details);
01062     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_list);
01063     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_key);

```



```

01064     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_details);
01065     BOOST_SPIRIT_DEBUG_NODE (class_list);
01066     BOOST_SPIRIT_DEBUG_NODE (class_key);
01067     BOOST_SPIRIT_DEBUG_NODE (parent_subclass_code);
01068     BOOST_SPIRIT_DEBUG_NODE (class_protection);
01069     BOOST_SPIRIT_DEBUG_NODE (class_nego);
01070     BOOST_SPIRIT_DEBUG_NODE (class_details);
01071     BOOST_SPIRIT_DEBUG_NODE (family_cabin_list);
01072     BOOST_SPIRIT_DEBUG_NODE (family_cabin_details);
01073 }
01074
01075 // //////////////////////////////////////
01076 template<typename ScannerT>
01077 bsc::rule<ScannerT> const&
01078 InventoryParser::definition<ScannerT>::start() const {
01079     return flight_date_list;
01080 }
01081 }
01082
01083 //
01084 // Entry class for the file parser
01085 //
01086 // //////////////////////////////////////
01087
01088 InventoryFileParser::
01089 InventoryFileParser (stdair::BomRoot& ioBomRoot, const std::string& iFilename
01090 )
01091 : _filename (iFilename), _bomRoot (ioBomRoot),
01092   _nbOfFlights (0) {
01093     init();
01094 }
01095
01096 // //////////////////////////////////////
01097 void InventoryFileParser::init() {
01098     // Open the file
01099     _startIterator = iterator_t (_filename);
01100
01101     // Check the filename exists and can be open
01102     if (!_startIterator) {
01103         std::ostringstream oMessage;
01104         oMessage << "The file " << _filename << " can not be open.";
01105         STDAIR_LOG_ERROR (oMessage.str());
01106         throw InventoryInputFileNotFoundException (oMessage.str());
01107     }
01108
01109     // Create an EOF iterator
01110     _endIterator = _startIterator.make_end();
01111 }
01112
01113 // //////////////////////////////////////
01114 bool InventoryFileParser::buildInventory () {
01115     bool oResult = false;
01116
01117     STDAIR_LOG_DEBUG ("Parsing inventory input file: " << _filename);
01118
01119     // Initialise the parser (grammar) with the helper/staging structure.
01120     InventoryParserHelper::InventoryParser lInventoryParser (_bomRoot,
01121                                                             _flightDate,
01122                                                             _nbOfFlights);
01123
01124     // Launch the parsing of the file and, thanks to the doEndFlightDate
01125     // call-back structure, the building of the whole Inventory BOM
01126     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
01127     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator
01128 ,
01129                                                  lInventoryParser,
01130                                                  bsc::space_p - bsc::eol_p);
01131
01132     // Retrieves whether or not the parsing was successful
01133     oResult = info.hit;
01134
01135     const std::string hasBeenFullyReadStr = (info.full == true)?"":"not ";
01136     if (oResult == true) {
01137

```

```

01138         STDAIR_LOG_DEBUG ("Parsing of inventory input file: " << _filename
01139                           << " succeeded: read " << info.length
01140                           << " characters. The input file has "
01141                           << hasBeenFullyReadStr
01142                           << "been fully read. Stop point: " << info.stop);
01143
01144     } else {
01145         STDAIR_LOG_ERROR ("Parsing of inventory input file: " << _filename
01146                          << " failed: read " << info.length
01147                          << " characters. The input file has "
01148                          << hasBeenFullyReadStr
01149                          << "been fully read. Stop point: " << info.stop);
01150         throw InventoryFileParsingFailedException("Parsing of inventory input
01151 file"
01152                                                  ": " + _filename + " failed");
01153     }
01154     return oResult;
01155 }
01156
01157 }

```

25.127 airinv/command/InventoryParserHelper.hpp File Reference

```

#include <string> #include <stdair/command/CmdAbstract.-
hpp> #include <airinv/AIRINV_Types.hpp> #include <airinv/basic/-
BasParserTypes.hpp> #include <airinv/bom/FlightDateStruct.-
hpp>

```

Classes

- struct [AIRINV::InventoryParserHelper::ParserSemanticAction](#)
- struct [AIRINV::InventoryParserHelper::storeSnapshotDate](#)
- struct [AIRINV::InventoryParserHelper::storeAirlineCode](#)
- struct [AIRINV::InventoryParserHelper::storeFlightNumber](#)
- struct [AIRINV::InventoryParserHelper::storeFlightDate](#)
- struct [AIRINV::InventoryParserHelper::storeFlightTypeCode](#)
- struct [AIRINV::InventoryParserHelper::storeFlightVisibilityCode](#)
- struct [AIRINV::InventoryParserHelper::storeLegBoardingPoint](#)
- struct [AIRINV::InventoryParserHelper::storeLegOffPoint](#)
- struct [AIRINV::InventoryParserHelper::storeBoardingDate](#)
- struct [AIRINV::InventoryParserHelper::storeBoardingTime](#)
- struct [AIRINV::InventoryParserHelper::storeOffDate](#)
- struct [AIRINV::InventoryParserHelper::storeOffTime](#)
- struct [AIRINV::InventoryParserHelper::storeLegCabinCode](#)
- struct [AIRINV::InventoryParserHelper::storeSaleableCapacity](#)
- struct [AIRINV::InventoryParserHelper::storeAU](#)
- struct [AIRINV::InventoryParserHelper::storeUPR](#)
- struct [AIRINV::InventoryParserHelper::storeBookingCounter](#)
- struct [AIRINV::InventoryParserHelper::storeNAV](#)
- struct [AIRINV::InventoryParserHelper::storeGAV](#)
- struct [AIRINV::InventoryParserHelper::storeACP](#)
- struct [AIRINV::InventoryParserHelper::storeETB](#)

- struct [AIRINV::InventoryParserHelper::storeYieldUpperRange](#)
- struct [AIRINV::InventoryParserHelper::storeBucketAvaibility](#)
- struct [AIRINV::InventoryParserHelper::storeSeatIndex](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentOffPoint](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentCabinCode](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter](#)
- struct [AIRINV::InventoryParserHelper::storeClassCode](#)
- struct [AIRINV::InventoryParserHelper::storeSubclassCode](#)
- struct [AIRINV::InventoryParserHelper::storeParentClassCode](#)
- struct [AIRINV::InventoryParserHelper::storeParentSubclassCode](#)
- struct [AIRINV::InventoryParserHelper::storeCumulatedProtection](#)
- struct [AIRINV::InventoryParserHelper::storeProtection](#)
- struct [AIRINV::InventoryParserHelper::storeNego](#)
- struct [AIRINV::InventoryParserHelper::storeNoShow](#)
- struct [AIRINV::InventoryParserHelper::storeOverbooking](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfWLBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeClassETB](#)
- struct [AIRINV::InventoryParserHelper::storeClassAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeRevenueAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeFamilyCode](#)
- struct [AIRINV::InventoryParserHelper::storeFClasses](#)
- struct [AIRINV::InventoryParserHelper::doEndFlightDate](#)
- struct [AIRINV::InventoryParserHelper::InventoryParser](#)
- struct [AIRINV::InventoryParserHelper::InventoryParser::definition](#)
- class [AIRINV::InventoryFileParser](#)

Namespaces

- namespace [stdair](#)
 - Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::InventoryParserHelper](#)

25.128 InventoryParserHelper.hpp

```

00001 #ifndef __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
00002 #define __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FlightDateStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023     namespace InventoryParserHelper {
00024
00025         // //////////////////////////////////////
00026         // Semantic actions
00027         // //////////////////////////////////////
00028         struct ParserSemanticAction {
00029             ParserSemanticAction (FlightDateStruct&);
00030             FlightDateStruct& _flightDate;
00031         };
00032
00033         struct storeSnapshotDate : public ParserSemanticAction {
00034             storeSnapshotDate (FlightDateStruct&);
00035             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00036         };
00037
00038         struct storeAirlineCode : public ParserSemanticAction {
00039             storeAirlineCode (FlightDateStruct&);
00040             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00041         };
00042
00043         struct storeFlightNumber : public ParserSemanticAction {
00044             storeFlightNumber (FlightDateStruct&);
00045             void operator() (unsigned int iNumber) const;
00046         };
00047
00048         struct storeFlightDate : public ParserSemanticAction {
00049             storeFlightDate (FlightDateStruct&);
00050             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00051         };
00052
00053         struct storeFlightTypeCode : public ParserSemanticAction {
00054             storeFlightTypeCode (FlightDateStruct&);
00055             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00056         };
00057
00058         struct storeFlightVisibilityCode : public ParserSemanticAction {
00059             storeFlightVisibilityCode (FlightDateStruct&);
00060             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00061         };
00062
00063         struct storeLegBoardingPoint : public ParserSemanticAction {
00064             storeLegBoardingPoint (FlightDateStruct&);
00065             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00066         };
00067
00068         struct storeLegOffPoint : public ParserSemanticAction {
00069             storeLegOffPoint (FlightDateStruct&);
00070             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00071         };
00072
00073     }
00074
00075 }
00076
00077 #endif

```

```
00099
00101 struct storeBoardingDate : public ParserSemanticAction {
00103     storeBoardingDate (FlightDateStruct&);
00105     void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00106 };
00107
00109 struct storeBoardingTime : public ParserSemanticAction {
00111     storeBoardingTime (FlightDateStruct&);
00113     void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00114 };
00115
00117 struct storeOffDate : public ParserSemanticAction {
00119     storeOffDate (FlightDateStruct&);
00121     void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00122 };
00123
00125 struct storeOffTime : public ParserSemanticAction {
00127     storeOffTime (FlightDateStruct&);
00129     void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00130 };
00131
00133 struct storeLegCabinCode : public ParserSemanticAction {
00135     storeLegCabinCode (FlightDateStruct&);
00137     void operator() (char iChar) const;
00138 };
00139
00141 struct storeSaleableCapacity : public ParserSemanticAction {
00143     storeSaleableCapacity (FlightDateStruct&);
00145     void operator() (double iReal) const;
00146 };
00147
00149 struct storeAU : public ParserSemanticAction {
00151     storeAU (FlightDateStruct&);
00153     void operator() (double iReal) const;
00154 };
00155
00157 struct storeUPR : public ParserSemanticAction {
00159     storeUPR (FlightDateStruct&);
00161     void operator() (double iReal) const;
00162 };
00163
00165 struct storeBookingCounter : public ParserSemanticAction {
00167     storeBookingCounter (FlightDateStruct&);
00169     void operator() (double iReal) const;
00170 };
00171
00173 struct storeNAV : public ParserSemanticAction {
00175     storeNAV (FlightDateStruct&);
00177     void operator() (double iReal) const;
00178 };
00179
00181 struct storeGAV : public ParserSemanticAction {
00183     storeGAV (FlightDateStruct&);
00185     void operator() (double iReal) const;
00186 };
00187
00189 struct storeACP : public ParserSemanticAction {
00191     storeACP (FlightDateStruct&);
00193     void operator() (double iReal) const;
00194 };
00195
00197 struct storeETB : public ParserSemanticAction {
00199     storeETB (FlightDateStruct&);
00201     void operator() (double iReal) const;
00202 };
00203
00205 struct storeYieldUpperRange : public ParserSemanticAction {
00207     storeYieldUpperRange (FlightDateStruct&);
00209     void operator() (double iReal) const;
00210 };
00211
00213 struct storeBucketAvaibility : public ParserSemanticAction {
00215     storeBucketAvaibility (FlightDateStruct&);
00217     void operator() (double iReal) const;
```

```
00218     };
00219
00221     struct storeSeatIndex : public ParserSemanticAction {
00223         storeSeatIndex (FlightDateStruct&);
00225         void operator() (double iReal) const;
00226     };
00227
00229     struct storeSegmentBoardingPoint : public ParserSemanticAction {
00231         storeSegmentBoardingPoint (FlightDateStruct&);
00233         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00234     };
00235
00237     struct storeSegmentOffPoint : public ParserSemanticAction {
00239         storeSegmentOffPoint (FlightDateStruct&);
00241         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00242     };
00243
00245     struct storeSegmentCabinCode : public ParserSemanticAction {
00247         storeSegmentCabinCode (FlightDateStruct&);
00249         void operator() (char iChar) const;
00250     };
00251
00253     struct storeSegmentCabinBookingCounter : public ParserSemanticAction {
00255         storeSegmentCabinBookingCounter (FlightDateStruct&);
00257         void operator() (double iReal) const;
00258     };
00259
00261     struct storeClassCode : public ParserSemanticAction {
00263         storeClassCode (FlightDateStruct&);
00265         void operator() (char iChar) const;
00266     };
00267
00269     struct storeSubclassCode : public ParserSemanticAction {
00271         storeSubclassCode (FlightDateStruct&);
00273         void operator() (unsigned int iNumber) const;
00274     };
00275
00277     struct storeParentClassCode : public ParserSemanticAction {
00279         storeParentClassCode (FlightDateStruct&);
00281         void operator() (char iChar) const;
00282     };
00283
00285     struct storeParentSubclassCode : public ParserSemanticAction {
00287         storeParentSubclassCode (FlightDateStruct&);
00289         void operator() (unsigned int iNumber) const;
00290     };
00291
00293     struct storeCumulatedProtection : public ParserSemanticAction {
00295         storeCumulatedProtection (FlightDateStruct&);
00297         void operator() (double iReal) const;
00298     };
00299
00301     struct storeProtection : public ParserSemanticAction {
00303         storeProtection (FlightDateStruct&);
00305         void operator() (double iReal) const;
00306     };
00307
00309     struct storeNego : public ParserSemanticAction {
00311         storeNego (FlightDateStruct&);
00313         void operator() (double iReal) const;
00314     };
00315
00317     struct storeNoShow : public ParserSemanticAction {
00319         storeNoShow (FlightDateStruct&);
00321         void operator() (double iReal) const;
00322     };
00323
00325     struct storeOverbooking : public ParserSemanticAction {
00327         storeOverbooking (FlightDateStruct&);
00329         void operator() (double iReal) const;
00330     };
00331
00333     struct storeNbOfBkgs : public ParserSemanticAction {
00335         storeNbOfBkgs (FlightDateStruct&);
```

```

00337     void operator() (double iReal) const;
00338 };
00339
00341 struct storeNbOfGroupBkgs : public ParserSemanticAction {
00343     storeNbOfGroupBkgs (FlightDateStruct&);
00345     void operator() (double iReal) const;
00346 };
00347
00349 struct storeNbOfPendingGroupBkgs : public ParserSemanticAction {
00351     storeNbOfPendingGroupBkgs (FlightDateStruct&);
00353     void operator() (double iReal) const;
00354 };
00355
00357 struct storeNbOfStaffBkgs : public ParserSemanticAction {
00359     storeNbOfStaffBkgs (FlightDateStruct&);
00361     void operator() (double iReal) const;
00362 };
00363
00366 struct storeNbOfWLBkgs : public ParserSemanticAction {
00368     storeNbOfWLBkgs (FlightDateStruct&);
00370     void operator() (double iReal) const;
00371 };
00372
00374 struct storeClassETB : public ParserSemanticAction {
00376     storeClassETB (FlightDateStruct&);
00378     void operator() (double iReal) const;
00379 };
00380
00383 struct storeClassAvailability : public ParserSemanticAction {
00385     storeClassAvailability (FlightDateStruct&);
00387     void operator() (double iReal) const;
00388 };
00389
00392 struct storeSegmentAvailability : public ParserSemanticAction {
00394     storeSegmentAvailability (FlightDateStruct&);
00396     void operator() (double iReal) const;
00397 };
00398
00401 struct storeRevenueAvailability : public ParserSemanticAction {
00403     storeRevenueAvailability (FlightDateStruct&);
00405     void operator() (double iReal) const;
00406 };
00407
00409 struct storeFamilyCode : public ParserSemanticAction {
00411     storeFamilyCode (FlightDateStruct&);
00413     void operator() (int iCode) const;
00414 };
00415
00417 struct storeFClasses : public ParserSemanticAction {
00419     storeFClasses (FlightDateStruct&);
00421     void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00422 };
00423
00425 struct doEndFlightDate : public ParserSemanticAction {
00427     doEndFlightDate (stdair::BomRoot&, FlightDateStruct&,
00428                     unsigned int&);
00430     void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00432     stdair::BomRoot& _bomRoot;
00433     unsigned int& _nbOfFlights;
00434 };
00435
00436 //
00438 // (Boost Spirit) Grammar Definition
00440 //
00442
00454 struct InventoryParser :
00455     public boost::spirit::classic::grammar<InventoryParser> {
00456
00457     InventoryParser (stdair::BomRoot&, FlightDateStruct&, unsigned int&);
00458
00459     template <typename ScannerT>
00460     struct definition {
00461         definition (InventoryParser const& self);

```

```

00462
00463 // Instantiation of rules
00464 boost::spirit::classic::rule<ScannerT> flight_date_list,
00465     not_to_be_parsed,
00466     flight_date, flight_date_end, flight_key, airline_code, flight_number
00467 ,
00468     flight_type_code, flight_visibility_code,
00469     date, leg_list, leg, leg_key, leg_details,
00470     leg_cabin_list, leg_cabin_details,
00471     bucket_list, bucket_details,
00472     time, segment_list, segment, segment_key, full_segment_cabin_details,
00473     segment_cabin_list, segment_cabin_key, segment_cabin_details,
00474     class_list, class_key, parent_subclass_code,
00475     class_protection, class_nego, class_details,
00476     family_cabin_list, family_cabin_details;
00477
00478 boost::spirit::classic::rule<ScannerT> const& start() const;
00479 };
00480
00481 // Parser Context
00482 stdair::BomRoot& _bomRoot;
00483 FlightDateStruct& _flightDate;
00484 unsigned int& _nbOfFlights;
00485 };
00486
00487 }
00488
00489 //
00490 // Entry class for the file parser
00491 //
00492
00493 class InventoryFileParser : public stdair::CmdAbstract {
00494 public:
00495     InventoryFileParser (stdair::BomRoot&,
00496                         const stdair::Filename_T& iInventoryInputFilename);
00497
00498     bool buildInventory ();
00499
00500 private:
00501     void init();
00502
00503 private:
00504     // Attributes
00505     stdair::Filename_T _filename;
00506
00507     iterator_t _startIterator;
00508
00509     iterator_t _endIterator;
00510
00511     stdair::BomRoot& _bomRoot;
00512
00513     FlightDateStruct _flightDate;
00514
00515     unsigned int _nbOfFlights;
00516 };
00517
00518 }
00519 #endif // __AIRINV_CMD_INVENTORYPARSERHELPER_HPP

```

25.129 airinv/command/ScheduleParser.cpp File Reference

```

#include <cassert> #include <sstream> #include <stdair/basic/-
BasFileMgr.hpp> #include <stdair/bom/BomRoot.hpp> #include
<stdair/service/Logger.hpp> #include <airinv/command/-
ScheduleParserHelper.hpp> #include <airinv/command/Schedule-
Parser.hpp> #include <airinv/command/InventoryManager.-
hpp>

```


Namespaces

- namespace `AIRINV`

25.130 ScheduleParser.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // Airinv
00012 #include <airinv/command/ScheduleParserHelper.hpp>
00013 #include <airinv/command/ScheduleParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp>
00015
00016 namespace AIRINV {
00017
00018 // //////////////////////////////////////
00019 void ScheduleParser::
00020 generateInventories (const stdair::Filename_T& iScheduleFilename,
00021                    stdair::BomRoot& ioBomRoot) {
00022
00023     // Check that the file path given as input corresponds to an actual file
00024     bool doesExistAndIsReadable =
00025         stdair::BasFileMgr::doesExistAndIsReadable (iScheduleFilename);
00026     if (doesExistAndIsReadable == false) {
00027         std::ostringstream oMessage;
00028         oMessage << "The schedule input file, '" << iScheduleFilename
00029                 << "', can not be retrieved on the file-system";
00030         STDAIR_LOG_ERROR (oMessage.str());
00031         throw ScheduleInputFileNotFoundException (oMessage.str());
00032     }
00033
00034     // Initialise the Flight-Period file parser.
00035     FlightPeriodFileParser lFlightPeriodParser (ioBomRoot, iScheduleFilename);
00036
00037     // Parse the CSV-formatted schedule input file, and generate the
00038     // corresponding Inventories for the airlines.
00039     lFlightPeriodParser.generateInventories ();
00040
00041     // Complete the BomRoot BOM building
00042     // Create the routings for all the inventories.
00043     InventoryManager::createDirectAccesses (ioBomRoot);
00044
00045     // Build the similar flight-date sets and the corresponding guillotine
00046     // blocks.
00047     InventoryManager::buildSimilarSegmentCabinSets (ioBomRoot);
00048
00049     // Bid price vector initialisation
00050     InventoryManager::setDefaultBidPriceVector (ioBomRoot);
00051
00052 }
00053
00054 }

```

25.131 airinv/command/ScheduleParser.hpp File Reference

```

#include <stdair/stdair_basic_types.hpp> #include <stdair/command/-
CmdAbstract.hpp>

```

Classes

- class [AIRINV::ScheduleParser](#)
Class wrapping the parser entry point.

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.132 ScheduleParser.hpp

```

00001 #ifndef __AIRINV_CMD_SCHEDULEPARSER_HPP
00002 #define __AIRINV_CMD_SCHEDULEPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00021     class ScheduleParser : public stdair::CmdAbstract {
00022     public:
00031         static void generateInventories (const stdair::Filename_T&
00032                                         iScheduleFilename,
00032                                         stdair::BomRoot&);
00033     };
00034 }
00035 #endif // __AIRINV_CMD_SCHEDULEPARSER_HPP

```

25.133 airinv/command/ScheduleParserHelper.cpp File Reference

```

#include <cassert>    #include <stdair/stdair_exceptions.-
hpp> #include <stdair/bom/BomRoot.hpp> #include <stdair/service/-
Logger.hpp> #include <airinv/command/InventoryGenerator.-
hpp> #include <airinv/command/ScheduleParserHelper.hpp>

```

Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::ScheduleParserHelper](#)

Functions

- repeat_p_t [AIRINV::ScheduleParserHelper::airline_code_p](#) (chset_t("0-9A-Z").-
derived(), 2, 3)

- bounded1_4_p_t AIRINV::ScheduleParserHelper::flight_number_p (uint1_4_p.-derived(), 0u, 9999u)
- bounded4_p_t AIRINV::ScheduleParserHelper::year_p (uint4_p.derived(), 2000u, 2099u)
- bounded2_p_t AIRINV::ScheduleParserHelper::month_p (uint2_p.derived(), 1u, 12u)
- bounded2_p_t AIRINV::ScheduleParserHelper::day_p (uint2_p.derived(), 1u, 31u)
- repeat_p_t AIRINV::ScheduleParserHelper::dow_p (chset_t("0-1").derived().derived(), 7, 7)
- repeat_p_t AIRINV::ScheduleParserHelper::airport_p (chset_t("0-9A-Z").-derived(), 3, 3)
- bounded2_p_t AIRINV::ScheduleParserHelper::hours_p (uint2_p.derived(), 0u, 23u)
- bounded2_p_t AIRINV::ScheduleParserHelper::minutes_p (uint2_p.derived(), 0u, 59u)
- bounded2_p_t AIRINV::ScheduleParserHelper::seconds_p (uint2_p.derived(), 0u, 59u)
- chset_t AIRINV::ScheduleParserHelper::cabin_code_p ("A-Z")
- repeat_p_t AIRINV::ScheduleParserHelper::class_code_list_p (chset_t("A-Z").derived(), 1, 26)

Variables

- int1_p_t AIRINV::ScheduleParserHelper::int1_p
- uint2_p_t AIRINV::ScheduleParserHelper::uint2_p
- uint4_p_t AIRINV::ScheduleParserHelper::uint4_p
- uint1_4_p_t AIRINV::ScheduleParserHelper::uint1_4_p
- int1_p_t AIRINV::ScheduleParserHelper::family_code_p

25.134 ScheduleParserHelper.cpp

```

00001 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00002 // Import section
00003 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/stdair_exceptions.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AirInv
00011 #include <airinv/command/InventoryGenerator.hpp>
00012 // #define BOOST_SPIRIT_DEBUG
00013 #include <airinv/command/ScheduleParserHelper.hpp>
00014
00015 //
00016 namespace bsc = boost::spirit::classic;
00017
00018 namespace AIRINV {
00019
00020     namespace ScheduleParserHelper {
00021
00022         //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00023         // Semantic actions

```

```

00024 // //////////////////////////////////////
00025
00026 ParserSemanticAction::
00027 ParserSemanticAction (FlightPeriodStruct& ioFlightPeriod)
00028 : _flightPeriod (ioFlightPeriod) {
00029 }
00030
00031 // //////////////////////////////////////
00032 storeAirlineCode::
00033 storeAirlineCode (FlightPeriodStruct& ioFlightPeriod)
00034 : ParserSemanticAction (ioFlightPeriod) {
00035 }
00036
00037 // //////////////////////////////////////
00038 void storeAirlineCode::operator() (iterator_t iStr,
00039                                     iterator_t iStrEnd) const {
00040     const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00041     _flightPeriod._airlineCode = lAirlineCode;
00042
00043     // As that's the beginning of a new flight, the list of legs
00044     // must be reset
00045     _flightPeriod._legList.clear();
00046 }
00047
00048 // //////////////////////////////////////
00049 storeFlightNumber::
00050 storeFlightNumber (FlightPeriodStruct& ioFlightPeriod)
00051 : ParserSemanticAction (ioFlightPeriod) {
00052 }
00053
00054 // //////////////////////////////////////
00055 void storeFlightNumber::operator() (unsigned int iNumber) const {
00056     _flightPeriod._flightNumber = iNumber;
00057 }
00058
00059 // //////////////////////////////////////
00060 storeDateRangeStart::
00061 storeDateRangeStart (FlightPeriodStruct& ioFlightPeriod)
00062 : ParserSemanticAction (ioFlightPeriod) {
00063 }
00064
00065 // //////////////////////////////////////
00066 void storeDateRangeStart::operator() (iterator_t iStr,
00067                                     iterator_t iStrEnd) const {
00068     _flightPeriod._dateRangeStart = _flightPeriod.getDate();
00069
00070     // Reset the number of seconds
00071     _flightPeriod._itSeconds = 0;
00072 }
00073
00074 // //////////////////////////////////////
00075 storeDateRangeEnd::
00076 storeDateRangeEnd (FlightPeriodStruct& ioFlightPeriod)
00077 : ParserSemanticAction (ioFlightPeriod) {
00078 }
00079
00080 // //////////////////////////////////////
00081 void storeDateRangeEnd::operator() (iterator_t iStr,
00082                                     iterator_t iStrEnd) const {
00083     // As a Boost date period (DatePeriod_T) defines the last day of
00084     // the period to be end-date - one day, we have to add one day to that
00085     // end date before.
00086     const stdair::DateOffset_T oneDay (1);
00087     _flightPeriod._dateRangeEnd = _flightPeriod.getDate() + oneDay;
00088
00089     // Transform the date pair (i.e., the date range) into a date period
00090     _flightPeriod._dateRange =
00091         stdair::DatePeriod_T (_flightPeriod._dateRangeStart,
00092                               _flightPeriod._dateRangeEnd);
00093
00094     // Reset the number of seconds
00095     _flightPeriod._itSeconds = 0;
00096 }
00097

```

```

00098 // //////////////////////////////////////
00099 storeDow::storeDow (FlightPeriodStruct& ioFlightPeriod)
00100 : ParserSemanticAction (ioFlightPeriod) {
00101 }
00102
00103 // //////////////////////////////////////
00104 void storeDow::operator() (iterator_t iStr, iterator_t iStrEnd) const {
00105     stdair::DOW_String_T lDow (iStr, iStrEnd);
00106     _flightPeriod._dow = lDow;
00107 }
00108
00109 // //////////////////////////////////////
00110 storeLegBoardingPoint::
00111 storeLegBoardingPoint (FlightPeriodStruct& ioFlightPeriod)
00112 : ParserSemanticAction (ioFlightPeriod) {
00113 }
00114
00115 // //////////////////////////////////////
00116 void storeLegBoardingPoint::operator() (iterator_t iStr,
00117                                         iterator_t iStrEnd) const {
00118     stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00119
00120     // If a leg has already been parsed, add it to the FlightPeriod
00121     if (_flightPeriod._legAlreadyDefined == true) {
00122         _flightPeriod._legList.push_back (_flightPeriod._itLeg);
00123     } else {
00124         _flightPeriod._legAlreadyDefined = true;
00125     }
00126
00127     // Set the (new) boarding point
00128     _flightPeriod._itLeg._boardingPoint = lBoardingPoint;
00129
00130     // As that's the beginning of a new leg, the list of cabins
00131     // must be reset
00132     _flightPeriod._itLeg._cabinList.clear();
00133
00134     // Add the airport code if it is not already stored in the airport lists
00135     _flightPeriod.addAirport (lBoardingPoint);
00136 }
00137
00138 // //////////////////////////////////////
00139 storeLegOffPoint::
00140 storeLegOffPoint (FlightPeriodStruct& ioFlightPeriod)
00141 : ParserSemanticAction (ioFlightPeriod) {
00142 }
00143
00144 // //////////////////////////////////////
00145 void storeLegOffPoint::operator() (iterator_t iStr,
00146                                   iterator_t iStrEnd) const {
00147     stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00148     _flightPeriod._itLeg._offPoint = lOffPoint;
00149
00150     // Add the airport code if it is not already stored in the airport lists
00151     _flightPeriod.addAirport (lOffPoint);
00152 }
00153
00154 // //////////////////////////////////////
00155 storeBoardingTime::
00156 storeBoardingTime (FlightPeriodStruct& ioFlightPeriod)
00157 : ParserSemanticAction (ioFlightPeriod) {
00158 }
00159
00160 // //////////////////////////////////////
00161 void storeBoardingTime::operator() (iterator_t iStr,
00162                                     iterator_t iStrEnd) const {
00163     _flightPeriod._itLeg._boardingTime = _flightPeriod.getTime();
00164
00165     // Reset the number of seconds
00166     _flightPeriod._itSeconds = 0;
00167
00168     // Reset the date off-set
00169     _flightPeriod._dateOffset = 0;
00170 }
00171

```

```

00172 // //////////////////////////////////////
00173 storeOffTime::
00174 storeOffTime (FlightPeriodStruct& ioFlightPeriod)
00175 : ParserSemanticAction (ioFlightPeriod) {
00176 }
00177
00178 // //////////////////////////////////////
00179 void storeOffTime::operator() (iterator_t iStr,
00180                               iterator_t iStrEnd) const {
00181     _flightPeriod._itLeg._offTime = _flightPeriod.getTime();
00182
00183     // Reset the number of seconds
00184     _flightPeriod._itSeconds = 0;
00185
00186     // As the boarding date off set is optional, it can be set only
00187     // afterwards, based on the staging date off-set value
00188     // (_flightPeriod._dateOffset).
00189     const stdair::DateOffset_T lDateOffset (_flightPeriod._dateOffset);
00190     _flightPeriod._itLeg._boardingDateOffset = lDateOffset;
00191 }
00192
00193 // //////////////////////////////////////
00194 storeElapsedTime::
00195 storeElapsedTime (FlightPeriodStruct& ioFlightPeriod)
00196 : ParserSemanticAction (ioFlightPeriod) {
00197 }
00198
00199 // //////////////////////////////////////
00200 void storeElapsedTime::operator() (iterator_t iStr,
00201                                   iterator_t iStrEnd) const {
00202     _flightPeriod._itLeg._elapsed = _flightPeriod.getTime();
00203
00204     // Reset the number of seconds
00205     _flightPeriod._itSeconds = 0;
00206
00207     // As the boarding date off set is optional, it can be set only
00208     // afterwards, based on the staging date off-set value
00209     // (_flightPeriod._dateOffset).
00210     const stdair::DateOffset_T lDateOffset (_flightPeriod._dateOffset);
00211     _flightPeriod._itLeg._offDateOffset = lDateOffset;
00212 }
00213
00214 // //////////////////////////////////////
00215 storeLegCabinCode::
00216 storeLegCabinCode (FlightPeriodStruct& ioFlightPeriod)
00217 : ParserSemanticAction (ioFlightPeriod) {
00218 }
00219
00220 // //////////////////////////////////////
00221 void storeLegCabinCode::operator() (char iChar) const {
00222     _flightPeriod._itLegCabin._cabinCode = iChar;
00223     //std::cout << "Cabin code: " << iChar << std::endl;
00224 }
00225
00226 // //////////////////////////////////////
00227 storeCapacity::
00228 storeCapacity (FlightPeriodStruct& ioFlightPeriod)
00229 : ParserSemanticAction (ioFlightPeriod) {
00230 }
00231
00232 // //////////////////////////////////////
00233 void storeCapacity::operator() (double iReal) const {
00234     _flightPeriod._itLegCabin._saleableCapacity = iReal;
00235     //std::cout << "Capacity: " << iReal << std::endl;
00236
00237     // The capacity is the last (according to the arrival order
00238     // within the schedule input file) detail of the leg cabin. Hence,
00239     // when a capacity is parsed, it means that the full cabin
00240     // details have already been parsed as well: the cabin can
00241     // thus be added to the leg.
00242     _flightPeriod._itLeg._cabinList.push_back (_flightPeriod._itLegCabin);
00243 }
00244
00245 // //////////////////////////////////////

```

```

00246     storeSegmentSpecificity::
00247     storeSegmentSpecificity (FlightPeriodStruct& ioFlightPeriod)
00248         : ParserSemanticAction (ioFlightPeriod) {
00249     }
00250
00251     // //////////////////////////////////////
00252     void storeSegmentSpecificity::operator() (char iChar) const {
00253         if (iChar == '0') {
00254             _flightPeriod._areSegmentDefinitionsSpecific = false;
00255         } else {
00256             _flightPeriod._areSegmentDefinitionsSpecific = true;
00257         }
00258
00259         // Do a few sanity checks: the two lists should get exactly the same
00260         // content (in terms of airport codes). The only difference is that one
00261         // is a STL set, and the other a STL vector.
00262         assert (_flightPeriod._airportList.size()
00263             == _flightPeriod._airportOrderedList.size());
00264         assert (_flightPeriod._airportList.size() >= 2);
00265
00266         // Since all the legs have now been parsed, we get all the airports
00267         // and the segments may be built.
00268         _flightPeriod.buildSegments();
00269     }
00270
00271     // //////////////////////////////////////
00272     storeSegmentBoardingPoint::
00273     storeSegmentBoardingPoint (FlightPeriodStruct& ioFlightPeriod)
00274         : ParserSemanticAction (ioFlightPeriod) {
00275     }
00276
00277     // //////////////////////////////////////
00278     void storeSegmentBoardingPoint::operator() (iterator_t iStr,
00279         iterator_t iStrEnd) const {
00280         stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00281         _flightPeriod._itSegment._boardingPoint = lBoardingPoint;
00282     }
00283
00284     // //////////////////////////////////////
00285     storeSegmentOffPoint::
00286     storeSegmentOffPoint (FlightPeriodStruct& ioFlightPeriod)
00287         : ParserSemanticAction (ioFlightPeriod) {
00288     }
00289
00290     // //////////////////////////////////////
00291     void storeSegmentOffPoint::operator() (iterator_t iStr,
00292         iterator_t iStrEnd) const {
00293         stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00294         _flightPeriod._itSegment._offPoint = lOffPoint;
00295     }
00296
00297     // //////////////////////////////////////
00298     storeSegmentCabinCode::
00299     storeSegmentCabinCode (FlightPeriodStruct& ioFlightPeriod)
00300         : ParserSemanticAction (ioFlightPeriod) {
00301     }
00302
00303     // //////////////////////////////////////
00304     void storeSegmentCabinCode::operator() (char iChar) const {
00305         _flightPeriod._itSegmentCabin._cabinCode = iChar;
00306     }
00307
00308     // //////////////////////////////////////
00309     storeClasses::
00310     storeClasses (FlightPeriodStruct& ioFlightPeriod)
00311         : ParserSemanticAction (ioFlightPeriod) {
00312     }
00313
00314     // //////////////////////////////////////
00315     void storeClasses::operator() (iterator_t iStr,
00316         iterator_t iStrEnd) const {
00317         std::string lClasses (iStr, iStrEnd);
00318         _flightPeriod._itSegmentCabin._itFareFamily._classes = lClasses;
00319

```

```

00320         // The list of classes is the last (according to the arrival order
00321         // within the schedule input file) detail of the segment cabin. Hence,
00322         // when a list of classes is parsed, it means that the full segment
00323         // cabin details have already been parsed as well: the segment cabin
00324         // can thus be added to the segment.
00325         if (_flightPeriod._areSegmentDefinitionsSpecific == true) {
00326             _flightPeriod.addSegmentCabin (_flightPeriod._itSegment,
00327                                           _flightPeriod._itSegmentCabin);
00328         } else {
00329             _flightPeriod.addSegmentCabin (_flightPeriod._itSegmentCabin);
00330         }
00331     }
00332
00333     // //////////////////////////////////////
00334     storeFamilyCode::
00335     storeFamilyCode (FlightPeriodStruct& ioFlightPeriod)
00336         : ParserSemanticAction (ioFlightPeriod) {
00337     }
00338
00339     // //////////////////////////////////////
00340     void storeFamilyCode::operator() (int iCode) const {
00341         std::ostringstream ostr;
00342         ostr << iCode;
00343         _flightPeriod._itSegmentCabin._itFareFamily._familyCode = ostr.str();
00344     }
00345
00346     // //////////////////////////////////////
00347     storeFClasses::
00348     storeFClasses (FlightPeriodStruct& ioFlightPeriod)
00349         : ParserSemanticAction (ioFlightPeriod) {
00350     }
00351
00352     // //////////////////////////////////////
00353     void storeFClasses::operator() (iterator_t iStr,
00354                                     iterator_t iStrEnd) const {
00355         std::string lClasses (iStr, iStrEnd);
00356         FareFamilyStruct lFareFamily (_flightPeriod._itSegmentCabin._itFareFamily
00357                                     ._familyCode,
00358                                     lClasses);
00359
00360         // The list of classes is the last (according to the arrival order
00361         // within the schedule input file) detail of the segment cabin. Hence,
00362         // when a list of classes is parsed, it means that the full segment
00363         // cabin details have already been parsed as well: the segment cabin
00364         // can thus be added to the segment.
00365         if (_flightPeriod._areSegmentDefinitionsSpecific == true) {
00366             _flightPeriod.addFareFamily (_flightPeriod._itSegment,
00367                                         _flightPeriod._itSegmentCabin,
00368                                         lFareFamily);
00369         } else {
00370             _flightPeriod.addFareFamily (_flightPeriod._itSegmentCabin,
00371                                         lFareFamily);
00372         }
00373     }
00374
00375     // //////////////////////////////////////
00376     doEndFlight::
00377     doEndFlight (stdair::BomRoot& ioBomRoot,
00378                 FlightPeriodStruct& ioFlightPeriod)
00379         : ParserSemanticAction (ioFlightPeriod),
00380         _bomRoot (ioBomRoot) {
00381     }
00382
00383     // //////////////////////////////////////
00384     // void doEndFlight::operator() (char iChar) const {
00385     void doEndFlight::operator() (iterator_t iStr,
00386                                   iterator_t iStrEnd) const {
00387         assert (_flightPeriod._legAlreadyDefined == true);
00388         _flightPeriod._legList.push_back (_flightPeriod._itLeg);
00389
00390         // The lists of legs and cabins must be reset
00391         _flightPeriod._legAlreadyDefined = false;
00392         _flightPeriod._itLeg._cabinList.clear();

```



```

00393
00394     // DEBUG: Display the result
00395     STDAIR_LOG_DEBUG ("FlightPeriod: " << _flightPeriod.describe());
00396
00397     // Create the FlightDate BOM objects, and potentially the intermediary
00398     // objects (e.g., Inventory).
00399     InventoryGenerator::createFlightDate (_bomRoot, _flightPeriod);
00400 }
00401
00402
00403 // //////////////////////////////////////
00404 //
00405 //   Utility Parsers
00406 //
00407 // //////////////////////////////////////
00409 int1_p_t int1_p;
00410
00412 uint2_p_t uint2_p;
00413
00415 uint4_p_t uint4_p;
00416
00418 uint1_4_p_t uint1_4_p;
00419
00421 repeat_p_t airline_code_p (chset_t("0-9A-Z").derived(), 2, 3);
00422
00424 bounded1_4_p_t flight_number_p (uint1_4_p.derived(), 0u, 9999u);
00425
00427 bounded4_p_t year_p (uint4_p.derived(), 2000u, 2099u);
00428
00430 bounded2_p_t month_p (uint2_p.derived(), 1u, 12u);
00431
00433 bounded2_p_t day_p (uint2_p.derived(), 1u, 31u);
00434
00436 repeat_p_t dow_p (chset_t("0-1").derived().derived(), 7, 7);
00437
00439 repeat_p_t airport_p (chset_t("0-9A-Z").derived(), 3, 3);
00440
00442 bounded2_p_t hours_p (uint2_p.derived(), 0u, 23u);
00443
00445 bounded2_p_t minutes_p (uint2_p.derived(), 0u, 59u);
00446
00448 bounded2_p_t seconds_p (uint2_p.derived(), 0u, 59u);
00449
00451 chset_t cabin_code_p ("A-Z");
00452
00454 int1_p_t family_code_p;
00455
00457 repeat_p_t class_code_list_p (chset_t("A-Z").derived(), 1, 26);
00458
00459
00460 // //////////////////////////////////////
00461 //   (Boost Spirit) Grammar Definition
00462 //   //////////////////////////////////////
00463
00464 //   //////////////////////////////////////
00465 FlightPeriodParser::
00466 FlightPeriodParser (stdair::BomRoot& ioBomRoot,
00467                     FlightPeriodStruct& ioFlightPeriod)
00468 : _bomRoot (ioBomRoot),
00469   _flightPeriod (ioFlightPeriod) {
00470 }
00471
00472 //   //////////////////////////////////////
00473 template<typename ScannerT>
00474 FlightPeriodParser::definition<ScannerT>::
00475 definition (FlightPeriodParser const& self) {
00476
00477     flight_period_list = *( not_to_be_parsed | flight_period )
00478     ;
00479
00480     not_to_be_parsed =
00481         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00482                     | bsc::space_p ]
00483     ;

```

```

00484
00485     flight_period = flight_key
00486     >> +(';' >> leg )
00487     >> ';' >> segment_section
00488     >> flight_period_end[doEndFlight (self._bomRoot, self._flightPeriod)]
00489     ;
00490
00491     flight_period_end = bsc::ch_p(';')
00492     ;
00493
00494     flight_key = airline_code
00495     >> ';' >> flight_number
00496     >> ';' >> date[storeDateRangeStart (self._flightPeriod)]
00497     >> ';' >> date[storeDateRangeEnd (self._flightPeriod)]
00498     >> ';' >> dow[storeDow (self._flightPeriod)]
00499     ;
00500
00501     airline_code =
00502         bsc::lexeme_d[ (airline_code_p) [storeAirlineCode (self._flightPeriod)]]
00503     ;
00504
00505     flight_number =
00506         bsc::lexeme_d[ (flight_number_p) [storeFlightNumber (self._flightPeriod)]]
00507     ;
00508
00509     date =
00510         bsc::lexeme_d[ (year_p) [bsc::assign_a (self._flightPeriod._itYear)]
00511             >> '-' >> (month_p) [bsc::assign_a (self._flightPeriod._itMonth)]
00512             >> '-' >> (day_p) [bsc::assign_a (self._flightPeriod._itDay)]]
00513     ;
00514
00515     dow = bsc::lexeme_d[ dow_p ]
00516     ;
00517
00518     leg = leg_key >> ';' >> leg_details >> +(';' >> leg_cabin_details )
00519     ;
00520
00521     leg_key =
00522         (airport_p) [storeLegBoardingPoint (self._flightPeriod)]
00523     >> ';'
00524     >> (airport_p) [storeLegOffPoint (self._flightPeriod)]
00525     ;
00526
00527     leg_details =
00528         time[storeBoardingTime (self._flightPeriod)]
00529     >> !(date_offset)
00530     >> ';'
00531     >> time[storeOffTime (self._flightPeriod)]
00532     >> !(date_offset)
00533     >> ';'
00534     >> time[storeElapsedTime (self._flightPeriod)]
00535     ;
00536
00537     time =
00538         bsc::lexeme_d[ (hours_p) [bsc::assign_a (self._flightPeriod._itHours)]
00539             >> ':' >> (minutes_p) [bsc::assign_a (self._flightPeriod._itMinutes)]
00540             >> !(':') >> (seconds_p) [bsc::assign_a (self._flightPeriod._itSeconds)]
00541         )]
00542     ;
00543
00544     date_offset =
00545         bsc::ch_p('/')
00546     >> (intl_p) [bsc::assign_a (self._flightPeriod._dateOffset)]
00547     ;
00548
00549     leg_cabin_details =
00550         (cabin_code_p) [storeLegCabinCode (self._flightPeriod)]
00551     >> ';' >> (bsc::ureal_p) [storeCapacity (self._flightPeriod)]
00552     ;
00553
00554     segment_key =
00555         (airport_p) [storeSegmentBoardingPoint (self._flightPeriod)]
00556     >> ';'
    >> (airport_p) [storeSegmentOffPoint (self._flightPeriod)]

```

```

00557         ;
00558
00559         segment_section =
00560             generic_segment | specific_segment_list
00561         ;
00562
00563         generic_segment =
00564             bsc::ch_p('0')[storeSegmentSpecificity(self._flightPeriod)]
00565             >> +(';' >> segment_cabin_details)
00566         ;
00567
00568         specific_segment_list =
00569             bsc::ch_p('1')[storeSegmentSpecificity(self._flightPeriod)]
00570             >> +(';' >> segment_key >> full_segment_cabin_details)
00571         ;
00572
00573         full_segment_cabin_details =
00574             +(';' >> segment_cabin_details)
00575         ;
00576
00577         segment_cabin_details =
00578             (cabin_code_p)[storeSegmentCabinCode(self._flightPeriod)]
00579             >> ';' >> (class_code_list_p)[storeClasses(self._flightPeriod)]
00580             >> +(';' >> family_cabin_details)
00581         ;
00582
00583         family_cabin_details =
00584             (family_code_p)[storeFamilyCode(self._flightPeriod)]
00585             >> ';'
00586             >> (class_code_list_p)[storeFClasses(self._flightPeriod)]
00587         ;
00588
00589         // BOOST_SPIRIT_DEBUG_NODE (FlightPeriodParser);
00590         BOOST_SPIRIT_DEBUG_NODE (flight_period_list);
00591         BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
00592         BOOST_SPIRIT_DEBUG_NODE (flight_period);
00593         BOOST_SPIRIT_DEBUG_NODE (flight_period_end);
00594         BOOST_SPIRIT_DEBUG_NODE (flight_key);
00595         BOOST_SPIRIT_DEBUG_NODE (airline_code);
00596         BOOST_SPIRIT_DEBUG_NODE (flight_number);
00597         BOOST_SPIRIT_DEBUG_NODE (date);
00598         BOOST_SPIRIT_DEBUG_NODE (dow);
00599         BOOST_SPIRIT_DEBUG_NODE (leg);
00600         BOOST_SPIRIT_DEBUG_NODE (leg_key);
00601         BOOST_SPIRIT_DEBUG_NODE (leg_details);
00602         BOOST_SPIRIT_DEBUG_NODE (time);
00603         BOOST_SPIRIT_DEBUG_NODE (date_offset);
00604         BOOST_SPIRIT_DEBUG_NODE (leg_cabin_details);
00605         BOOST_SPIRIT_DEBUG_NODE (segment_section);
00606         BOOST_SPIRIT_DEBUG_NODE (segment_key);
00607         BOOST_SPIRIT_DEBUG_NODE (generic_segment);
00608         BOOST_SPIRIT_DEBUG_NODE (specific_segment_list);
00609         BOOST_SPIRIT_DEBUG_NODE (full_segment_cabin_details);
00610         BOOST_SPIRIT_DEBUG_NODE (segment_cabin_details);
00611         BOOST_SPIRIT_DEBUG_NODE (family_cabin_details);
00612     }
00613
00614     // //////////////////////////////////////
00615     template<typename ScannerT>
00616     bsc::rule<ScannerT> const&
00617     FlightPeriodParser::definition<ScannerT>::start() const {
00618         return flight_period_list;
00619     }
00620 }
00621
00622 //
00623 // Entry class for the file parser
00624 //
00625 // //////////////////////////////////////
00626 FlightPeriodFileParser::
00627 FlightPeriodFileParser (stdair::BomRoot& ioBomRoot,
00628                         const stdair::Filename_T& iFilename)

```

```

00633     : _filename (iFilename), _bomRoot (ioBomRoot) {
00634     init();
00635     }
00636
00637     // ////////////////////////////////////////
00638     void FlightPeriodFileParser::init() {
00639         // Open the file
00640         _startIterator = iterator_t (_filename);
00641
00642         // Check the filename exists and can be open
00643         if (!_startIterator) {
00644             std::ostringstream oMessage;
00645             oMessage << "The file " << _filename << " can not be open." << std::endl;
00646             STDAIR_LOG_ERROR (oMessage.str());
00647             throw ScheduleInputFileNotFoundException (oMessage.str());
00648         }
00649
00650         // Create an EOF iterator
00651         _endIterator = _startIterator.make_end();
00652     }
00653
00654     // ////////////////////////////////////////
00655     bool FlightPeriodFileParser::generateInventories () {
00656         bool oResult = false;
00657
00658         STDAIR_LOG_DEBUG ("Parsing schedule input file: " << _filename);
00659
00660         // Initialise the parser (grammar) with the helper/staging structure.
00661         ScheduleParserHelper::FlightPeriodParser lFPParser (_bomRoot, _flightPeriod
    );
00662
00663         // Launch the parsing of the file and, thanks to the doEndFlight
00664         // call-back structure, the building of the whole BomRoot BOM
00665         // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
00666         bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator
    ,
    lFPParser,
    bsc::space_p - bsc::eol_p);
00667
00668         // Retrieves whether or not the parsing was successful
00669         oResult = info.hit;
00670
00671         const bool isFull = info.full;
00672
00673         const std::string hasBeenFullyReadStr = (isFull == true)?"":"not ";
00674         if (oResult == true && isFull == true) {
00675             STDAIR_LOG_DEBUG ("Parsing of schedule input file: " << _filename
00676                 << " succeeded: read " << info.length
00677                 << " characters. The input file has "
00678                 << hasBeenFullyReadStr
00679                 << "been fully read. Stop point: " << info.stop);
00680         } else {
00681             STDAIR_LOG_ERROR ("Parsing of schedule input file: " << _filename
00682                 << " failed: read " << info.length
00683                 << " characters. The input file has "
00684                 << hasBeenFullyReadStr
00685                 << "been fully read. Stop point: " << info.stop);
00686             throw ScheduleFileParsingFailedException ("Parsing of schedule input
00687                 file: "
00688                 + _filename + " failed.");
00689         }
00690     }
00691     return oResult;
00692 }
00693
00694 }
00695
00696 }

```

25.135 airinv/command/ScheduleParserHelper.hpp File Reference

```
#include <string> #include <stdair/command/CmdAbstract.-
```

```
hpp> #include <airinv/AIRINV_Types.hpp> #include <airinv/basic/-
BasParserTypes.hpp>      #include <airinv/bom/FlightPeriod-
Struct.hpp>
```

Classes

- struct [AIRINV::ScheduleParserHelper::ParserSemanticAction](#)
- struct [AIRINV::ScheduleParserHelper::storeAirlineCode](#)
- struct [AIRINV::ScheduleParserHelper::storeFlightNumber](#)
- struct [AIRINV::ScheduleParserHelper::storeDateRangeStart](#)
- struct [AIRINV::ScheduleParserHelper::storeDateRangeEnd](#)
- struct [AIRINV::ScheduleParserHelper::storeDow](#)
- struct [AIRINV::ScheduleParserHelper::storeLegBoardingPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeLegOffPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeBoardingTime](#)
- struct [AIRINV::ScheduleParserHelper::storeOffTime](#)
- struct [AIRINV::ScheduleParserHelper::storeElapsedTime](#)
- struct [AIRINV::ScheduleParserHelper::storeLegCabinCode](#)
- struct [AIRINV::ScheduleParserHelper::storeCapacity](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentSpecificity](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentOffPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentCabinCode](#)
- struct [AIRINV::ScheduleParserHelper::storeClasses](#)
- struct [AIRINV::ScheduleParserHelper::storeFamilyCode](#)
- struct [AIRINV::ScheduleParserHelper::storeFClasses](#)
- struct [AIRINV::ScheduleParserHelper::doEndFlight](#)
- struct [AIRINV::ScheduleParserHelper::FlightPeriodParser](#)
- struct [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition](#)
- class [AIRINV::FlightPeriodFileParser](#)

Namespaces

- namespace [stdair](#)
 Forward declarations.
- namespace [AIRINV](#)
- namespace [AIRINV::ScheduleParserHelper](#)

25.136 ScheduleParserHelper.hpp

```
00001 #ifndef __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
00002 #define __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
```

```

00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FlightPeriodStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023     namespace ScheduleParserHelper {
00024
00025         // //////////////////////////////////////
00026         // Semantic actions
00027         // //////////////////////////////////////
00028         struct ParserSemanticAction {
00029             ParserSemanticAction (FlightPeriodStruct&);
00030             FlightPeriodStruct& _flightPeriod;
00031         };
00032
00033         struct storeAirlineCode : public ParserSemanticAction {
00034             storeAirlineCode (FlightPeriodStruct&);
00035             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00036         };
00037
00038         struct storeFlightNumber : public ParserSemanticAction {
00039             storeFlightNumber (FlightPeriodStruct&);
00040             void operator() (unsigned int iNumber) const;
00041         };
00042
00043         struct storeDateRangeStart : public ParserSemanticAction {
00044             storeDateRangeStart (FlightPeriodStruct&);
00045             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00046         };
00047
00048         struct storeDateRangeEnd : public ParserSemanticAction {
00049             storeDateRangeEnd (FlightPeriodStruct&);
00050             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00051         };
00052
00053         struct storeDow : public ParserSemanticAction {
00054             storeDow (FlightPeriodStruct&);
00055             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00056         };
00057
00058         struct storeLegBoardingPoint : public ParserSemanticAction {
00059             storeLegBoardingPoint (FlightPeriodStruct&);
00060             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00061         };
00062
00063         struct storeLegOffPoint : public ParserSemanticAction {
00064             storeLegOffPoint (FlightPeriodStruct&);
00065             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00066         };
00067
00068         struct storeBoardingTime : public ParserSemanticAction {
00069             storeBoardingTime (FlightPeriodStruct&);
00070             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00071         };
00072
00073         struct storeOffTime : public ParserSemanticAction {
00074             storeOffTime (FlightPeriodStruct&);
00075             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00076         };
00077
00078         struct storeElapsedTime : public ParserSemanticAction {
00079             storeElapsedTime (FlightPeriodStruct&);
00080             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00081         };
00082
00083     }
00084
00085 }
00086
00087 
```

```

00117     struct storeLegCabinCode : public ParserSemanticAction {
00119         storeLegCabinCode (FlightPeriodStruct&);
00121         void operator() (char iChar) const;
00122     };
00123
00125     struct storeCapacity : public ParserSemanticAction {
00127         storeCapacity (FlightPeriodStruct&);
00129         void operator() (double iReal) const;
00130     };
00131
00136     struct storeSegmentSpecificity : public ParserSemanticAction {
00138         storeSegmentSpecificity (FlightPeriodStruct&);
00140         void operator() (char iChar) const;
00141     };
00142
00144     struct storeSegmentBoardingPoint : public ParserSemanticAction {
00146         storeSegmentBoardingPoint (FlightPeriodStruct&);
00148         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00149     };
00150
00152     struct storeSegmentOffPoint : public ParserSemanticAction {
00154         storeSegmentOffPoint (FlightPeriodStruct&);
00156         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00157     };
00158
00160     struct storeSegmentCabinCode : public ParserSemanticAction {
00162         storeSegmentCabinCode (FlightPeriodStruct&);
00164         void operator() (char iChar) const;
00165     };
00166
00168     struct storeClasses : public ParserSemanticAction {
00170         storeClasses (FlightPeriodStruct&);
00172         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00173     };
00174
00176     struct storeFamilyCode : public ParserSemanticAction {
00178         storeFamilyCode (FlightPeriodStruct&);
00180         void operator() (int iCode) const;
00181     };
00182
00184     struct storeFClasses : public ParserSemanticAction {
00186         storeFClasses (FlightPeriodStruct&);
00188         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00189     };
00190
00192     struct doEndFlight : public ParserSemanticAction {
00194         doEndFlight (stdair::BomRoot&, FlightPeriodStruct&);
00196         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00198         stdair::BomRoot& _bomRoot;
00199     };
00200
00201
00203     //
00204     // (Boost Spirit) Grammar Definition
00205     //
00207
00249     struct FlightPeriodParser :
00250         public boost::spirit::classic::grammar<FlightPeriodParser> {
00251
00252         FlightPeriodParser (stdair::BomRoot&, FlightPeriodStruct&);
00253
00254         template <typename ScannerT>
00255         struct definition {
00256             definition (FlightPeriodParser const& self);
00257
00258             // Instantiation of rules
00259             boost::spirit::classic::rule<ScannerT> flight_period_list,
00260             not_to_be_parsed, flight_period, flight_period_end,
00261             flight_key, airline_code, flight_number,
00262             date, dow, time, date_offset,
00263             leg, leg_key, leg_details, leg_cabin_details,
00264             segment_section, segment_key, full_segment_cabin_details,
00265             segment_cabin_details, full_family_cabin_details,
00266             family_cabin_details, generic_segment, specific_segment_list;

```

```

00267
00269         boost::spirit::classic::rule<ScannerT> const& start() const;
00270     };
00271
00272     // Parser Context
00273     stdair::BomRoot& _bomRoot;
00274     FlightPeriodStruct& _flightPeriod;
00275 };
00276
00277 }
00282
00283 //
00284 // Entry class for the file parser
00285 //
00287
00292 class FlightPeriodFileParser : public stdair::CmdAbstract {
00293 public:
00295     FlightPeriodFileParser (stdair::BomRoot& ioBomRoot,
00296                             const stdair::Filename_T& iFilename);
00297
00299     bool generateInventories ();
00300
00301 private:
00303     void init();
00304
00305 private:
00306     // Attributes
00308     stdair::Filename_T _filename;
00309
00311     iterator_t _startIterator;
00312
00314     iterator_t _endIterator;
00315
00317     stdair::BomRoot& _bomRoot;
00318
00320     FlightPeriodStruct _flightPeriod;
00321 };
00322
00323 }
00324 #endif // __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP

```

25.137 airinv/command/vault/DCPEventGenerator.cpp File Reference

```

#include <cassert>    #include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp> #include <stdair/factory/-
FacBomManager.hpp>    #include <stdair/service/Logger.hpp>
#include <airinv/bom/DCPEventStruct.hpp> #include <airinv/command/-
DCPEventGenerator.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.138 DCPEventGenerator.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/bom/BomManager.hpp>
00008 #include <stdair/bom/BomRoot.hpp>

```



```

00009 #include <stdair/factory/FacBomManager.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/bom/DCPEventStruct.hpp>
00013 #include <airinv/command/DCPEventGenerator.hpp>
00014
00015 namespace AIRINV {
00016
00017 // //////////////////////////////////////
00018 void DCPEventGenerator::
00019     createDCPEvent (stdair::BomRoot& ioBomRoot,
00020                     DCPEventStruct& iDCPEventStruct) {
00021
00022     // Set the airport-pair primary key.
00023     /*
00024     const stdair::AirportCode_T& lBoardPoint = iDCPEventStruct._origin;
00025     const stdair::AirportCode_T& lOffPoint = iDCPEventStruct._destination;
00026     */
00027
00028     // Set the DCP date-period primary key.
00029     const stdair::Date_T& lDateRangeStart = iDCPEventStruct._dateRangeStart;
00030     const stdair::Date_T& lDateRangeEnd = iDCPEventStruct._dateRangeEnd;
00031     const stdair::DatePeriod_T lDatePeriod (lDateRangeStart, lDateRangeEnd);
00032
00033     // Set the DCP time-period primary key.
00034     /*
00035     const stdair::Time_T& lTimeRangeStart = iDCPEventStruct._timeRangeStart;
00036     const stdair::Time_T& lTimeRangeEnd = iDCPEventStruct._timeRangeEnd;
00037     */
00038
00039     // Generate the DCPEvent
00040     const stdair::DayDuration_T& lAdvancePurchase =
00041         iDCPEventStruct._advancePurchase;
00042     const stdair::SaturdayStay_T& lSaturdayStay = iDCPEventStruct._saturdayStay
;
00043     const stdair::ChangeFees_T& lChangeFees = iDCPEventStruct._changeFees;
00044     const stdair::NonRefundable_T& lNonRefundable =
00045         iDCPEventStruct._nonRefundable;
00046     const stdair::DayDuration_T& lMinimumStay = iDCPEventStruct._minimumStay;
00047     const stdair::Fare_T& lDCP = iDCPEventStruct._DCP;
00048
00049     // Generate Segment Features and link them to their DCPEvent
00050     stdair::ClassList_StringList_T::const_iterator lItCurrentClassCodeList =
00051         iDCPEventStruct._classCodeList.begin();
00052
00053     const unsigned int lAirlineListSize = iDCPEventStruct.getAirlineListSize();
00054     const unsigned int lClassCodeListSize =
00055         iDCPEventStruct.getClassCodeListSize();
00056     assert (lAirlineListSize == lClassCodeListSize);
00057
00058     iDCPEventStruct.beginClassCode();
00059     for (iDCPEventStruct.beginAirline();
00060          iDCPEventStruct.hasNotReachedEndAirline();
00061          iDCPEventStruct.iterateAirline()) {
00062         /*
00063         const stdair::AirlineCode_T& lAirlineCode =
00064             iDCPEventStruct.getCurrentAirlineCode();
00065         const std::string& lClassCodeList =
00066             iDCPEventStruct.getCurrentClassCode();
00067             iDCPEventStruct.iterateClassCode();
00068         */
00069     }
00070 }
00071 }
00072

```

25.139 airinv/command/vault/DCPEventGenerator.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp> #include <airinv/-
```

AIRINV_Types.hpp>

Classes

- class [AIRINV::DCPEventGenerator](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)
- namespace [AIRINV::DCPParserHelper](#)

25.140 DCPEventGenerator.hpp

```

00001 #ifndef __AIRINV_CMD_DCPEVENTGENERATOR_HPP
00002 #define __AIRINV_CMD_DCPEVENTGENERATOR_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014     class BomRoot;
00015     class DCPEvent;
00016 }
00017
00018 namespace AIRINV {
00019
00020     // Forward declarations
00021     struct DCPEventStruct;
00022     namespace DCPParserHelper {
00023         struct doEndDCP;
00024     }
00025
00026     class DCPEventGenerator : public stdair::CmdAbstract {
00027     // Only the following class may use methods of DCPGenerator.
00028     // Indeed, as those methods build the BOM, it is not good to expose
00029     // them public.
00030     friend class DCPFileParser;
00031     friend struct DCPParserHelper::doEndDCP;
00032     friend class DCPParser;
00033     private:
00034         static void createDCPEvent (stdair::BomRoot&, DCPEventStruct&);
00035     };
00036
00037 }
00038
00039 #endif // __AIRINV_CMD_DCPEVENTGENERATOR_HPP

```

25.141 airinv/command/vault/DCPParser.cpp File Reference

```

#include <cassert> #include <string> #include <stdair/service/-
Logger.hpp>      #include <airinv/command/DCPParserHelper.-
hpp> #include <airinv/command/DCPParser.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.142 DCPParser.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // AirSched
00010 #include <airinv/command/DCPParserHelper.hpp>
00011 #include <airinv/command/DCPParser.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 void DCPParser::DCPRuleGeneration (const stdair::Filename_T& iFilename,
00017                                     stdair::BomRoot& ioBomRoot) {
00018
00019     // Initialise the DCP file parser
00020     lDCPRuleFileParser lDCPRuleFileParser (ioBomRoot, iFilename);
00021
00022     // Parse the CSV-formatted DCP input file and generate the
00023     // corresponding DCP events
00024     lDCPRuleFileParser.generatedDCPRules();
00025 }
00026
00027 }

```

25.143 airinv/command/vault/DCPParser.hpp File Reference

```

#include <stdair/stdair_basic_types.hpp> #include <stdair/command/-
CmdAbstract.hpp>

```

Classes

- class [AIRINV::DCPParser](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)

25.144 DCPParser.hpp

```

00001 #ifndef __AIRINV_CMD_DCPPARSER_HPP
00002 #define __AIRINV_CMD_DCPPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section

```

```

00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00011 // Forward declarations.
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00019     class DCPParser : public stdair::CmdAbstract {
00020     public:
00028         static void DCPRuleGeneration (const stdair::Filename_T&,
00029                                         stdair::BomRoot&);
00030     };
00031 }
00032 #endif // __AIRINV_CMD_DCPPARSER_HPP

```

25.145 airinv/command/vault/DCPParserHelper.cpp File Reference

```

#include <cassert>   #include <string>   #include <vector>
#include <fstream>   #include <stdair/basic/BasFileMgr.-
hpp> #include <stdair/bom/BomRoot.hpp> #include <stdair/service/-
Logger.hpp>        #include <airinv/command/DCPParserHelper.-
hpp> #include <airinv/command/DCPRuleGenerator.hpp>

```

Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::DCPParserHelper](#)

Variables

- stdair::int1_p_t [AIRINV::DCPParserHelper::int1_p](#)
- stdair::uint2_p_t [AIRINV::DCPParserHelper::uint2_p](#)
- stdair::uint4_p_t [AIRINV::DCPParserHelper::uint4_p](#)
- stdair::uint1_4_p_t [AIRINV::DCPParserHelper::uint1_4_p](#)
- stdair::hour_p_t [AIRINV::DCPParserHelper::hour_p](#)
- stdair::minute_p_t [AIRINV::DCPParserHelper::minute_p](#)
- stdair::second_p_t [AIRINV::DCPParserHelper::second_p](#)
- stdair::year_p_t [AIRINV::DCPParserHelper::year_p](#)
- stdair::month_p_t [AIRINV::DCPParserHelper::month_p](#)
- stdair::day_p_t [AIRINV::DCPParserHelper::day_p](#)

25.146 DCPParserHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>

```

```

00007 #include <vector>
00008 #include <fstream>
00009 // StdAir
00010 #include <stdair/basic/BasFileMgr.hpp>
00011 #include <stdair/bom/BomRoot.hpp>
00012 #include <stdair/service/Logger.hpp>
00013 // AirInv
00014 #include <airinv/command/DCPParserHelper.hpp>
00015 #include <airinv/command/DCPRuleGenerator.hpp>
00016
00017 namespace AIRINV {
00018
00019     namespace DCPParserHelper {
00020
00021         // //////////////////////////////////////
00022         // Semantic actions
00023         // //////////////////////////////////////
00024
00025         ParserSemanticAction::ParserSemanticAction (DCPRuleStruct& ioDCPRule)
00026             : _DCPRule (ioDCPRule) {
00027         }
00028
00029         // //////////////////////////////////////
00030         storeDCPId::storeDCPId (DCPRuleStruct& ioDCPRule)
00031             : ParserSemanticAction (ioDCPRule) {
00032         }
00033
00034         // //////////////////////////////////////
00035         void storeDCPId::operator() (unsigned int iDCPId,
00036                                     boost::spirit::qi::unused_type,
00037                                     boost::spirit::qi::unused_type) const {
00038             _DCPRule._DCPId = iDCPId;
00039
00040             // DEBUG
00041             //STDAIR_LOG_DEBUG ( "DCP Id: " << _DCPRule._DCPId);
00042
00043             _DCPRule._nbOfAirlines = 0;
00044             _DCPRule._airlineCode = "";
00045             _DCPRule._classCode = "";
00046             _DCPRule._airlineCodeList.clear();
00047             _DCPRule._classCodeList.clear();
00048             _DCPRule._classCodeListOfList.clear();
00049             _DCPRule._itSeconds = 0;
00050         }
00051
00052         // //////////////////////////////////////
00053         storeOrigin ::
00054         storeOrigin (DCPRuleStruct& ioDCPRule)
00055             : ParserSemanticAction (ioDCPRule) {
00056         }
00057
00058         // //////////////////////////////////////
00059         void storeOrigin::operator() (std::vector<char> iChar,
00060                                     boost::spirit::qi::unused_type,
00061                                     boost::spirit::qi::unused_type) const {
00062             stdair::AirportCode_T lOrigin (iChar.begin(), iChar.end());
00063             // DEBUG
00064             //STDAIR_LOG_DEBUG ( "Origin: " << lOrigin);
00065             _DCPRule._origin = lOrigin;
00066         }
00067
00068         // //////////////////////////////////////
00069         storeDestination ::
00070         storeDestination (DCPRuleStruct& ioDCPRule)
00071             : ParserSemanticAction (ioDCPRule) {
00072         }
00073
00074         // //////////////////////////////////////
00075         void storeDestination::operator() (std::vector<char> iChar,
00076                                     boost::spirit::qi::unused_type,
00077                                     boost::spirit::qi::unused_type) const {
00078             stdair::AirportCode_T lDestination (iChar.begin(), iChar.end());
00079             // DEBUG
00080             //STDAIR_LOG_DEBUG ( "Destination: " << lDestination);

```

```

00081     _DCPRule._destination = lDestination;
00082 }
00083
00084 // //////////////////////////////////////
00085 storeDateRangeStart::
00086 storeDateRangeStart (DCPRuleStruct& ioDCPRule)
00087 : ParserSemanticAction (ioDCPRule) {
00088 }
00089
00090 // //////////////////////////////////////
00091 void storeDateRangeStart::operator() (boost::spirit::qi::unused_type,
00092                                     boost::spirit::qi::unused_type,
00093                                     boost::spirit::qi::unused_type) const
00094 {
00095     _DCPRule._dateRangeStart = _DCPRule.getDate();
00096     // DEBUG
00097     //STDAIR_LOG_DEBUG ("Date Range Start: "<< _DCPRule._dateRangeStart);
00098 }
00099 // //////////////////////////////////////
00100 storeDateRangeEnd::
00101 storeDateRangeEnd(DCPRuleStruct& ioDCPRule)
00102 : ParserSemanticAction (ioDCPRule) {
00103 }
00104
00105 // //////////////////////////////////////
00106 void storeDateRangeEnd::operator() (boost::spirit::qi::unused_type,
00107                                     boost::spirit::qi::unused_type,
00108                                     boost::spirit::qi::unused_type) const {
00109     _DCPRule._dateRangeEnd = _DCPRule.getDate();
00110     // DEBUG
00111     //STDAIR_LOG_DEBUG ("Date Range End: " << _DCPRule._dateRangeEnd);
00112 }
00113 // //////////////////////////////////////
00114 storeStartRangeTime::
00115 storeStartRangeTime (DCPRuleStruct& ioDCPRule)
00116 : ParserSemanticAction (ioDCPRule) {
00117 }
00118
00119 // //////////////////////////////////////
00120 void storeStartRangeTime::operator() (boost::spirit::qi::unused_type,
00121                                     boost::spirit::qi::unused_type,
00122                                     boost::spirit::qi::unused_type) const
00123 {
00124     _DCPRule._timeRangeStart = _DCPRule.getTime();
00125     // DEBUG
00126     //STDAIR_LOG_DEBUG ("Time Range Start: " << _DCPRule._timeRangeStart);
00127     // Reset the number of seconds
00128     _DCPRule._itSeconds = 0;
00129 }
00130 // //////////////////////////////////////
00131 storeEndRangeTime::
00132 storeEndRangeTime (DCPRuleStruct& ioDCPRule)
00133 : ParserSemanticAction (ioDCPRule) {
00134 }
00135
00136 // //////////////////////////////////////
00137 void storeEndRangeTime::operator() (boost::spirit::qi::unused_type,
00138                                     boost::spirit::qi::unused_type,
00139                                     boost::spirit::qi::unused_type) const {
00140     _DCPRule._timeRangeEnd = _DCPRule.getTime();
00141     // DEBUG
00142     //STDAIR_LOG_DEBUG ("Time Range End: " << _DCPRule._timeRangeEnd);
00143     // Reset the number of seconds
00144     _DCPRule._itSeconds = 0;
00145 }
00146 // //////////////////////////////////////
00147 storePOS ::
00148 storePOS (DCPRuleStruct& ioDCPRule)
00149 : ParserSemanticAction (ioDCPRule) {
00150 }
00151
00152 }

```

```

00153
00154 ///////////////////////////////////////////////////////////////////
00155 void storePOS::operator() (std::vector<char> iChar,
00156                          boost::spirit::qi::unused_type,
00157                          boost::spirit::qi::unused_type) const {
00158     stdair::AirlineCode_T lPOS (iChar.begin(), iChar.end());
00159     _DCPRule._pos = lPOS;
00160     // DEBUG
00161     //STDAIR_LOG_DEBUG ("POS: " << _DCPRule._pos);
00162 }
00163
00164 ///////////////////////////////////////////////////////////////////
00165 storeCabinCode ::
00166 storeCabinCode (DCPRuleStruct& ioDCPRule)
00167 : ParserSemanticAction (ioDCPRule) {
00168 }
00169
00170 ///////////////////////////////////////////////////////////////////
00171 void storeCabinCode::operator() (char iChar,
00172                                boost::spirit::qi::unused_type,
00173                                boost::spirit::qi::unused_type) const {
00174     std::ostringstream ostr;
00175     ostr << iChar;
00176     std::string cabinCodeStr = ostr.str();
00177     const stdair::CabinCode_T lCabinCode (cabinCodeStr);
00178     _DCPRule._cabinCode = lCabinCode;
00179
00180     // DEBUG
00181     //STDAIR_LOG_DEBUG ("Cabin Code: " << lCabinCode);
00182 }
00183
00184 ///////////////////////////////////////////////////////////////////
00185 storeChannel ::
00186 storeChannel (DCPRuleStruct& ioDCPRule)
00187 : ParserSemanticAction (ioDCPRule) {
00188 }
00189
00190 ///////////////////////////////////////////////////////////////////
00191 void storeChannel::operator() (std::vector<char> iChar,
00192                                boost::spirit::qi::unused_type,
00193                                boost::spirit::qi::unused_type) const {
00194     stdair::ChannelLabel_T lChannel (iChar.begin(), iChar.end());
00195     if (lChannel != "IN" && lChannel != "IF"
00196         && lChannel != "DN" && lChannel != "DF") {
00197         // DEBUG
00198         STDAIR_LOG_DEBUG ("Invalid channel " << lChannel);
00199     }
00200     _DCPRule._channel = lChannel;
00201     // DEBUG
00202     //STDAIR_LOG_DEBUG ("Channel: " << _DCPRule._channel);
00203 }
00204
00205 ///////////////////////////////////////////////////////////////////
00206 storeAdvancePurchase ::
00207 storeAdvancePurchase (DCPRuleStruct& ioDCPRule)
00208 : ParserSemanticAction (ioDCPRule) {
00209 }
00210
00211 ///////////////////////////////////////////////////////////////////
00212 void storeAdvancePurchase::operator() (unsigned int iAdvancePurchase,
00213                                       boost::spirit::qi::unused_type,
00214                                       boost::spirit::qi::unused_type)
00215 const {
00216     _DCPRule._advancePurchase = iAdvancePurchase;
00217     // DEBUG
00218     //STDAIR_LOG_DEBUG ( "Advance Purchase: " << _DCPRule._advancePurchase);
00219 }
00220
00221 ///////////////////////////////////////////////////////////////////
00222 storeSaturdayStay ::
00223 storeSaturdayStay (DCPRuleStruct& ioDCPRule)
00224 : ParserSemanticAction (ioDCPRule) {
00225 }

```

```

00226
00227 // //////////////////////////////////////
00228 void storeSaturdayStay::operator() (char iSaturdayStay,
00229                                     boost::spirit::qi::unused_type,
00230                                     boost::spirit::qi::unused_type) const {
00231     bool lBool = false;
00232     if (iSaturdayStay == 'T') {
00233         lBool = true;
00234     } else {
00235         if (iSaturdayStay != 'F') {
00236             // DEBUG
00237             STDAIR_LOG_DEBUG ("Invalid saturdayStay char " << iSaturdayStay);
00238         }
00239     }
00240     stdair::SaturdayStay_T lSaturdayStay (lBool);
00241     _DCPRule._saturdayStay = lSaturdayStay;
00242     // DEBUG
00243     //STDAIR_LOG_DEBUG ("Saturday Stay: " << _DCPRule._saturdayStay);
00244 }
00245
00246 // //////////////////////////////////////
00247 storeChangeFees ::
00248 storeChangeFees (DCPRuleStruct& ioDCPRule)
00249 : ParserSemanticAction (ioDCPRule) {
00250 }
00251
00252 // //////////////////////////////////////
00253 void storeChangeFees::operator() (char iChangefees,
00254                                   boost::spirit::qi::unused_type,
00255                                   boost::spirit::qi::unused_type) const {
00256     bool lBool = false;
00257     if (iChangefees == 'T') {
00258         lBool = true;
00259     } else {
00260         if (iChangefees != 'F') {
00261             // DEBUG
00262             STDAIR_LOG_DEBUG ("Invalid change fees char " << iChangefees);
00263         }
00264     }
00265     stdair::ChangeFees_T lChangefees (lBool);
00266     _DCPRule._changeFees = lChangefees;
00267     // DEBUG
00268     //STDAIR_LOG_DEBUG ("Change fees: " << _DCPRule._changeFees);
00269 }
00270
00271 // //////////////////////////////////////
00272 storeNonRefundable ::
00273 storeNonRefundable (DCPRuleStruct& ioDCPRule)
00274 : ParserSemanticAction (ioDCPRule) {
00275 }
00276
00277 // //////////////////////////////////////
00278 void storeNonRefundable::operator() (char iNonRefundable,
00279                                     boost::spirit::qi::unused_type,
00280                                     boost::spirit::qi::unused_type) const
00281 {
00282     bool lBool = false;
00283     if (iNonRefundable == 'T') {
00284         lBool = true;
00285     } else {
00286         if (iNonRefundable != 'F') {
00287             // DEBUG
00288             STDAIR_LOG_DEBUG ("Invalid non refundable char " << iNonRefundable);
00289         }
00290     }
00291     stdair::NonRefundable_T lNonRefundable (lBool);
00292     _DCPRule._nonRefundable = lNonRefundable;
00293     // DEBUG
00294     //STDAIR_LOG_DEBUG ("Non refundable: " << _DCPRule._nonRefundable);
00295 }
00296
00297 // //////////////////////////////////////
00298 storeMinimumStay ::

```



```

00299     storeMinimumStay (DCPRuleStruct& ioDCPRule)
00300     : ParserSemanticAction (ioDCPRule) {
00301     }
00302
00303     // //////////////////////////////////////
00304     void storeMinimumStay::operator() (unsigned int iMinStay,
00305                                       boost::spirit::qi::unused_type,
00306                                       boost::spirit::qi::unused_type) const {
00307         _DCPRule._minimumStay = iMinStay;
00308         // DEBUG
00309         //STDAIR_LOG_DEBUG ("Minimum Stay: " << _DCPRule._minimumStay );
00310     }
00311
00312     // //////////////////////////////////////
00313     storeDCP ::
00314     storeDCP (DCPRuleStruct& ioDCPRule)
00315     : ParserSemanticAction (ioDCPRule) {
00316     }
00317
00318     // //////////////////////////////////////
00319     void storeDCP::operator() (double iDCP,
00320                               boost::spirit::qi::unused_type,
00321                               boost::spirit::qi::unused_type) const {
00322         _DCPRule._DCP = iDCP;
00323         // DEBUG
00324         //STDAIR_LOG_DEBUG ("DCP: " << _DCPRule._DCP);
00325     }
00326
00327     // //////////////////////////////////////
00328     storeAirlineCode ::
00329     storeAirlineCode (DCPRuleStruct& ioDCPRule)
00330     : ParserSemanticAction (ioDCPRule) {
00331     }
00332
00333     // //////////////////////////////////////
00334     void storeAirlineCode::operator() (std::vector<char> iChar,
00335                                       boost::spirit::qi::unused_type,
00336                                       boost::spirit::qi::unused_type) const {
00337
00338         bool lAlreadyInTheList = false;
00339         stdair::AirlineCode_T lAirlineCode (iChar.begin(), iChar.end());
00340         // Update the airline code
00341         _DCPRule._airlineCode = lAirlineCode;
00342         // Test if the DCPRule Struct stands for interline products
00343         if (_DCPRule._airlineCodeList.size() > 0) {
00344             _DCPRule._classCodeListOfList.push_back(_DCPRule._classCodeList);
00345             _DCPRule._classCodeList.clear();
00346             // Update the number of airlines if necessary
00347             std::vector<stdair::AirlineCode_T>::iterator Airline_iterator;
00348             for (Airline_iterator = _DCPRule._airlineCodeList.begin();
00349                  Airline_iterator != _DCPRule._airlineCodeList.end();
00350                  ++Airline_iterator) {
00351                 stdair::AirlineCode_T lPreviousAirlineCode =
00352                     *Airline_iterator;
00353                 if (lPreviousAirlineCode == lAirlineCode) {
00354                     lAlreadyInTheList = true;
00355                     /*STDAIR_LOG_DEBUG ("Airline Code Already Existing: "
00356                                         << lAirlineCode);*/
00357                 }
00358             }
00359             if (lAlreadyInTheList == false) {
00360                 /*STDAIR_LOG_DEBUG ("New Airline Code: "
00361                                     << lAirlineCode);*/
00362                 _DCPRule._airlineCodeList.push_back(lAirlineCode);
00363                 _DCPRule._classCodeList.clear();
00364             }
00365         } else {
00366             /*STDAIR_LOG_DEBUG ("First Airline Code: "
00367                                 << lAirlineCode);*/
00368             _DCPRule._airlineCodeList.push_back (lAirlineCode);
00369         }
00370         // DEBUG
00371         //STDAIR_LOG_DEBUG ( "Airline code: " << lAirlineCode);
00372     }

```

```

00373
00374 // //////////////////////////////////////
00375 storeClass ::
00376 storeClass (DCPRuleStruct& ioDCPRule)
00377 : ParserSemanticAction (ioDCPRule) {
00378 }
00379
00380 // //////////////////////////////////////
00381 void storeClass::operator() (std::vector<char> iChar,
00382                             boost::spirit::qi::unused_type,
00383                             boost::spirit::qi::unused_type) const {
00384     std::ostringstream ostr;
00385     for (std::vector<char>::const_iterator lItVector = iChar.begin();
00386          lItVector != iChar.end();
00387          lItVector++) {
00388         ostr << *lItVector;
00389     }
00390     std::string classCodeStr = ostr.str();
00391     // Insertion of this class Code list in the whole classCode name
00392     _DCPRule._classCodeList.push_back(classCodeStr);
00393     // DEBUG
00394     // STDAIR_LOG_DEBUG ("Class Code: " << classCodeStr);
00395 }
00396
00397 // //////////////////////////////////////
00398 doEndDCP::
00399 doEndDCP (stdair::BomRoot& ioBomRoot,
00400           DCPRuleStruct& ioDCPRule)
00401 : ParserSemanticAction (ioDCPRule),
00402   _bomRoot (ioBomRoot) {
00403 }
00404
00405 // //////////////////////////////////////
00406 void doEndDCP::operator() (boost::spirit::qi::unused_type,
00407                             boost::spirit::qi::unused_type,
00408                             boost::spirit::qi::unused_type) const {
00409     // DEBUG
00410     // STDAIR_LOG_DEBUG ("Do End");
00411     // Generation of the DCP rule object.
00412     _DCPRule._classCodeListOfList.push_back(_DCPRule._classCodeList);
00413     DCPRuleGenerator::createDCPRule (_bomRoot, _DCPRule);
00414     STDAIR_LOG_DEBUG(_DCPRule.describe());
00415 }
00416
00417 // //////////////////////////////////////
00418 //
00419 // Utility Parsers
00420 //
00421 // //////////////////////////////////////
00422 namespace bsq = boost::spirit::qi;
00423 namespace bsa = boost::spirit::ascii;
00424
00425 stdair::int1_p_t int1_p;
00426
00427 stdair::uint2_p_t uint2_p;
00428
00429 stdair::uint4_p_t uint4_p;
00430
00431 stdair::uint1_4_p_t uint1_4_p;
00432
00433 stdair::hour_p_t hour_p;
00434
00435 stdair::minute_p_t minute_p;
00436
00437 stdair::second_p_t second_p;
00438
00439 stdair::year_p_t year_p;
00440
00441 stdair::month_p_t month_p;
00442
00443 stdair::day_p_t day_p;
00444
00445 // //////////////////////////////////////
00446 // (Boost Spirit) Grammar Definition
00447 // //////////////////////////////////////
00448
00449 // //////////////////////////////////////
00450 DCPRuleParser::DCPRuleParser (stdair::BomRoot& ioBomRoot,

```

```

00454         DCPRuleStruct& ioDCPRule) :
00455     DCPRuleParser::base_type(start),
00456     _bomRoot(ioBomRoot), _DCPRule(ioDCPRule) {
00457
00458     start = *(comments | DCP_rule);
00459
00460     comments = (bsq::lexeme[bsq::repeat(2)[bsa::char_('/')]
00461                 >> +(bsa::char_ - bsq::eol)
00462                 >> bsq::eol]
00463                 | bsq::lexeme[bsa::char_('/') >> bsa::char_('*')
00464                 >> +(bsa::char_ - bsa::char_('*'))
00465                 >> bsa::char_('*') >> bsa::char_('/')]);
00466
00467     DCP_rule = DCP_key
00468     >> +(';' >> segment)
00469     >> DCP_rule_end[doEndDCP(_bomRoot, _DCPRule)];
00470
00471     DCP_rule_end = bsa::char_(';');
00472
00473     DCP_key = DCP_id
00474     >> ';' >> origin >> ';' >> destination
00475     >> ';' >> dateRangeStart >> ';' >> dateRangeEnd
00476     >> ';' >> timeRangeStart >> ';' >> timeRangeEnd
00477     >> ';' >> position >> ';' >> cabinCode >> ';' >> channel
00478     >> ';' >> advancePurchase >> ';' >> saturdayStay
00479     >> ';' >> changeFees >> ';' >> nonRefundable
00480     >> ';' >> minimumStay >> ';' >> DCP;
00481
00482     DCP_id = uint1_4_p[storeDCPId(_DCPRule)];
00483
00484     origin = bsq::repeat(3)[bsa::char_("A-Z")][storeOrigin(_DCPRule)];
00485
00486     destination =
00487     bsq::repeat(3)[bsa::char_("A-Z")][storeDestination(_DCPRule)];
00488
00489     dateRangeStart = date[storeDateRangeStart(_DCPRule)];
00490
00491     dateRangeEnd = date[storeDateRangeEnd(_DCPRule)];
00492
00493     date = bsq::lexeme
00494     [year_p[boost::phoenix::ref(_DCPRule._itYear) = bsq::labels::_1]
00495     >> '-'
00496     >> month_p[boost::phoenix::ref(_DCPRule._itMonth) = bsq::labels::_1]
00497     >> '-'
00498     >> day_p[boost::phoenix::ref(_DCPRule._itDay) = bsq::labels::_1] ];
00499
00500     timeRangeStart = time[storeStartRangeTime(_DCPRule)];
00501
00502     timeRangeEnd = time[storeEndRangeTime(_DCPRule)];
00503
00504     time = bsq::lexeme
00505     [hour_p[boost::phoenix::ref(_DCPRule._itHours) = bsq::labels::_1]
00506     >> ':'
00507     >> minute_p[boost::phoenix::ref(_DCPRule._itMinutes) = bsq::labels::_1]
00508     >> -(':' >> second_p[boost::phoenix::ref(_DCPRule._itSeconds) = bsq
00509     ::labels::_1] ) ];
00510
00511     position = bsq::repeat(3)[bsa::char_("A-Z")][storePOS(_DCPRule)];
00512
00513     cabinCode = bsa::char_("A-Z")[storeCabinCode(_DCPRule)];
00514
00515     channel = bsq::repeat(2)[bsa::char_("A-Z")][storeChannel(_DCPRule)];
00516
00517     advancePurchase = uint1_4_p[storeAdvancePurchase(_DCPRule)];
00518
00519     saturdayStay = bsa::char_("A-Z")[storeSaturdayStay(_DCPRule)];
00520
00521     changeFees = bsa::char_("A-Z")[storeChangeFees(_DCPRule)];
00522
00523     nonRefundable = bsa::char_("A-Z")[storeNonRefundable(_DCPRule)];
00524
00525     minimumStay = uint1_4_p[storeMinimumStay(_DCPRule)];

```

```

00526         DCP = bsq::double_[storeDCP(_DCPRule)];
00527
00528         segment = bsq::repeat(2)[bsa::char_("A-Z")][storeAirlineCode(_DCPRule)]
00529         //>> ' ';
00530         //>> bsa::char_("A-Z")[storeClass(_DCPRule)]
00531         >> +(';' >> list_class);
00532
00533         list_class = bsq::repeat(1,bsq::inf)[bsa::char_("A-Z")][storeClass(
00534         _DCPRule)];
00535
00536         //BOOST_SPIRIT_DEBUG_NODE (DCPRuleParser);
00537         BOOST_SPIRIT_DEBUG_NODE (start);
00538         BOOST_SPIRIT_DEBUG_NODE (comments);
00539         BOOST_SPIRIT_DEBUG_NODE (DCP_rule);
00540         BOOST_SPIRIT_DEBUG_NODE (DCP_rule_end);
00541         BOOST_SPIRIT_DEBUG_NODE (DCP_key);
00542         BOOST_SPIRIT_DEBUG_NODE (DCP_id);
00543         BOOST_SPIRIT_DEBUG_NODE (origin);
00544         BOOST_SPIRIT_DEBUG_NODE (destination);
00545         BOOST_SPIRIT_DEBUG_NODE (dateRangeStart);
00546         BOOST_SPIRIT_DEBUG_NODE (dateRangeEnd);
00547         BOOST_SPIRIT_DEBUG_NODE (date);
00548         BOOST_SPIRIT_DEBUG_NODE (timeRangeStart);
00549         BOOST_SPIRIT_DEBUG_NODE (timeRangeEnd);
00550         BOOST_SPIRIT_DEBUG_NODE (time);
00551         BOOST_SPIRIT_DEBUG_NODE (position);
00552         BOOST_SPIRIT_DEBUG_NODE (cabinCode);
00553         BOOST_SPIRIT_DEBUG_NODE (channel);
00554         BOOST_SPIRIT_DEBUG_NODE (advancePurchase);
00555         BOOST_SPIRIT_DEBUG_NODE (saturdayStay);
00556         BOOST_SPIRIT_DEBUG_NODE (changeFees);
00557         BOOST_SPIRIT_DEBUG_NODE (nonRefundable);
00558         BOOST_SPIRIT_DEBUG_NODE (minimumStay);
00559         BOOST_SPIRIT_DEBUG_NODE (DCP);
00560         BOOST_SPIRIT_DEBUG_NODE (segment);
00561         BOOST_SPIRIT_DEBUG_NODE (list_class);
00562     }
00563 }
00564
00565 //
00566 // Entry class for the file parser
00567 //
00568
00569 // //////////////////////////////////////
00570 DCPRuleFileParser::
00571 DCPRuleFileParser (stdair::BomRoot& ioBomRoot,
00572                    const stdair::Filename_T& iFilename)
00573     : _filename (iFilename), _bomRoot (ioBomRoot) {
00574     init();
00575 }
00576
00577 // //////////////////////////////////////
00578 void DCPRuleFileParser::init() {
00579     // Check that the file exists and is readable
00580     const bool doesExistAndIsReadable =
00581         stdair::BasFileMgr::doesExistAndIsReadable (_filename);
00582
00583     if (doesExistAndIsReadable == false) {
00584         STDAIR_LOG_ERROR ("The DCP schedule file " << _filename
00585             << " does not exist or can not be read.");
00586
00587         throw DCPInputFileNotFoundException ("The DCP file " + _filename + " does
00588         not exist or can not be read");
00589     }
00590 }
00591
00592 // //////////////////////////////////////
00593 bool DCPRuleFileParser::generatedDCPRules () {
00594
00595     STDAIR_LOG_DEBUG ("Parsing DCP input file: " << _filename);
00596
00597     // File to be parsed
00598     const std::string* lFileName = &_filename;
00599     const char *lChar = (*lFileName).c_str();

```

```

00600     std::ifstream fileToBeParsed(lChar, std::ios_base::in);
00601
00602     // Check the filename exists and can be open
00603     if (fileToBeParsed == false) {
00604         STDAIR_LOG_ERROR ("The DCP file " << _filename << " can not be open."
00605             << std::endl);
00606
00607         throw DCPInputFileNotFoundException ("The file " + _filename + " does not
exist or can not be read");
00608     }
00609
00610     // Create an input iterator
00611     stdair::base_iterator_t inputBegin (fileToBeParsed);
00612
00613     // Convert input iterator to an iterator usable by spirit parser
00614     stdair::iterator_t
00615         start (boost::spirit::make_default_multi_pass (inputBegin));
00616     stdair::iterator_t end;
00617
00618     // Initialise the parser (grammar) with the helper/staging structure.
00619     DCPParserHelper::DCPRuleParser lFPParser(_bomRoot, _DCPRule);
00620
00621     // Launch the parsing of the file and, thanks to the doEndDCP
00622     // call-back structure, the building of the whole BomRoot BOM
00623
00624     const bool hasParsingBeenSuccesful =
00625         boost::spirit::qi::phrase_parse (start, end, lFPParser,
00626             boost::spirit::ascii::space);
00627
00628     if (hasParsingBeenSuccesful == false) {
00629         // TODO: decide whether to throw an exception
00630         STDAIR_LOG_ERROR ("Parsing of DCP input file: " << _filename
00631             << " failed");
00632     }
00633     if (start != end) {
00634         // TODO: decide whether to throw an exception
00635         STDAIR_LOG_ERROR ("Parsing of DCP input file: " << _filename
00636             << " failed");
00637     }
00638     if (hasParsingBeenSuccesful == true && start == end) {
00639         STDAIR_LOG_DEBUG ("Parsing of DCP input file: " << _filename
00640             << " succeeded");
00641     }
00642     return hasParsingBeenSuccesful;
00643 }
00644
00645 }

```

25.147 airinv/command/vault/DCPParserHelper.hpp File Reference

```

#include <stdair/basic/BasParserTypes.hpp> #include <stdair/command/-
CmdAbstract.hpp> #include <airinv/AIRINV_Types.hpp> ×
#include <airinv/bom/DCPRuleStruct.hpp>

```

Classes

- struct [AIRINV::DCPParserHelper::ParserSemanticAction](#)
- struct [AIRINV::DCPParserHelper::storeDCPIId](#)
- struct [AIRINV::DCPParserHelper::storeOrigin](#)
- struct [AIRINV::DCPParserHelper::storeDestination](#)
- struct [AIRINV::DCPParserHelper::storeDateRangeStart](#)
- struct [AIRINV::DCPParserHelper::storeDateRangeEnd](#)
- struct [AIRINV::DCPParserHelper::storeStartRangeTime](#)

- struct [AIRINV::DCPParserHelper::storeEndRangeTime](#)
- struct [AIRINV::DCPParserHelper::storePOS](#)
- struct [AIRINV::DCPParserHelper::storeCabinCode](#)
- struct [AIRINV::DCPParserHelper::storeChannel](#)
- struct [AIRINV::DCPParserHelper::storeAdvancePurchase](#)
- struct [AIRINV::DCPParserHelper::storeSaturdayStay](#)
- struct [AIRINV::DCPParserHelper::storeChangeFees](#)
- struct [AIRINV::DCPParserHelper::storeNonRefundable](#)
- struct [AIRINV::DCPParserHelper::storeMinimumStay](#)
- struct [AIRINV::DCPParserHelper::storeDCP](#)
- struct [AIRINV::DCPParserHelper::storeAirlineCode](#)
- struct [AIRINV::DCPParserHelper::storeClass](#)
- struct [AIRINV::DCPParserHelper::doEndDCP](#)
- struct [AIRINV::DCPParserHelper::DCPRuleParser](#)
- class [AIRINV::DCPRuleFileParser](#)

Namespaces

- namespace [stdair](#)
Forward declarations.
- namespace [AIRINV](#)
- namespace [AIRINV::DCPParserHelper](#)

25.148 DCPParserHelper.hpp

```

00001 #ifndef __AIRINV_CMD_DCPPARSERHELPER_HPP
00002 #define __AIRINV_CMD_DCPPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 // The stdair/basic/BasParserTypes.hpp header includes Boost.Spirit headers
00009 // #define BOOST_SPIRIT_DEBUG
00010 #include <stdair/basic/BasParserTypes.hpp>
00011 #include <stdair/command/CmdAbstract.hpp>
00012 // AirInv
00013 #include <airinv/AIRINV_Types.hpp>
00014 #include <airinv/bom/DCPRuleStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022     namespace DCPParserHelper {
00023
00024
00025         // //////////////////////////////////////
00026         // Semantic actions
00027         // //////////////////////////////////////
00028
00029         struct ParserSemanticAction {
00030             ParserSemanticAction (DCPRuleStruct&);
00031             DCPRuleStruct& _DCPRule;
00032         };
00033
00034
00035
00036

```

```

00038     struct storeDCPID : public ParserSemanticAction {
00040         storeDCPID (DCPRuleStruct&);
00042         void operator() (unsigned int,
00043             boost::spirit::qi::unused_type,
00044             boost::spirit::qi::unused_type) const;
00045     };
00046
00048     struct storeOrigin : public ParserSemanticAction {
00050         storeOrigin (DCPRuleStruct&);
00052         void operator() (std::vector<char>,
00053             boost::spirit::qi::unused_type,
00054             boost::spirit::qi::unused_type) const;
00055     };
00056
00058     struct storeDestination : public ParserSemanticAction {
00060         storeDestination (DCPRuleStruct&);
00062         void operator() (std::vector<char>,
00063             boost::spirit::qi::unused_type,
00064             boost::spirit::qi::unused_type) const;
00065     };
00066
00068     struct storeDateRangeStart : public ParserSemanticAction {
00070         storeDateRangeStart (DCPRuleStruct&);
00072         void operator() (boost::spirit::qi::unused_type,
00073             boost::spirit::qi::unused_type,
00074             boost::spirit::qi::unused_type) const;
00075     };
00076
00078     struct storeDateRangeEnd : public ParserSemanticAction {
00080         storeDateRangeEnd (DCPRuleStruct&);
00082         void operator() (boost::spirit::qi::unused_type,
00083             boost::spirit::qi::unused_type,
00084             boost::spirit::qi::unused_type) const;
00085     };
00086
00088     struct storeStartRangeTime : public ParserSemanticAction {
00090         storeStartRangeTime (DCPRuleStruct&);
00092         void operator() (boost::spirit::qi::unused_type,
00093             boost::spirit::qi::unused_type,
00094             boost::spirit::qi::unused_type) const;
00095     };
00096
00098     struct storeEndRangeTime : public ParserSemanticAction {
00100         storeEndRangeTime (DCPRuleStruct&);
00102         void operator() (boost::spirit::qi::unused_type,
00103             boost::spirit::qi::unused_type,
00104             boost::spirit::qi::unused_type) const;
00105     };
00106
00108     struct storePOS : public ParserSemanticAction {
00110         storePOS (DCPRuleStruct&);
00112         void operator() (std::vector<char>,
00113             boost::spirit::qi::unused_type,
00114             boost::spirit::qi::unused_type) const;
00115     };
00116
00118     struct storeCabinCode : public ParserSemanticAction {
00120         storeCabinCode (DCPRuleStruct&);
00122         void operator() (char,
00123             boost::spirit::qi::unused_type,
00124             boost::spirit::qi::unused_type) const;
00125     };
00126
00128     struct storeChannel : public ParserSemanticAction {
00130         storeChannel (DCPRuleStruct&);
00132         void operator() (std::vector<char>,
00133             boost::spirit::qi::unused_type,
00134             boost::spirit::qi::unused_type) const;
00135     };
00136
00138     struct storeAdvancePurchase : public ParserSemanticAction {
00140         storeAdvancePurchase (DCPRuleStruct&);
00142         void operator() (unsigned int,
00143             boost::spirit::qi::unused_type,

```

```

00144             boost::spirit::qi::unused_type) const;
00145     };
00146
00148     struct storeSaturdayStay : public ParserSemanticAction {
00150         storeSaturdayStay (DCPRuleStruct&);
00152         void operator() (char,
00153             boost::spirit::qi::unused_type,
00154             boost::spirit::qi::unused_type) const;
00155     };
00156
00158     struct storeChangeFees : public ParserSemanticAction {
00160         storeChangeFees (DCPRuleStruct&);
00162         void operator() (char,
00163             boost::spirit::qi::unused_type,
00164             boost::spirit::qi::unused_type) const;
00165     };
00166
00168     struct storeNonRefundable : public ParserSemanticAction {
00170         storeNonRefundable (DCPRuleStruct&);
00172         void operator() (char,
00173             boost::spirit::qi::unused_type,
00174             boost::spirit::qi::unused_type) const;
00175     };
00176
00178     struct storeMinimumStay : public ParserSemanticAction {
00180         storeMinimumStay (DCPRuleStruct&);
00182         void operator() (unsigned int,
00183             boost::spirit::qi::unused_type,
00184             boost::spirit::qi::unused_type) const;
00185     };
00186
00188     struct storeDCP : public ParserSemanticAction {
00190         storeDCP (DCPRuleStruct&);
00192         void operator() (double,
00193             boost::spirit::qi::unused_type,
00194             boost::spirit::qi::unused_type) const;
00195     };
00196
00198     struct storeAirlineCode : public ParserSemanticAction {
00200         storeAirlineCode (DCPRuleStruct&);
00202         void operator() (std::vector<char>,
00203             boost::spirit::qi::unused_type,
00204             boost::spirit::qi::unused_type) const;
00205     };
00206
00208     struct storeClass : public ParserSemanticAction {
00210         storeClass (DCPRuleStruct&);
00212         void operator() (std::vector<char>,
00213             boost::spirit::qi::unused_type,
00214             boost::spirit::qi::unused_type) const;
00215     };
00216
00218     struct doEndDCP : public ParserSemanticAction {
00220         doEndDCP (stdair::BomRoot&, DCPRuleStruct&);
00222         void operator() (boost::spirit::qi::unused_type,
00223             boost::spirit::qi::unused_type,
00224             boost::spirit::qi::unused_type) const;
00226         stdair::BomRoot& _bomRoot;
00227     };
00228
00229
00231     //
00232     // (Boost Spirit) Grammar Definition
00233     //
00235
00304     struct DCPRuleParser :
00305     public boost::spirit::qi::grammar<stdair::iterator_t,
00306         boost::spirit::ascii::space_type> {
00307
00308         DCPRuleParser (stdair::BomRoot&, DCPRuleStruct&);
00309
00310         // Instantiation of rules
00311         boost::spirit::qi::rule<stdair::iterator_t,
00312             boost::spirit::ascii::space_type>

```



```

00313     start, comments, DCP_rule, DCP_rule_end, DCP_key, DCP_id, origin,
00314     destination, dateRangeStart, dateRangeEnd, date, timeRangeStart,
00315     timeRangeEnd, time, position, cabinCode, channel, advancePurchase,
00316     saturdayStay, changeFees, nonRefundable, minimumStay, DCP,
00317     segment, list_class;
00318
00319     // Parser Context
00320     stdair::BomRoot& _bomRoot;
00321     DCPRuleStruct& _DCPRule;
00322 };
00323
00324 }
00325
00326 //
00327 // Entry class for the file parser
00328 //
00329 //
00330
00331 class DCPRuleFileParser : public stdair::CmdAbstract {
00332 public:
00333     DCPRuleFileParser (stdair::BomRoot& ioBomRoot,
00334         const stdair::Filename_T& iFilename);
00335
00336     bool generateDCPRules ();
00337
00338 private:
00339     void init();
00340
00341 private:
00342     // Attributes
00343     stdair::Filename_T _filename;
00344
00345     stdair::BomRoot& _bomRoot;
00346
00347     DCPRuleStruct _DCPRule;
00348 };
00349
00350 }
00351 #endif // __AIRINV_CMD_DCPPARSERHELPER_HPP

```

25.149 airinv/config/airinv-paths.hpp File Reference

Defines

- #define [PACKAGE](#) "airinv"
- #define [PACKAGE_NAME](#) "AIRINV"
- #define [PACKAGE_VERSION](#) "0.1.2"
- #define [PREFIXDIR](#) "/usr"
- #define [EXEC_PREFIX](#) "/usr"
- #define [BINDIR](#) "/usr/bin"
- #define [LIBDIR](#) "/usr/lib"
- #define [LIBEXECDIR](#) "/usr/libexec"
- #define [SBINDIR](#) "/usr/sbin"
- #define [SYSCONFDIR](#) "/usr/etc"
- #define [INCLUDEDIR](#) "/usr/include"
- #define [DATAROOTDIR](#) "/usr/share"
- #define [DATADIR](#) "/usr/share"
- #define [DOCDIR](#) "/usr/share/doc/airinv-0.1.2"
- #define [MANDIR](#) "/usr/share/man"
- #define [INFODIR](#) "/usr/share/info"
- #define [HTMLDIR](#) "/usr/share/doc/airinv-0.1.2/html"

- `#define PDFDIR "/usr/share/doc/airinv-0.1.2/html"`
- `#define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"`

25.149.1 Define Documentation

25.149.1.1 `#define PACKAGE "airinv"`

Definition at line 4 of file [airinv-paths.hpp](#).

25.149.1.2 `#define PACKAGE_NAME "AIRINV"`

Definition at line 5 of file [airinv-paths.hpp](#).

25.149.1.3 `#define PACKAGE_VERSION "0.1.2"`

Definition at line 6 of file [airinv-paths.hpp](#).

25.149.1.4 `#define PREFIXDIR "/usr"`

Definition at line 7 of file [airinv-paths.hpp](#).

25.149.1.5 `#define EXEC_PREFIX "/usr"`

Definition at line 8 of file [airinv-paths.hpp](#).

25.149.1.6 `#define BINDIR "/usr/bin"`

Definition at line 9 of file [airinv-paths.hpp](#).

25.149.1.7 `#define LIBDIR "/usr/lib"`

Definition at line 10 of file [airinv-paths.hpp](#).

25.149.1.8 `#define LIBEXECDIR "/usr/libexec"`

Definition at line 11 of file [airinv-paths.hpp](#).

25.149.1.9 `#define SBINDIR "/usr/sbin"`

Definition at line 12 of file [airinv-paths.hpp](#).

25.149.1.10 `#define SYSCONFDIR "/usr/etc"`

Definition at line 13 of file [airinv-paths.hpp](#).

25.149.1.11 `#define INCLUDEDIR "/usr/include"`

Definition at line 14 of file [airinv-paths.hpp](#).

25.149.1.12 `#define DATAROOTDIR "/usr/share"`

Definition at line 15 of file [airinv-paths.hpp](#).

25.149.1.13 `#define DATADIR "/usr/share"`

Definition at line 16 of file [airinv-paths.hpp](#).

25.149.1.14 `#define DOCDIR "/usr/share/doc/airinv-0.1.2"`

Definition at line 17 of file [airinv-paths.hpp](#).

25.149.1.15 `#define MANDIR "/usr/share/man"`

Definition at line 18 of file [airinv-paths.hpp](#).

25.149.1.16 `#define INFODIR "/usr/share/info"`

Definition at line 19 of file [airinv-paths.hpp](#).

25.149.1.17 `#define HTMLDIR "/usr/share/doc/airinv-0.1.2/html"`

Definition at line 20 of file [airinv-paths.hpp](#).

25.149.1.18 `#define PDFDIR "/usr/share/doc/airinv-0.1.2/html"`

Definition at line 21 of file [airinv-paths.hpp](#).

25.149.1.19 `#define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"`

Definition at line 22 of file [airinv-paths.hpp](#).

25.150 airinv-paths.hpp

```
00001 #ifndef __AIRINV_PATHS_HPP__
00002 #define __AIRINV_PATHS_HPP__
00003
00004 #define PACKAGE "airinv"
00005 #define PACKAGE_NAME "AIRINV"
00006 #define PACKAGE_VERSION "0.1.2"
00007 #define PREFIXDIR "/usr"
00008 #define EXEC_PREFIX "/usr"
00009 #define BINDIR "/usr/bin"
00010 #define LIBDIR "/usr/lib"
00011 #define LIBEXECDIR "/usr/libexec"
00012 #define SBINDIR "/usr/sbin"
00013 #define SYSCONFDIR "/usr/etc"
00014 #define INCLUDEDIR "/usr/include"
00015 #define DATAROOTDIR "/usr/share"
00016 #define DATADIR "/usr/share"
00017 #define DOCDIR "/usr/share/doc/airinv-0.1.2"
00018 #define MANDIR "/usr/share/man"
00019 #define INFODIR "/usr/share/info"
00020 #define HTMLDIR "/usr/share/doc/airinv-0.1.2/html"
00021 #define PDFDIR "/usr/share/doc/airinv-0.1.2/html"
00022 #define STDAIR_SAMPLE_DIR "/usr/share/stdair/samples"
00023
00024 #endif // __AIRINV_PATHS_HPP__
```

25.151 airinv/config/airinv-paths.hpp.in File Reference

Defines

- `#define __AIRINV_PATHS_HPP__`
- `#define PACKAGE "@PACKAGE@"`
- `#define PACKAGE_NAME "@PACKAGE_NAME@"`
- `#define PACKAGE_VERSION "@PACKAGE_VERSION@"`
- `#define PREFIXDIR "@prefix@"`
- `#define EXEC_PREFIX "@exec_prefix@"`
- `#define BINDIR "@bindir@"`
- `#define LIBDIR "@libdir@"`
- `#define LIBEXECDIR "@libexecdir@"`
- `#define SBINDIR "@sbindir@"`
- `#define SYSCONFDIR "@sysconfdir@"`
- `#define INCLUDEDIR "@includedir@"`
- `#define DATAROOTDIR "@datarootdir@"`
- `#define DATADIR "@datadir@"`
- `#define DOCDIR "@docdir@"`
- `#define MANDIR "@mandir@"`
- `#define INFODIR "@infodir@"`
- `#define HTMLDIR "@htmldir@"`
- `#define PDFDIR "@pdfdir@"`
- `#define STDAIR_SAMPLE_DIR "@sampledir@"`

25.151.1 Define Documentation

25.151.1.1 `#define __AIRINV_PATHS_HPP__`

Definition at line 2 of file [airinv-paths.hpp.in](#).

25.151.1.2 `#define PACKAGE "@PACKAGE@"`

Definition at line 4 of file [airinv-paths.hpp.in](#).

25.151.1.3 `#define PACKAGE_NAME "@PACKAGE_NAME@"`

Definition at line 5 of file [airinv-paths.hpp.in](#).

25.151.1.4 `#define PACKAGE_VERSION "@PACKAGE_VERSION@"`

Definition at line 6 of file [airinv-paths.hpp.in](#).

25.151.1.5 `#define PREFIXDIR "@prefix@"`

Definition at line 7 of file [airinv-paths.hpp.in](#).

25.151.1.6 `#define EXEC_PREFIX "@exec_prefix@"`

Definition at line 8 of file [airinv-paths.hpp.in](#).

25.151.1.7 `#define BINDIR "@bindir@"`

Definition at line 9 of file [airinv-paths.hpp.in](#).

25.151.1.8 `#define LIBDIR "@libdir@"`

Definition at line 10 of file [airinv-paths.hpp.in](#).

25.151.1.9 `#define LIBEXECDIR "@libexecdir@"`

Definition at line 11 of file [airinv-paths.hpp.in](#).

25.151.1.10 `#define SBINDIR "@sbindir@"`

Definition at line 12 of file [airinv-paths.hpp.in](#).

25.151.1.11 `#define SYSCONFDIR "@sysconfdir@"`

Definition at line 13 of file [airinv-paths.hpp.in](#).

25.151.1.12 `#define INCLUDEDIR "@includedir@"`

Definition at line 14 of file [airinv-paths.hpp.in](#).

25.151.1.13 `#define DATAROOTDIR "@datarootdir@"`

Definition at line 15 of file [airinv-paths.hpp.in](#).

25.151.1.14 `#define DATADIR "@datadir@"`

Definition at line 16 of file [airinv-paths.hpp.in](#).

25.151.1.15 `#define DOCDIR "@docdir@"`

Definition at line 17 of file [airinv-paths.hpp.in](#).

25.151.1.16 `#define MANDIR "@mandir@"`

Definition at line 18 of file [airinv-paths.hpp.in](#).

25.151.1.17 `#define INFODIR "@infodir@"`

Definition at line 19 of file [airinv-paths.hpp.in](#).

25.151.1.18 `#define HTMLDIR "@htmldir@"`

Definition at line 20 of file [airinv-paths.hpp.in](#).

25.151.1.19 `#define PDFDIR "@pdfdir@"`

Definition at line 21 of file [airinv-paths.hpp.in](#).

25.151.1.20 `#define STDAIR_SAMPLE_DIR "@sampledir@"`

Definition at line 22 of file [airinv-paths.hpp.in](#).

25.152 airinv-paths.hpp.in

```
00001 #ifndef __AIRINV_PATHS_HPP__
00002 #define __AIRINV_PATHS_HPP__
00003
00004 #define PACKAGE "@PACKAGE@"
00005 #define PACKAGE_NAME "@PACKAGE_NAME@"
00006 #define PACKAGE_VERSION "@PACKAGE_VERSION@"
00007 #define PREFIXDIR "@prefix@"
00008 #define EXEC_PREFIX "@exec_prefix@"
00009 #define BINDIR "@bindir@"
00010 #define LIBDIR "@libdir@"
00011 #define LIBEXECDIR "@libexecdir@"
00012 #define SBINDIR "@sbindir@"
00013 #define SYSCONFDIR "@sysconfdir@"
00014 #define INCLUDEDIR "@includedir@"
00015 #define DATAROOTDIR "@datarootdir@"
00016 #define DATADIR "@datadir@"
00017 #define DOCDIR "@docdir@"
00018 #define MANDIR "@mandir@"
00019 #define INFODIR "@infodir@"
00020 #define HTMLDIR "@htmldir@"
00021 #define PDFDIR "@pdfdir@"
00022 #define STDAIR_SAMPLE_DIR "@sampledir@"
00023
00024 #endif // __AIRINV_PATHS_HPP__
```

25.153 airinv/factory/FacAirinvMasterServiceContext.cpp File Reference

```
#include <cassert> #include <stdair/service/FacSupervisor.-
hpp>      #include <airinv/factory/FacAirinvMasterService-
Context.hpp>      #include <airinv/service/AIRINV_Master_-
ServiceContext.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.154 FacAirinvMasterServiceContext.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // AirInv
00009 #include <airinv/factory/FacAirinvMasterServiceContext.hpp>
00010 #include <airinv/service/AIRINV_Master_ServiceContext.hpp>
00011
00012 namespace AIRINV {
00013
00014     FacAirinvMasterServiceContext* FacAirinvMasterServiceContext::_instance =
        NULL;
```

```

00015
00016 // //////////////////////////////////////
00017 FacAirinvMasterServiceContext::~FacAirinvMasterServiceContext() {
00018     _instance = NULL;
00019 }
00020
00021 // //////////////////////////////////////
00022 FacAirinvMasterServiceContext& FacAirinvMasterServiceContext::instance() {
00023
00024     if (_instance == NULL) {
00025         _instance = new FacAirinvMasterServiceContext();
00026         assert (_instance != NULL);
00027
00028         stdair::FacSupervisor::instance().registerServiceFactory (_instance);
00029     }
00030     return *_instance;
00031 }
00032
00033 // //////////////////////////////////////
00034 AIRINV_Master_ServiceContext& FacAirinvMasterServiceContext::create() {
00035     AIRINV_Master_ServiceContext* aAIRINV_Master_ServiceContext_ptr = NULL;
00036
00037     aAIRINV_Master_ServiceContext_ptr = new AIRINV_Master_ServiceContext();
00038     assert (aAIRINV_Master_ServiceContext_ptr != NULL);
00039
00040     // The new object is added to the Bom pool
00041     _pool.push_back (aAIRINV_Master_ServiceContext_ptr);
00042
00043     return *aAIRINV_Master_ServiceContext_ptr;
00044 }
00045
00046 }

```

25.155 airinv/factory/FacAirinvMasterServiceContext.hpp File Reference

```

#include <string>      #include <stdair/service/FacService-
Abstract.hpp>

```

Classes

- class [AIRINV::FacAirinvMasterServiceContext](#)
Factory for Bucket.

Namespaces

- namespace [AIRINV](#)

25.156 FacAirinvMasterServiceContext.hpp

```

00001 #ifndef __AIRINV_FAC_FACAIRINVMASERSERVICECONTEXT_HPP
00002 #define __AIRINV_FAC_FACAIRINVMASERSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/service/FacServiceAbstract.hpp>
00011

```

```

00012 namespace AIRINV {
00013
00015     class AIRINV_Master_ServiceContext;
00016
00020     class FacAirinvMasterServiceContext : public stdair::FacServiceAbstract {
00021     public:
00022
00026         static FacAirinvMasterServiceContext& instance();
00027
00032         ~FacAirinvMasterServiceContext();
00033
00037         AIRINV_Master_ServiceContext& create();
00038
00039
00040     protected:
00044         FacAirinvMasterServiceContext() {}
00045
00046     private:
00048         static FacAirinvMasterServiceContext* _instance;
00049     };
00050
00051 }
00052 #endif // __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP

```

25.157 airinv/factory/FacAirinvServiceContext.cpp File Reference

```

#include <cassert> #include <stdair/service/FacSupervisor.-
hpp> #include <airinv/factory/FacAirinvServiceContext.-
hpp> #include <airinv/service/AIRINV_ServiceContext.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

25.158 FacAirinvServiceContext.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // AirInv
00009 #include <airinv/factory/FacAirinvServiceContext.hpp>
00010 #include <airinv/service/AIRINV_ServiceContext.hpp>
00011
00012 namespace AIRINV {
00013
00014     FacAirinvServiceContext* FacAirinvServiceContext::_instance = NULL;
00015
00016     // //////////////////////////////////////
00017     FacAirinvServiceContext::~FacAirinvServiceContext() {
00018         _instance = NULL;
00019     }
00020
00021     // //////////////////////////////////////
00022     FacAirinvServiceContext& FacAirinvServiceContext::instance() {
00023
00024         if (_instance == NULL) {
00025             _instance = new FacAirinvServiceContext();
00026             assert (_instance != NULL);

```



```

00027
00028         stdair::FacSupervisor::instance().registerServiceFactory (_instance);
00029     }
00030     return *_instance;
00031 }
00032
00033 // //////////////////////////////////////
00034 AIRINV_ServiceContext& FacAirinvServiceContext::create() {
00035     AIRINV_ServiceContext* aAIRINV_ServiceContext_ptr = NULL;
00036
00037     aAIRINV_ServiceContext_ptr = new AIRINV_ServiceContext();
00038     assert (aAIRINV_ServiceContext_ptr != NULL);
00039
00040     // The new object is added to the Bom pool
00041     _pool.push_back (aAIRINV_ServiceContext_ptr);
00042
00043     return *aAIRINV_ServiceContext_ptr;
00044 }
00045
00046 }

```

25.159 airinv/factory/FacAirinvServiceContext.hpp File Reference

```

#include <string>      #include <stdair/service/FacService-
Abstract.hpp>

```

Classes

- class [AIRINV::FacAirinvServiceContext](#)

Namespaces

- namespace [AIRINV](#)

25.160 FacAirinvServiceContext.hpp

```

00001 #ifndef __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
00002 #define __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/service/FacServiceAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     class AIRINV_ServiceContext;
00015
00016     class FacAirinvServiceContext : public stdair::FacServiceAbstract {
00017     public:
00018
00019         static FacAirinvServiceContext& instance();
00020
00021         ~FacAirinvServiceContext();
00022
00023         AIRINV_ServiceContext& create();
00024
00025     };
00026
00027 }

```

```

00038     protected:
00042         FacAirinvServiceContext() {}
00043
00044     private:
00046         static FacAirinvServiceContext* _instance;
00047     };
00048
00049 }
00050 #endif // __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP

```

25.161 airinv/factory/FacBomAbstract.cpp File Reference

```

#include <cassert> #include <sstream> #include <boost/functional/hash/hash.-
hpp> #include <airinv/bom/BomAbstract.hpp> #include <airinv/factory/-
FacBomAbstract.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.162 FacBomAbstract.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Boost (STL Extension)
00008 #include <boost/functional/hash/hash.hpp>
00009 // Airinv
00010 #include <airinv/bom/BomAbstract.hpp>
00011 #include <airinv/factory/FacBomAbstract.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 FacBomAbstract::~FacBomAbstract() {
00017     clean ();
00018 }
00019
00020 // //////////////////////////////////////
00021 void FacBomAbstract::clean() {
00022     for (BomPool_T::iterator itBom = _pool.begin();
00023          itBom != _pool.end(); itBom++) {
00024         BomAbstract* currentBom_ptr = *itBom;
00025         assert (currentBom_ptr != NULL);
00026
00027         delete (currentBom_ptr); currentBom_ptr = NULL;
00028     }
00029
00030     // Empty the pool of Factories
00031     _pool.clear();
00032 }
00033
00034 // //////////////////////////////////////
00035 std::size_t FacBomAbstract::getID (const BomAbstract* iBomAbstract_ptr) {
00036     const void* lPtr = iBomAbstract_ptr;
00037     boost::hash<const void*> ptr_hash;
00038     const std::size_t lID = ptr_hash (lPtr);
00039     return lID;
00040 }
00041
00042 // //////////////////////////////////////

```

```

00043     std::size_t FacBomAbstract::getID (const BomAbstract& iBomAbstract) {
00044         return getID (&iBomAbstract);
00045     }
00046
00047     // //////////////////////////////////////
00048     std::string FacBomAbstract::getIDString(const BomAbstract* iBomAbstract_ptr)
00049     {
00049         const std::size_t lID = getID (iBomAbstract_ptr);
00050         std::ostringstream oStr;
00051         oStr << lID;
00052         return oStr.str();
00053     }
00054
00055     // //////////////////////////////////////
00056     std::string FacBomAbstract::getIDString (const BomAbstract& iBomAbstract) {
00057         return getIDString (&iBomAbstract);
00058     }
00059
00060 }

```

25.163 airinv/factory/FacBomAbstract.hpp File Reference

```
#include <string> #include <vector>
```

Classes

- class [AIRINV::FacBomAbstract](#)

Namespaces

- namespace [AIRINV](#)

25.164 FacBomAbstract.hpp

```

00001 #ifndef __AIRINV_FAC_FACBOMABSTRACT_HPP
00002 #define __AIRINV_FAC_FACBOMABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010
00011 namespace AIRINV {
00012
00013     // Forward declarations
00014     class BomAbstract;
00015
00016     class FacBomAbstract {
00017     friend class FacSupervisor;
00018     public:
00019
00020
00022         typedef std::vector<BomAbstract*> BomPool_T;
00023
00025         static std::size_t getID (const BomAbstract*);
00026
00028         static std::size_t getID (const BomAbstract&);
00029
00032         static std::string getIDString (const BomAbstract*);
00033
00036         static std::string getIDString (const BomAbstract&);

```

```

00037
00038     protected:
00041         FacBomAbstract() {}
00042         FacBomAbstract(const FacBomAbstract&) {}
00043
00044     virtual ~FacBomAbstract();
00045
00046     private:
00047         void clean();
00048
00049     protected:
00051         BomPool_T _pool;
00052     };
00053 }
00054 #endif // __AIRINV_FAC_FACBOMABSTRACT_HPP

```

25.165 airinv/factory/FacServiceAbstract.cpp File Reference

```

#include <cassert>          #include <airinv/service/Service-
Abstract.hpp> #include <airinv/factory/FacServiceAbstract.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

25.166 FacServiceAbstract.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AIRINV
00007 #include <airinv/service/ServiceAbstract.hpp>
00008 #include <airinv/factory/FacServiceAbstract.hpp>
00009
00010 namespace AIRINV {
00011
00012 // //////////////////////////////////////
00013 FacServiceAbstract::~FacServiceAbstract() {
00014     clean ();
00015 }
00016
00017 // //////////////////////////////////////
00018 void FacServiceAbstract::clean() {
00019     for (ServicePool_T::iterator itService = _pool.begin();
00020          itService != _pool.end(); itService++) {
00021         ServiceAbstract* currentService_ptr = *itService;
00022         assert (currentService_ptr != NULL);
00023
00024         delete (currentService_ptr); currentService_ptr = NULL;
00025     }
00026
00027     // Empty the pool of Service Factories
00028     _pool.clear();
00029 }
00030
00031 }

```

25.167 airinv/factory/FacServiceAbstract.hpp File Reference

```
#include <vector>
```

Classes

- class [AIRINV::FacServiceAbstract](#)

Namespaces

- namespace [AIRINV](#)

25.168 FacServiceAbstract.hpp

```
00001 #ifndef __AIRINV_FAC_FACSERVICEABSTRACT_HPP
00002 #define __AIRINV_FAC_FACSERVICEABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <vector>
00009
00010 namespace AIRINV {
00011
00012 // Forward declarations
00013 class ServiceAbstract;
00014
00016 class FacServiceAbstract {
00017 public:
00018
00020     typedef std::vector<ServiceAbstract*> ServicePool_T;
00021
00023     virtual ~FacServiceAbstract();
00024
00026     void clean();
00027
00028 protected:
00031     FacServiceAbstract() {}
00032
00034     ServicePool_T _pool;
00035 };
00036
00037 }
00038 #endif // __AIRINV_FAC_FACSERVICEABSTRACT_HPP
```

25.169 airinv/factory/FacSupervisor.cpp File Reference

```
#include <cassert> #include <airinv/factory/FacBomAbstract.-
hpp> #include <airinv/factory/FacServiceAbstract.hpp> ×
#include <airinv/factory/FacSupervisor.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.170 FacSupervisor.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AIRINV
00007 #include <airinv/factory/FacBomAbstract.hpp>
00008 #include <airinv/factory/FacServiceAbstract.hpp>
00009 #include <airinv/factory/FacSupervisor.hpp>
00010
00011 namespace AIRINV {
00012
00013     FacSupervisor* FacSupervisor::_instance = NULL;
00014
00015     // //////////////////////////////////////
00016     FacSupervisor::FacSupervisor () {
00017     }
00018
00019     // //////////////////////////////////////
00020     FacSupervisor& FacSupervisor::instance() {
00021         if (_instance == NULL) {
00022             _instance = new FacSupervisor();
00023         }
00024
00025         return *_instance;
00026     }
00027
00028     // //////////////////////////////////////
00029     void FacSupervisor::
00030     registerBomFactory (FacBomAbstract* ioFacBomAbstract_ptr) {
00031         _bomPool.push_back (ioFacBomAbstract_ptr);
00032     }
00033
00034     // //////////////////////////////////////
00035     void FacSupervisor::
00036     registerServiceFactory (FacServiceAbstract* ioFacServiceAbstract_ptr) {
00037         _svcPool.push_back (ioFacServiceAbstract_ptr);
00038     }
00039
00040     // //////////////////////////////////////
00041     FacSupervisor::~FacSupervisor() {
00042         cleanBomLayer();
00043         cleanServiceLayer();
00044     }
00045
00046     // //////////////////////////////////////
00047     void FacSupervisor::cleanBomLayer() {
00048         for (BomFactoryPool_T::const_iterator itFactory = _bomPool.begin();
00049             itFactory != _bomPool.end(); itFactory++) {
00050             const FacBomAbstract* currentFactory_ptr = *itFactory;
00051             assert (currentFactory_ptr != NULL);
00052
00053             delete (currentFactory_ptr); currentFactory_ptr = NULL;
00054         }
00055
00056         // Empty the pool of Bom Factories
00057         _bomPool.clear();
00058     }
00059
00060     // //////////////////////////////////////
00061     void FacSupervisor::cleanServiceLayer() {
00062         for (ServiceFactoryPool_T::const_iterator itFactory = _svcPool.begin();
00063             itFactory != _svcPool.end(); itFactory++) {
00064             const FacServiceAbstract* currentFactory_ptr = *itFactory;
00065             assert (currentFactory_ptr != NULL);
00066
00067             delete (currentFactory_ptr); currentFactory_ptr = NULL;
00068         }
00069
00070         // Empty the pool of Service Factories
00071         _svcPool.clear();

```

```

00072     }
00073
00074     // //////////////////////////////////////
00075     void FacSupervisor::cleanFactory () {
00076         if (_instance != NULL) {
00077             _instance->cleanBomLayer();
00078             _instance->cleanServiceLayer();
00079         }
00080         delete (_instance); _instance = NULL;
00081     }
00082
00083 }

```

25.171 airinv/factory/FacSupervisor.hpp File Reference

```
#include <vector>
```

Classes

- class [AIRINV::FacSupervisor](#)

Namespaces

- namespace [AIRINV](#)

25.172 FacSupervisor.hpp

```

00001 #ifndef __AIRINV_FAC_FACSUPERVISOR_HPP
00002 #define __AIRINV_FAC_FACSUPERVISOR_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <vector>
00009
00010 namespace AIRINV {
00011
00012     // Forward declarations
00013     class FacBomAbstract;
00014     class FacServiceAbstract;
00015
00016     class FacSupervisor {
00017     public:
00018
00019         typedef std::vector<FacBomAbstract*> BomFactoryPool_T;
00020         typedef std::vector<FacServiceAbstract*> ServiceFactoryPool_T;
00021
00022         static FacSupervisor& instance();
00023
00024         void registerBomFactory (FacBomAbstract*);
00025
00026         void registerServiceFactory (FacServiceAbstract*);
00027
00028         void cleanBomLayer();
00029
00030         void cleanServiceLayer();
00031
00032         static void cleanFactory ();
00033
00034         ~FacSupervisor();
00035
00036     };
00037
00038 }
00039
00040 #endif

```

```

00060
00061     protected:
00062         FacSupervisor ();
00063         FacSupervisor (const FacSupervisor&) {}
00064
00065     private:
00066         static FacSupervisor* _instance;
00067
00068         BomFactoryPool_T _bomPool;
00069
00070         ServiceFactoryPool_T _svcPool;
00071     };
00072 }
00073 #endif // __AIRINV_FAC_FAC_SUPERVISOR_HPP

```

25.173 airinv/FlightRequestStatus.hpp File Reference

```

#include <string> #include <stdair/basic/StructAbstract.-
hpp>

```

Classes

- struct [AIRINV::FlightRequestStatus](#)

Namespaces

- namespace [AIRINV](#)

25.174 FlightRequestStatus.hpp

```

00001 #ifndef __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
00002 #define __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FlightRequestStatus : public stdair::StructAbstract {
00015     public:
00016         typedef enum {
00017             OK = 0,
00018             NOT_FOUND,
00019             INTERNAL_ERROR,
00020             LAST_VALUE
00021         } EN_FlightRequestStatus;
00022
00023         static const std::string& getLabel (const EN_FlightRequestStatus&);
00024
00025         static const std::string& getCodeLabel (const EN_FlightRequestStatus&);
00026
00027         static std::string describeLabels();
00028
00029         EN_FlightRequestStatus getCode() const;
00030
00031     };
00032 }
00033
00034 #endif

```



```

00037     const std::string describe() const;
00038
00039
00040 public:
00041     FlightRequestStatus (const EN_FlightRequestStatus&);
00042     FlightRequestStatus (const std::string& iCode);
00043
00044
00045 private:
00046     static const std::string _labels[LAST_VALUE];
00047     static const std::string _codeLabels[LAST_VALUE];
00048
00049 private:
00050     // ////////// Attributes //////////
00051     EN_FlightRequestStatus _code;
00052 };
00053
00054 }
00055 #endif // __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP

```

25.175 airinv/server/AirInvClient.cpp File Reference

```
#include <string>    #include <iostream>    #include <zmq.-
hpp>
```

Functions

- `int main (int argc, char *argv[])`

25.175.1 Function Documentation

25.175.1.1 `int main (int argc, char * argv[])`

Definition at line 11 of file [AirInvClient.cpp](#).

25.176 AirInvClient.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <string>
00006 #include <iostream>
00007 // ZeroMQ
00008 #include <zmq.hpp>
00009
00010 // ////////////////////////////////////// M A I N //////////////////////////////////////
00011 int main (int argc, char* argv[]) {
00012     // Prepare our context and socket
00013     zmq::context_t context (1);
00014     zmq::socket_t socket (context, ZMQ_REQ);
00015
00016     std::cout << "Connecting to hello world server..." << std::endl;
00017     socket.connect ("tcp://localhost:5555");
00018
00019     // Do 10 requests, waiting each time for a response
00020     for (int request_nbr = 0; request_nbr != 10; request_nbr++) {
00021         zmq::message_t request (6);
00022         memcpy ((void *) request.data (), "Hello", 5);

```

```

00023     std::cout << "Sending Hello " << request_nbr << "..." << std::endl;
00024     socket.send (request);
00025
00026     // Get the reply.
00027     zmq::message_t reply;
00028     socket.recv (&reply);
00029     std::cout << "Received World " << request_nbr << std::endl;
00030 }
00031 return 0;
00032 }

```

25.177 airinv/server/AirInvClient_ASIO.cpp File Reference

```

#include <cassert> #include <iostream> #include <string> ×
#include <boost/asio.hpp> #include <boost/array.hpp>

```

Functions

- `int main (int argc, char *argv[])`

25.177.1 Function Documentation

25.177.1.1 `int main (int argc, char * argv[])`

Definition at line 14 of file [AirInvClient_ASIO.cpp](#).

25.178 AirInvClient_ASIO.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <iostream>
00007 #include <string>
00008 // Boost.ASIO
00009 #include <boost/asio.hpp>
00010 // Boost.Array
00011 #include <boost/array.hpp>
00012
00013 // //////////// M A I N ////////////
00014 int main (int argc, char* argv[]) {
00015
00016     // Host name
00017     std::string lHostname = "localhost";
00018
00019     // Service name (as specified within /etc/services)
00020     // The "aria" service corresponds to the port 2624
00021     const std::string lServiceName = "aria";
00022
00023     try {
00024
00025         if (argc >= 2) {
00026             lHostname = argv[1];
00027         }
00028
00029         boost::asio::io_service lIOService;
00030
00031         boost::asio::ip::tcp::resolver lResolver (lIOService);
00032

```

```

00033     boost::asio::ip::tcp::resolver::query lQuery (lHostname, lServiceName);
00034
00035     boost::asio::ip::tcp::resolver::iterator itEndPoint =
00036         lResolver.resolve (lQuery);
00037     boost::asio::ip::tcp::resolver::iterator lEnd;
00038
00039     boost::asio::ip::tcp::socket lSocket (lIOService);
00040     boost::system::error_code lError = boost::asio::error::host_not_found;
00041
00042     //
00043     while (lError && itEndPoint != lEnd) {
00044         const boost::asio::ip::tcp::endpoint lEndPoint = *itEndPoint;
00045
00046         // DEBUG
00047         std::cout << "Testing end point: " << std::endl;
00048
00049         lSocket.close();
00050         lSocket.connect (lEndPoint, lError);
00051         ++itEndPoint;
00052     }
00053
00054     //
00055     if (lError) {
00056         throw boost::system::system_error (lError);
00057     }
00058     assert (!lError);
00059
00060     // DEBUG
00061     const boost::asio::ip::tcp::endpoint lValidEndPoint;
00062     std::cout << "Valid end point: " << lValidEndPoint << std::endl;
00063
00064     // Send a message to the server
00065     const std::string lMessage ("Hello AirInv Server!");
00066     boost::asio::write (lSocket, boost::asio::buffer (lMessage),
00067         boost::asio::transfer_all(), lError);
00068
00069     // Read the reply from the server
00070     boost::array<char, 256> lBuffer;
00071
00072     size_t lLength = lSocket.read_some (boost::asio::buffer(lBuffer), lError);
00073
00074     // Some other error than connection closed cleanly by peer
00075     if (lError && lError != boost::asio::error::eof) {
00076         throw boost::system::system_error (lError);
00077     }
00078
00079     // DEBUG
00080     std::cout << "Reply from the server: ";
00081     std::cout.write (lBuffer.data(), lLength);
00082     std::cout << std::endl;
00083
00084 } catch (std::exception& lException) {
00085     std::cerr << lException.what() << std::endl;
00086 }
00087
00088 return 0;
00089 }

```

25.179 airinv/server/AirInvServer.cpp File Reference

25.180 AirInvServer.cpp

```

00001
00005 // //////////////////////////////////////
00006 // Import section
00007 // //////////////////////////////////////
00008 // STL
00009 #include <cassert>
00010 #include <sstream>
00011 #include <fstream>

```

```

00012 #include <string>
00013 #include <unistd.h>
00014 // Boost (Extended STL)
00015 #include <boost/program_options.hpp>
00016 #include <boost/tokenizer.hpp>
00017 // ZeroMQ
00018 #include <zmq.hpp>
00019 // StdAir
00020 #include <stdair/basic/BasLogParams.hpp>
00021 #include <stdair/basic/BasDBParams.hpp>
00022 #include <stdair/bom/BomJSONImport.hpp>
00023 #include <stdair/bom/BomJSONExport.hpp>
00024 #include <stdair/service/Logger.hpp>
00025 // AirInvServer
00026 #include <airinv/config/airinv-paths.hpp>
00027 #include <airinv/AIRINV_Master_Service.hpp>
00028
00029 // ////////// Type definitions //////////
00030 typedef unsigned int ServerPort_T;
00031
00032 // ////////// Constants //////////
00033 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinvServer.log");
00034
00035 const std::string K_AIRINV_DEFAULT_SERVER_PROTOCOL ("tcp://");
00036
00037 const std::string K_AIRINV_DEFAULT_SERVER_ADDRESS ("*");
00038
00039 const ServerPort_T K_AIRINV_DEFAULT_SERVER_PORT (5555);
00040
00041 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00042                                                         "/invdump01.csv");
00043 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00044                                                         "/schedule01.csv");
00045 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00046                                                    "/ond01.csv");
00047 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00048                                                      "/yield01.csv");
00049
00050 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00051
00052 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00053
00054 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00055
00056 struct Command_T {
00057     typedef enum {
00058         NOP = 0,
00059         QUIT,
00060         DISPLAY,
00061         SELL,
00062         LAST_VALUE
00063     } Type_T;
00064 };
00065
00066 // ////////// Parsing of Options & Configuration //////////
00067 // A helper function to simplify the main part.
00068 template<class T> std::ostream& operator<< (std::ostream& os,
00069                                           const std::vector<T>& v) {
00070     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00071     return os;
00072 }
00073
00074 int readConfiguration (int argc, char* argv[], std::string& ioServerProtocol,
00075                       std::string& ioServerAddress, ServerPort_T& ioServerPort,
00076                       bool& ioIsBuiltin, bool& ioIsForSchedule,
00077                       stdair::Filename_T& ioInventoryFilename,
00078                       stdair::Filename_T& ioScheduleInputFilename,
00079                       stdair::Filename_T& ioODInputFilename,
00080                       stdair::Filename_T& ioYieldInputFilename,
00081                       std::string& ioLogFilename) {
00082     // Default for the built-in input
00083     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;

```

```

00108
00109 // Default for the inventory or schedule option
00110 ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00111
00112 // Declare a group of options that will be allowed only on command line
00113 boost::program_options::options_description generic ("Generic options");
00114 generic.add_options()
00115     ("prefix", "print installation prefix")
00116     ("version,v", "print version string")
00117     ("help,h", "produce help message");
00118
00119 // Declare a group of options that will be allowed both on command
00120 // line and in config file
00121
00122 boost::program_options::options_description config ("Configuration");
00123 config.add_options()
00124     ("builtin,b",
00125      "The sample BOM tree can be either built-in or parsed from an input file.
00126      That latter must then be given with the -i/--inventory or -s/--schedule option")
00127     ("for_schedule,f",
00128      "The BOM tree should be built from a schedule file (instead of from an
00129      inventory dump)")
00130     ("inventory,i",
00131      boost::program_options::value< std::string >(&ioInventoryFilename)->
00132      default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00133      "(CVS) input file for the inventory")
00134     ("schedule,s",
00135      boost::program_options::value< std::string >(&ioScheduleInputFilename)->
00136      default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00137      "(CVS) input file for the schedule")
00138     ("ond,o",
00139      boost::program_options::value< std::string >(&ioODInputFilename)->
00140      default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00141      "(CVS) input file for the O&D")
00142     ("yield,y",
00143      boost::program_options::value< std::string >(&ioYieldInputFilename)->
00144      default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00145      "(CVS) input file for the yield")
00146     ("protocol,t",
00147      boost::program_options::value< std::string >(&ioServerProtocol)->
00148      default_value(K_AIRINV_DEFAULT_SERVER_PROTOCOL),
00149      "Server protocol")
00150     ("address,a",
00151      boost::program_options::value< std::string >(&ioServerAddress)->
00152      default_value(K_AIRINV_DEFAULT_SERVER_ADDRESS),
00153      "Server address")
00154     ("port,p",
00155      boost::program_options::value< ServerPort_T >(&ioServerPort)->
00156      default_value(K_AIRINV_DEFAULT_SERVER_PORT),
00157      "Server port")
00158     ("log,l",
00159      boost::program_options::value< std::string >(&ioLogFilename)->
00160      default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00161      "Filename for the output logs")
00162     ;
00163
00164 // Hidden options, will be allowed both on command line and
00165 // in config file, but will not be shown to the user.
00166 boost::program_options::options_description hidden ("Hidden options");
00167 hidden.add_options()
00168     ("copyright",
00169      boost::program_options::value< std::vector<std::string> >(),
00170      "Show the copyright (license)");
00171
00172 boost::program_options::options_description cmdline_options;
00173 cmdline_options.add(generic).add(config).add(hidden);
00174
00175 boost::program_options::options_description config_file_options;
00176 config_file_options.add(config).add(hidden);
00177 boost::program_options::options_description visible ("Allowed options");
00178 visible.add(generic).add(config);
00179
00180 boost::program_options::positional_options_description p;
00181 p.add ("copyright", -1);

```

```

00172
00173 boost::program_options::variables_map vm;
00174 boost::program_options::
00175     store (boost::program_options::command_line_parser (argc, argv).
00176             options (cmdline_options).positional(p).run(), vm);
00177
00178 std::ifstream ifs ("airinvServer.cfg");
00179 boost::program_options::store (parse_config_file (ifs, config_file_options),
00180                                vm);
00181 boost::program_options::notify (vm);
00182
00183 if (vm.count ("help")) {
00184     std::cout << visible << std::endl;
00185     return K_AIRINV_EARLY_RETURN_STATUS;
00186 }
00187
00188 if (vm.count ("version")) {
00189     std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00190     return K_AIRINV_EARLY_RETURN_STATUS;
00191 }
00192
00193 if (vm.count ("prefix")) {
00194     std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00195     return K_AIRINV_EARLY_RETURN_STATUS;
00196 }
00197
00198 if (vm.count ("protocol")) {
00199     ioServerProtocol = vm["protocol"].as< std::string >();
00200     std::cout << "Server protocol is: " << ioServerProtocol << std::endl;
00201 }
00202
00203 if (vm.count ("address")) {
00204     ioServerAddress = vm["address"].as< std::string >();
00205     std::cout << "Server address is: " << ioServerAddress << std::endl;
00206 }
00207
00208 if (vm.count ("port")) {
00209     ioServerPort = vm["port"].as< ServerPort_T >();
00210     std::cout << "Server port is: " << ioServerPort << std::endl;
00211 }
00212
00213 if (vm.count ("builtin")) {
00214     ioIsBuiltin = true;
00215 }
00216 const std::string isBuiltinStr = (ioIsBuiltin == true)? "yes": "no";
00217 std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00218
00219 if (vm.count ("for_schedule")) {
00220     ioIsForSchedule = true;
00221 }
00222 const std::string isForScheduleStr = (ioIsForSchedule == true)? "yes": "no";
00223 std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00224           << std::endl;
00225
00226 if (ioIsBuiltin == false) {
00227
00228     if (ioIsForSchedule == false) {
00229         // The BOM tree should be built from parsing an inventory dump
00230         if (vm.count ("inventory")) {
00231             ioInventoryFilename = vm["inventory"].as< std::string >();
00232             std::cout << "Input inventory filename is: " << ioInventoryFilename
00233                     << std::endl;
00234         }
00235     } else {
00236         // The built-in option is not selected. However, no inventory dump
00237         // file is specified
00238         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00239                 << " -f/--for_schedule and -s/--schedule options "
00240                 << "must be specified" << std::endl;
00241     }
00242 } else {
00243     // The BOM tree should be built from parsing a schedule (and O&D) file
00244     if (vm.count ("schedule")) {
00245

```

```

00246         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00247         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00248             << std::endl;
00249
00250     } else {
00251         // The built-in option is not selected. However, no schedule file
00252         // is specified
00253         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00254             << " -f/--for_schedule and -s/--schedule options "
00255             << "must be specified" << std::endl;
00256     }
00257
00258     if (vm.count ("ond")) {
00259         ioODInputFilename = vm["ond"].as< std::string >();
00260         std::cout << "Input O&D filename is: " << ioODInputFilename << std
::endl;
00261     }
00262
00263     if (vm.count ("yield")) {
00264         ioYieldInputFilename = vm["yield"].as< std::string >();
00265         std::cout << "Input yield filename is: " << ioYieldInputFilename << std
::endl;
00266     }
00267 }
00268 }
00269
00270 if (vm.count ("log")) {
00271     ioLogFilename = vm["log"].as< std::string >();
00272     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00273 }
00274
00275 return 0;
00276 }
00277
00278
00279 // //////////// Utility functions on top of the ZeroMQ library ////////////
00280 static std::string s_recv (zmq::socket_t& socket) {
00281     zmq::message_t message;
00282     socket.recv (&message);
00283
00284     return std::string (static_cast<char*> (message.data()), message.size());
00285 }
00286
00287 static bool s_send (zmq::socket_t& socket, const std::string& string) {
00288     zmq::message_t message (string.size());
00289     memcpy (message.data(), string.data(), string.size());
00290
00291     bool rc = socket.send (message);
00292     return rc;
00293 }
00294
00295
00296
00297
00298
00299
00300
00301
00302 // //////////// M A I N ////////////
00303 int main (int argc, char* argv[]) {
00304
00305     // Server parameters (for ZeroMQ)
00306     std::string ioServerProtocol;
00307     std::string ioServerAddress;
00308     ServerPort_T ioServerPort;
00309
00310     // State whether the BOM tree should be built-in or parsed from an
00311     // input file
00312     bool isBuiltin;
00313     bool isForSchedule;
00314
00315     // Input file names
00316     stdair::Filename_T lInventoryFilename;
00317     stdair::Filename_T lScheduleInputFilename;
00318     stdair::Filename_T lODInputFilename;
00319     stdair::Filename_T lYieldInputFilename;
00320
00321     // Output log File
00322     stdair::Filename_T lLogFilename;
00323

```

```

00324 // Call the command-line option parser
00325 const int lOptionParserStatus =
00326     readConfiguration (argc, argv, ioServerProtocol, ioServerAddress,
00327         ioServerPort, isBuiltin, isForSchedule,
00328         lInventoryFilename, lScheduleInputFilename,
00329         lODInputFilename, lYieldInputFilename, lLogFilename);
00330
00331 if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00332     return 0;
00333 }
00334
00335 // Set the log parameters
00336 std::ofstream logOutputFile;
00337 // Open and clean the log outputfile
00338 logOutputFile.open (lLogFilename.c_str());
00339 logOutputFile.clear();
00340
00341 // Initialise the inventory service
00342 const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00343 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00344
00345 // DEBUG
00346 STDAIR_LOG_DEBUG ("Initialisation of the AirInv server");
00347
00348 // Check whether or not a (CSV) input file should be read
00349 if (isBuiltin == true) {
00350
00351     // Build the sample BOM tree for RMOL
00352     airinvService.buildSampleBom();
00353
00354 } else {
00355     if (isForSchedule == true) {
00356         // Build the BOM tree from parsing a schedule file (and O&D list)
00357         AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00358         airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00359             lYieldFilePath);
00360
00361     } else {
00362         // Build the BOM tree from parsing an inventory dump file
00363         airinvService.parseAndLoad (lInventoryFilename);
00364     }
00365 }
00366
00367 // Build the connection string (e.g., "tcp://*:5555", which is the default)
00368 std::ostringstream oZeroMQBindStream;
00369 oZeroMQBindStream << ioServerProtocol << ioServerAddress
00370     << ":" << ioServerPort;
00371 const std::string lZeroMQBindString (oZeroMQBindStream.str());
00372
00373 // Prepare the context and socket of the server
00374 zmq::context_t context (1);
00375 zmq::socket_t socket (context, ZMQ_REP);
00376 socket.bind (lZeroMQBindString.c_str());
00377
00378 // DEBUG
00379 STDAIR_LOG_DEBUG ("The AirInv server is ready to receive requests...");
00380
00381 while (true) {
00382
00383     // Wait for next request from client, which is expected to give
00384     // the JSON-ified details of the requested flight-date
00385     const std::string& lFlightDateKeyJSONString = s_recv (socket);
00386
00387     // DEBUG
00388     STDAIR_LOG_DEBUG ("Received: '" << lFlightDateKeyJSONString << "'");
00389
00390     // Extract, from the JSON-ified string an airline code
00391     stdair::AirlineCode_T lAirlineCode;
00392     stdair::BomJSONImport::jsonImportInventoryKey (lFlightDateKeyJSONString,
00393         lAirlineCode);
00394
00395     // Extract, from the JSON-ified string a flight number and a departure date
00396     stdair::FlightNumber_T lFlightNumber;
00397     stdair::Date_T lDate;

```



```

00398     stdair::BomJSONImport::jsonImportFlightDateKey (lFlightDateKeyJSONString,
00399                                                     lFlightNumber, lDate);
00400
00401     // DEBUG
00402     STDAIR_LOG_DEBUG ("=> airline code = '" << lAirlineCode
00403                     << "', flight number = '" << lFlightNumber
00404                     << "', departure date = '" << lDate << "'");
00405
00406     // DEBUG: Display the flight-date dump
00407     const std::string& lFlightDateCSVDump =
00408         airinvService.csvDisplay (lAirlineCode, lFlightNumber, lDate);
00409     STDAIR_LOG_DEBUG (std::endl << lFlightDateCSVDump);
00410
00411     // Dump the full details of the flight-date into the JSON-ified flight-date
00412     const std::string& lFlightDateJSONDump =
00413         airinvService.jsonExport (lAirlineCode, lFlightNumber, lDate);
00414
00415     // DEBUG
00416     STDAIR_LOG_DEBUG ("Send: '" << lFlightDateJSONDump << "'");
00417
00418     // Send back the flight-date details to the client
00419     s_send (socket, lFlightDateJSONDump);
00420 }
00421
00422 return 0;
00423 }
00424

```

25.181 airinv/server/AirInvServer.hpp File Reference

```

#include <string> #include <vector> #include <boost/asio.-
hpp> #include <boost/noncopyable.hpp> #include <boost/shared-
_ptr.hpp> #include <stdair/stdair_basic_types.hpp> #include
<airinv/server/Connection.hpp> #include <airinv/server/-
RequestHandler.hpp>

```

Classes

- class [AIRINV::AirInvServer](#)

Namespaces

- namespace [AIRINV](#)

25.182 AirInvServer.hpp

```

00001 #ifndef __AIRINV_SVR_AIRINVSERVER_HPP
00002 #define __AIRINV_SVR_AIRINVSERVER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // Boost
00011 #include <boost/asio.hpp>
00012 #include <boost/noncopyable.hpp>
00013 #include <boost/shared_ptr.hpp>
00014 // StdAir

```

```

00015 #include <stdair/stdair_basic_types.hpp>
00016 // AirInv
00017 #include <airinv/server/Connection.hpp>
00018 #include <airinv/server/RequestHandler.hpp>
00019
00020 namespace AIRINV {
00021
00022     class AirInvServer : private boost::noncopyable {
00023     public:
00024         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00025         AirInvServer (const std::string& address, const std::string& port,
00026                     const stdair::AirlineCode_T& iAirlineCode,
00027                     std::size_t thread_pool_size);
00028         ~AirInvServer();
00029
00030     public:
00031         // ////////////////////////////////// Business Methods //////////////////////////////////
00032         void run();
00033         void stop();
00034
00035     private:
00036         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00037         AirInvServer();
00038         AirInvServer(const AirInvServer&);
00039
00040     private:
00041         // ////////////////////////////////// Attributes //////////////////////////////////
00042         void handleAccept (const boost::system::error_code& e);
00043
00044         std::size_t _threadPoolSize;
00045         boost::asio::io_service _ioService;
00046         boost::asio::ip::tcp::acceptor _acceptor;
00047         ConnectionShrPtr_T _newConnection;
00048         RequestHandler _requestHandler;
00049     };
00050 }
00051 #endif // __AIRINV_SVR_AIRINVSERVICES_HPP

```

25.183 airinv/server/AirInvServer_ASIO.cpp File Reference

```

#include <cassert> #include <boost/thread.hpp> #include
<boost/bind.hpp> #include <airinv/server/AirInvServer.-
hpp>

```

Namespaces

- namespace [AIRINV](#)

Typedefs

- typedef boost::shared_ptr < boost::thread > [AIRINV::ThreadShrPtr_T](#)
- typedef [std::vector](#) < ThreadShrPtr_T > [AIRINV::ThreadShrPtrList_T](#)

25.184 AirInvServer_ASIO.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/thread.hpp>
00008 #include <boost/bind.hpp>
00009 // AirInv
00010 #include <airinv/server/AirInvServer.hpp>
00011
00012 namespace AIRINV {
00013
00014 // Type definitions
00015 typedef boost::shared_ptr<boost::thread> ThreadShrPtr_T;
00016 typedef std::vector<ThreadShrPtr_T> ThreadShrPtrList_T;
00017
00018
00019 // //////////////////////////////////////
00020 AirInvServer::AirInvServer (const std::string& address,
00021                             const std::string& port,
00022                             const stdair::AirlineCode_T& iAirlineCode,
00023                             std::size_t iThreadPoolSize)
00024 : _threadPoolSize (iThreadPoolSize), _acceptor (_ioService),
00025   _newConnection (new Connection (_ioService, _requestHandler)),
00026   _requestHandler (iAirlineCode) {
00027
00028     // Open the acceptor with the option to reuse the address
00029     // (i.e. SO_REUSEADDR).
00030     boost::asio::ip::tcp::resolver resolver (_ioService);
00031     boost::asio::ip::tcp::resolver::query query (address, port);
00032     boost::asio::ip::tcp::endpoint endpoint = *resolver.resolve(query);
00033
00034     _acceptor.open (endpoint.protocol());
00035     _acceptor.set_option (boost::asio::ip::tcp::acceptor::reuse_address(true));
00036     _acceptor.bind (endpoint);
00037     _acceptor.listen();
00038
00039     assert (_newConnection != NULL);
00040     _acceptor.async_accept (_newConnection->socket(),
00041                           boost::bind (&AirInvServer::handleAccept, this,
00042                                         boost::asio::placeholders::error));
00043 }
00044
00045 // //////////////////////////////////////
00046 AirInvServer::~AirInvServer () {
00047 }
00048
00049 // //////////////////////////////////////
00050 void AirInvServer::run() {
00051     // Create a pool of threads to run all of the io_services.
00052     ThreadShrPtrList_T lThreadList;
00053
00054     for (std::size_t itThread = 0; itThread != _threadPoolSize; ++itThread) {
00055         ThreadShrPtr_T lThread (new boost::thread (boost::bind (&
00056 boost::asio::io_service::run,
00057                                                                 &_ioService)));
00057         lThreadList.push_back (lThread);
00058     }
00059
00060     // Wait for all threads in the pool to exit.
00061     for (std::size_t itThread = 0; itThread != lThreadList.size(); ++itThread)
00062     {
00063         boost::shared_ptr<boost::thread> lThread_ptr = lThreadList.at (itThread);
00064         assert (lThread_ptr != NULL);
00065         lThread_ptr->join();
00066     }
00067 }
00068
00069 // //////////////////////////////////////
00069 void AirInvServer::stop() {

```

```

00070     _ioService.stop();
00071 }
00072
00073 // //////////////////////////////////////
00074 void AirInvServer::handleAccept (const boost::system::error_code& iError) {
00075
00076     if (!iError) {
00077
00078         assert (_newConnection != NULL);
00079
00080         // The Connection object now takes in charge reading an incoming
00081         // message from the socket, and writing back a message.
00082         _newConnection->start();
00083
00084         // The (Boost) shared pointer is reset to a newly allocated Connection
00085         // object. As the older Connection object is no longer pointed to, it is
00086         // deleted by the shared pointer mechanism.
00087         _newConnection.reset (new Connection (_ioService, _requestHandler));
00088
00089         _acceptor.async_accept (_newConnection->socket (),
00090                                boost::bind (&AirInvServer::handleAccept, this,
00091                                              boost::asio::placeholders::error));
00092     }
00093 }
00094
00095 }

```

25.185 airinv/server/BomPropertyTree.cpp File Reference

```

#include <boost/property_tree/ptree.hpp> #include <boost/property-
_tree/json_parser.hpp> #include <boost/foreach.hpp> x
#include <airinv/server/BomPropertyTree.hpp>

```

Namespaces

- namespace `stdair`

Forward declarations.

25.186 BomPropertyTree.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // Boost Property Tree
00005 #include <boost/property_tree/ptree.hpp>
00006 #include <boost/property_tree/json_parser.hpp>
00007 // Boost ForEach
00008 #include <boost/foreach.hpp>
00009 // AirInvServer
00010 #include <airinv/server/BomPropertyTree.hpp>
00011
00012 namespace bpt = boost::property_tree;
00013
00014 namespace stdair {
00015
00016     // Loads BomPropertyTree structure from the specified JSON file
00017     void BomPropertyTree::load (const std::string& iBomTree) {
00018         // Create an empty property tree object
00019         bpt::ptree pt;
00020
00021         // Load the JSON formatted string into the property tree. If reading fails
00022         // (cannot open stream, parse error), an exception is thrown.
00023         std::istream iStr (iBomTree);

```

```

00024     read_json (iStr, pt);
00025
00026     // Get the airline_code and store it in the _airlineCode variable.
00027     // Note that we construct the path to the value by separating
00028     // the individual keys with dots. If dots appear in the keys,
00029     // a path type with a different separator can be used.
00030     // If the flight_date.airline_code key is not found, an exception is
00031     // thrown.
00032     _airlineCode = pt.get<stdair::AirlineCode_T> ("flight_date.airline_code");
00033
00034     // Get the departure_date and store it in the _departureDate variable.
00035     // This is another version of the get method: if the value is
00036     // not found, the default value (specified by the second
00037     // parameter) is returned instead. The type of the value
00038     // extracted is determined by the type of the second parameter,
00039     // so we can simply write get(...) instead of get<int>(...).
00040     _flightNumber =
00041         pt.get<stdair::FlightNumber_T> ("flight_date.flight_number", 100);
00042
00043     const std::string& lDepartureDateStr =
00044         pt.get<std::string> ("flight_date.departure_date");
00045     _departureDate = boost::gregorian::from_simple_string (lDepartureDateStr);
00046
00047     // Iterate over the flight_date.airport_codes section and store all found
00048     // codes in the _airportCodeList set. The get_child() function
00049     // returns a reference to the child at the specified path; if
00050     // there is no such child, it throws. Property tree iterators
00051     // are models of BidirectionalIterator.
00052     /*
00053     BOOST_FOREACH (bpt::ptree::value_type &v,
00054         pt.get_child ("flight_date.airport_codes")) {
00055         _airportCodeList.insert (v.second.data());
00056     }
00057     */
00058
00059     // Saves the BomPropertyTree structure to the specified JSON file
00060     std::string BomPropertyTree::save() const {
00061         std::ostream oStr;
00062
00063         // Create an empty property tree object
00064         bpt::ptree pt;
00065
00066         // Put airline code in property tree
00067         pt.put ("flight_date.airline_code", _airlineCode);
00068
00069         // Put flight number level in property tree
00070         pt.put ("flight_date.flight_number", _flightNumber);
00071
00072         // Put the flight departure date in property tree
00073         const std::string& lDepartureDateStr =
00074             boost::gregorian::to_simple_string (_departureDate);
00075         pt.put ("flight_date.departure_date", lDepartureDateStr);
00076
00077         // Iterate over the airport codes in the set and put them in the
00078         // property tree. Note that the put function places the new
00079         // key at the end of the list of keys. This is fine most of
00080         // the time. If you want to place an item at some other place
00081         // (i.e. at the front or somewhere in the middle), this can
00082         // be achieved using a combination of the insert and put_own
00083         // functions.
00084         bpt::ptree lAirportCodeArray;
00085         BOOST_FOREACH (const std::string& name, _airportCodeList) {
00086             lAirportCodeArray.push_back (std::pair<bpt::ptree::key_type,
00087                 bpt::ptree::data_type> ("", name))
00088         };
00089         pt.put_child ("flight_date.airport_codes", lAirportCodeArray);
00090         //pt.push_back (std::make_pair ("flight_date.airport_codes",
00091             lAirportCodeArray));
00092
00093         // Write the property tree to the JSON stream.
00094         write_json (oStr, pt);

```

```

00095     return oStr.str();
00096 }
00097
00098 }

```

25.187 airinv/server/BomPropertyTree.hpp File Reference

```

#include <string> #include <set> #include <stdair/stdair-
_basic_types.hpp> #include <stdair/stdair_date_time_
types.hpp>

```

Classes

- struct [stdair::BomPropertyTree](#)

Namespaces

- namespace [stdair](#)

Forward declarations.

25.188 BomPropertyTree.hpp

```

00001 #ifndef __AIRINV_SVR_BOMPROPERTYTREE_HPP
00002 #define __AIRINV_SVR_BOMPROPERTYTREE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <set>
00010 // StdAir
00011 #include <stdair/stdair_basic_types.hpp>
00012 #include <stdair/stdair_date_time_types.hpp>
00013
00014 namespace stdair {
00015
00019     struct BomPropertyTree {
00024         void load (const std::string& iBomTree);
00025
00029         std::string save() const;
00030
00031         // ////////////////////////////////// Attributes //////////////////////////////////
00033         stdair::AirlineCode_T _airlineCode;
00034
00036         stdair::FlightNumber_T _flightNumber;
00037
00039         stdair::Date_T _departureDate;
00040
00042         std::set<stdair::AirportCode_T> _airportCodeList;
00043     };
00044
00045 }
00046 #endif // __AIRINV_SVR_BOMPROPERTYTREE_HPP

```

25.189 airinv/server/Connection.cpp File Reference

```
#include <cassert> #include <vector> #include <boost/bind.-
hpp> #include <airinv/server/RequestHandler.hpp> #include
<airinv/server/Connection.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.190 Connection.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <vector>
00007 // Boost
00008 #include <boost/bind.hpp>
00009 // AirInv
00010 #include <airinv/server/RequestHandler.hpp>
00011 #include <airinv/server/Connection.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 Connection::Connection (boost::asio::io_service& ioService,
00017                        RequestHandler& ioHandler)
00018     : _strand (ioService), _socket (ioService), _requestHandler (ioHandler) {
00019 }
00020
00021 // //////////////////////////////////////
00022 boost::asio::ip::tcp::socket& Connection::socket () {
00023     return _socket;
00024 }
00025
00026 // //////////////////////////////////////
00027 void Connection::start () {
00028
00029     _socket.async_read_some (boost::asio::buffer (_buffer),
00030                             _strand.wrap (boost::bind (&Connection::handleRead
00031
00032
00033                                     shared_from_this(),
00034
00035                                     boost::asio::placeholders::error,
00036                                     boost::asio::placeholders::bytes_transferred)));
00037 }
00038
00039 // //////////////////////////////////////
00040 void Connection::handleRead (const boost::system::error_code& iErrorCode,
00041                             std::size_t bytes_transferred) {
00042     if (!iErrorCode) {
00043         _request._flightDetails = _buffer.data();
00044         const bool hasBeenSuccessfull = _requestHandler.handleRequest (_request,
00045                                     _reply);
00046         if (hasBeenSuccessfull == true) {
00047             boost::asio::async_write (_socket, _reply.to_buffers(),
00048                                     _strand.wrap (boost::bind (&
00049                                     Connection::handleWrite,
00050
00051                                     shared_from_this()
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```

        boost::asio::placeholders::error)));
00050
00051     } else {
00052
00053         boost::asio::async_write (_socket, _reply.to_buffers(),
00054                                   _strand.wrap (boost::bind (&
Connection::handleWrite,
00055                                                             shared_from_this())
,
00056 boost::asio::placeholders::error)));
00057     }
00058 }
00059 }
00060
00061 // If an error occurs then no new asynchronous operations are
00062 // started. This means that all shared_ptr references to the
00063 // connection object will disappear and the object will be
00064 // destroyed automatically after this handler returns. The
00065 // connection class's destructor closes the socket.
00066 }
00067
00068 // //////////////////////////////////////
00069 void Connection::handleWrite (const boost::system::error_code& iErrorCode) {
00070
00071     if (!iErrorCode) {
00072         // Initiate graceful connection closure.
00073         boost::system::error_code ignored_ec;
00074         _socket.shutdown (boost::asio::ip::tcp::socket::shutdown_both,
00075                           ignored_ec);
00076     }
00077
00078     // No new asynchronous operations are started. This means that all
00079     // shared_ptr references to the connection object will disappear
00080     // and the object will be destroyed automatically after this
00081     // handler returns. The connection class's destructor closes the
00082     // socket.
00083 }
00084
00085 }

```

25.191 airinv/server/Connection.hpp File Reference

```

#include <boost/asio.hpp>    #include <boost/array.hpp> ×
#include <boost/noncopyable.hpp> #include <boost/shared-
_ptr.hpp>    #include <boost/enable_shared_from_this.hpp>
#include <airinv/server/Reply.hpp> #include <airinv/server/-
Request.hpp>

```

Classes

- class [AIRINV::Connection](#)

Namespaces

- namespace [AIRINV](#)

Typedefs

- typedef boost::shared_ptr < Connection > [AIRINV::ConnectionShrPtr_T](#)

25.192 Connection.hpp

```

00001 #ifndef __AIRINV_SVR_CONNECTION_HPP
00002 #define __AIRINV_SVR_CONNECTION_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 // Boost
00009 #include <boost/asio.hpp>
00010 #include <boost/array.hpp>
00011 #include <boost/noncopyable.hpp>
00012 #include <boost/shared_ptr.hpp>
00013 #include <boost/enable_shared_from_this.hpp>
00014 // AirInv
00015 #include <airinv/server/Reply.hpp>
00016 #include <airinv/server/Request.hpp>
00017
00018 namespace AIRINV {
00019
00020 // Forward declarations.
00021 class RequestHandler;
00022
00023
00024 class Connection : public boost::enable_shared_from_this<Connection>,
00025                   private boost::noncopyable {
00026 public:
00027     // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00028     Connection (boost::asio::io_service&, RequestHandler&);
00029
00030     // ////////////////////////////////// Business Support Methods //////////////////////////////////
00031     boost::asio::ip::tcp::socket& socket();
00032
00033     void start();
00034
00035 private:
00036     void handleRead (const boost::system::error_code& e,
00037                     std::size_t bytes_transferred);
00038
00039     void handleWrite (const boost::system::error_code& e);
00040
00041     boost::asio::io_service::strand _strand;
00042
00043     boost::asio::ip::tcp::socket _socket;
00044
00045     RequestHandler& _requestHandler;
00046
00047     boost::array<char, 8192> _buffer;
00048
00049     Request _request;
00050
00051     Reply _reply;
00052 };
00053
00054 typedef boost::shared_ptr<Connection> ConnectionShrPtr_T;
00055
00056 }
00057 #endif // __AIRINV_SVR_CONNECTION_HPP

```

25.193 airinv/server/header.hpp File Reference

```
#include <string>
```

Classes

- struct [AIRINV::header](#)

Namespaces

- namespace [AIRINV](#)

25.194 header.hpp

```

00001 #ifndef __AIRINV_SVR_HEADER_HPP
00002 #define __AIRINV_SVR_HEADER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009
00010 namespace AIRINV {
00011
00012     struct header {
00013         std::string name;
00014         std::string value;
00015     };
00016
00017 }
00018
00019 #endif // __AIRINV_SVR_HEADER_HPP

```

25.195 airinv/server/posix_main.cpp File Reference

```

#include <iostream> #include <string> #include <boost/asio.-
hpp> #include <boost/thread.hpp> #include <boost/bind.-
hpp> #include <boost/lexical_cast.hpp> #include <airinv/server/-
AirInvServer.hpp> #include <pthread.h> #include <signal.-
h>

```

Functions

- int [main](#) (int argc, char *argv[])

25.195.1 Function Documentation

25.195.1.1 int main (int argc, char * argv[])

Definition at line 25 of file [posix_main.cpp](#).

References [AIRINV::AirInvServer::run\(\)](#).

25.196 posix_main.cpp

```

00001 //

```

```

00002 // posix_main.cpp
00003 // ~~~~~
00004 //
00005 // Copyright (c) 2003-2008 Christopher M. Kohlhoff (chris at kohlhoff dot com)
00006 //
00007 // Distributed under the Boost Software License, Version 1.0. (See accompanying
00008 // file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)
00009 //
00010
00011 #include <iostream>
00012 #include <string>
00013 #include <boost/asio.hpp>
00014 #include <boost/thread.hpp>
00015 #include <boost/bind.hpp>
00016 #include <boost/lexical_cast.hpp>
00017 #include <airinv/server/AirInvServer.hpp>
00018
00019 #if !defined(_WIN32)
00020
00021 #include <pthread.h>
00022 #include <signal.h>
00023
00024 // //////////// M A I N ////////////
00025 int main(int argc, char* argv[]) {
00026
00027     try {
00028
00029         // Check command line arguments.
00030         if (argc != 5) {
00031             std::cerr << "Usage: airinvServer <address> <port> <threads> <doc_root>"
00032                 << std::endl;
00033             std::cerr << "  For IPv4, try: " << std::endl;
00034             std::cerr << "    receiver 0.0.0.0 80 1 ." << std::endl;
00035             std::cerr << "  For IPv6, try: " << std::endl;
00036             std::cerr << "    receiver 0::0 80 1 ." << std::endl;
00037             return 1;
00038         }
00039
00040         // Block all signals for background thread.
00041         sigset_t new_mask;
00042         sigfillset (&new_mask);
00043         sigset_t old_mask;
00044         pthread_sigmask (SIG_BLOCK, &new_mask, &old_mask);
00045
00046         // Run server in background thread.
00047         std::size_t num_threads = boost::lexical_cast<std::size_t>(argv[3]);
00048         AIRINV::AirInvServer s (argv[1], argv[2], argv[4], num_threads);
00049         boost::thread t (boost::bind (&AIRINV::AirInvServer::run, &s));
00050
00051         // Restore previous signals.
00052         pthread_sigmask (SIG_SETMASK, &old_mask, 0);
00053
00054         // Wait for signal indicating time to shut down.
00055         sigset_t wait_mask;
00056         sigemptyset (&wait_mask);
00057         sigaddset (&wait_mask, SIGINT);
00058         sigaddset (&wait_mask, SIGQUIT);
00059         sigaddset (&wait_mask, SIGTERM);
00060         pthread_sigmask (SIG_BLOCK, &wait_mask, 0);
00061         int sig = 0;
00062         sigwait (&wait_mask, &sig);
00063
00064         // Stop the server.
00065         s.stop();
00066         t.join();
00067
00068     } catch (std::exception& e) {
00069         std::cerr << "exception: " << e.what() << "\n";
00070     }
00071
00072     return 0;
00073 }
00074
00075 #endif // !defined(_WIN32)

```

25.197 airinv/server/Reply.cpp File Reference

```
#include <cassert> #include <string> #include <boost/lexical-
_cast.hpp> #include <airinv/server/Reply.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.198 Reply.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 // Boost
00008 #include <boost/lexical_cast.hpp>
00009 // AirInv
00010 #include <airinv/server/Reply.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015     std::vector<boost::asio::const_buffer> Reply::to_buffers() {
00016         std::vector<boost::asio::const_buffer> lBuffers;
00017         lBuffers.push_back (boost::asio::buffer(content));
00018         return lBuffers;
00019     }
00020
00021 }
```

25.199 airinv/server/Reply.hpp File Reference

```
#include <string> #include <vector> #include <boost/asio.-
hpp> #include <airinv/FlightRequestStatus.hpp>
```

Classes

- struct [AIRINV::Reply](#)

Namespaces

- namespace [AIRINV](#)

25.200 Reply.hpp

```
00001 #ifndef __AIRINV_SVR_REPLY_HPP
00002 #define __AIRINV_SVR_REPLY_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
```

```

00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // Boost
00011 #include <boost/asio.hpp>
00012 // AirInv
00013 #include <airinv/FlightRequestStatus.hpp>
00014
00015 namespace AIRINV {
00016
00017     struct Reply {
00020         FlightRequestStatus::EN_FlightRequestStatus _status;
00021
00023         std::string content;
00024
00029         std::vector<boost::asio::const_buffer> to_buffers();
00030     };
00031
00032 }
00033 #endif // __AIRINV_SVR_REPLY_HPP

```

25.201 airinv/server/Request.cpp File Reference

```
#include <cassert> #include <airinv/server/Request.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.202 Request.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AirInv
00007 #include <airinv/server/Request.hpp>
00008
00009 namespace AIRINV {
00010
00011     // //////////////////////////////////////
00012     bool Request::parseFlightDate () {
00013         bool hasBeenSuccessfull = false;
00014
00015         //
00016         _airlineCode = "BA";
00017         _flightNumber = 341;
00018         _departureDate = stdair::Date_T (2010, 04, 20);
00019
00020         //
00021         hasBeenSuccessfull = true;
00022
00023         return hasBeenSuccessfull;
00024     }
00025
00026 }

```

25.203 airinv/server/Request.hpp File Reference

```
#include <string> #include <vector> #include <stdair/stdair-
```

```
_basic_types.hpp>      #include <stdair/stdair_date_time_-
types.hpp>
```

Classes

- struct [AIRINV::Request](#)

Namespaces

- namespace [AIRINV](#)

25.204 Request.hpp

```
00001 #ifndef __AIRINV_SVR_REQUEST_HPP
00002 #define __AIRINV_SVR_REQUEST_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_basic_types.hpp>
00012 #include <stdair/stdair_date_time_types.hpp>
00013 // AirInv
00014
00015 namespace AIRINV {
00016
00017     struct Request {
00018     public:
00019         bool parseFlightDate();
00020
00021     public:
00022         // ////////////////////////////////// Attributes //////////////////////////////////
00023         std::string _flightDetails;
00024         stdair::AirlineCode_T _airlineCode;
00025         stdair::FlightNumber_T _flightNumber;
00026         stdair::Date_T _departureDate;
00027     };
00028 }
00029 #endif // __AIRINV_SVR_REQUEST_HPP
```

25.205 airinv/server/RequestHandler.cpp File Reference

```
#include <cassert> #include <string> #include <fstream>
#include <sstream>      #include <boost/lexical_cast.hpp>
#include <airinv/server/Reply.hpp> #include <airinv/server/-
Request.hpp>      #include <airinv/server/RequestHandler.-
hpp>
```

Namespaces

- namespace [AIRINV](#)

25.206 RequestHandler.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 #include <fstream>
00008 #include <sstream>
00009 // Boost
00010 #include <boost/lexical_cast.hpp>
00011 // StdAir
00012 // AirInv
00013 #include <airinv/server/Reply.hpp>
00014 #include <airinv/server/Request.hpp>
00015 #include <airinv/server/RequestHandler.hpp>
00016
00017 namespace AIRINV {
00018
00019 // //////////////////////////////////////
00020 RequestHandler::RequestHandler (const stdair::AirlineCode_T& iAirlineCode)
00021 : _airlineCode (iAirlineCode) {
00022 }
00023
00024 // //////////////////////////////////////
00025 bool RequestHandler::
00026 handleRequest (Request& ioRequest, Reply& ioReply) const {
00027     bool hasBeenSuccessfull = false;
00028
00029     // Decode request string to a flight-date details (airline code,
00030     // flight number and departure date)
00031     hasBeenSuccessfull = ioRequest.parseFlightDate();
00032
00033     if (hasBeenSuccessfull == false) {
00034         ioReply._status = FlightRequestStatus::INTERNAL_ERROR;
00035         return hasBeenSuccessfull;
00036     }
00037
00038     // Fill out the reply to be sent to the client.
00039     ioReply._status = FlightRequestStatus::OK;
00040     ioReply.content = "Your are looking for: '" + ioRequest._flightDetails + "
00041     '. Ok, I have found your flight-date. Be patient until I give you more
00042     information about it";
00043
00044     return hasBeenSuccessfull;
00045 }
00046
00047 }
00048
00049 }
00050
00051 }
00052 }

```

25.207 airinv/server/RequestHandler.hpp File Reference

```

#include <string>          #include <boost/noncopyable.hpp> ×
#include <stdair/stdair_basic_types.hpp>

```

Classes

- class [AIRINV::RequestHandler](#)
The common handler for all incoming requests.

Namespaces

- namespace [stdair](#)

Forward declarations.

- namespace [AIRINV](#)

25.208 RequestHandler.hpp

```

00001 #ifndef __AIRINV_SVR_REQUESTHANDLER_HPP
00002 #define __AIRINV_SVR_REQUESTHANDLER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/noncopyable.hpp>
00011 // StdAir
00012 #include <stdair/stdair_basic_types.hpp>
00013 // AirInv
00014
00015 // Forward declarations
00016 namespace stdair {
00017     struct InventoryKey_T;
00018     struct FlightDateKey_T;
00019 }
00020
00021 namespace AIRINV {
00022
00023     // Forward declarations.
00024     struct Reply;
00025     struct Request;
00026
00027     class RequestHandler : private boost::noncopyable {
00028     public:
00029         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00030         RequestHandler (const stdair::AirlineCode_T&);
00031
00032     public:
00033         // ////////////////////////////////// Business Support Methods //////////////////////////////////
00034         bool handleRequest (Request&, Reply&) const;
00035
00036     private:
00037         // ////////////////////////////////// Attributes //////////////////////////////////
00038         stdair::AirlineCode_T _airlineCode;
00039     };
00040
00041 }
00042 #endif // __AIRINV_SVR_REQUESTHANDLER_HPP

```

25.209 airinv/server/RequestParser.cpp File Reference

```

#include <cassert> #include <airinv/server/RequestParser.-
hpp> #include <airinv/server/Request.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.210 RequestParser.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AirInv
00007 #include <airinv/server/RequestParser.hpp>
00008 #include <airinv/server/Request.hpp>
00009
00010 namespace AIRINV {
00011
00012 // //////////////////////////////////////
00013 RequestParser::RequestParser()
00014     : state_(method_start) {
00015 }
00016
00017 // //////////////////////////////////////
00018 void RequestParser::reset() {
00019     state_ = method_start;
00020 }
00021
00022 // //////////////////////////////////////
00023 boost::tribool RequestParser::consume (Request& req, char input) {
00024
00025     switch (state_) {
00026
00027     case method_start:
00028         if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00029             return false;
00030         } else {
00031             state_ = method;
00032             req.method.push_back(input);
00033             return boost::indeterminate;
00034         }
00035
00036     case method:
00037         if (input == ' ') {
00038             state_ = uri;
00039             return boost::indeterminate;
00040         } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00041             return false;
00042         } else {
00043             req.method.push_back(input);
00044             return boost::indeterminate;
00045         }
00046
00047     case uri_start:
00048         if (is_ctl(input)) {
00049             return false;
00050         } else {
00051             state_ = uri;
00052             req.uri.push_back(input);
00053             return boost::indeterminate;
00054         }
00055
00056     case uri:
00057         if (input == ' ') {
00058             state_ = http_version_h;
00059             return boost::indeterminate;
00060         } else if (is_ctl(input)) {
00061             return false;
00062         } else {
00063             req.uri.push_back(input);
00064             return boost::indeterminate;
00065         }
00066     }
00067 }
00068
00069
00070
00071

```

```
00072
00073     case http_version_h:
00074         if (input == 'H') {
00075             state_ = http_version_t_1;
00076             return boost::indeterminate;
00077         } else {
00078             return false;
00079         }
00080     }
00081
00082     case http_version_t_1:
00083         if (input == 'T') {
00084             state_ = http_version_t_2;
00085             return boost::indeterminate;
00086         } else {
00087             return false;
00088         }
00089     }
00090
00091     case http_version_t_2:
00092         if (input == 'T') {
00093             state_ = http_version_p;
00094             return boost::indeterminate;
00095         } else {
00096             return false;
00097         }
00098     }
00099
00100     case http_version_p:
00101         if (input == 'P') {
00102             state_ = http_version_slash;
00103             return boost::indeterminate;
00104         } else {
00105             return false;
00106         }
00107     }
00108
00109     case http_version_slash:
00110         if (input == '/') {
00111             req.http_version_major = 0;
00112             req.http_version_minor = 0;
00113             state_ = http_version_major_start;
00114             return boost::indeterminate;
00115         } else {
00116             return false;
00117         }
00118     }
00119
00120     case http_version_major_start:
00121         if (is_digit(input)) {
00122             req.http_version_major = req.http_version_major * 10 + input - '0';
00123             state_ = http_version_major;
00124             return boost::indeterminate;
00125         } else {
00126             return false;
00127         }
00128     }
00129
00130     case http_version_major:
00131         if (input == '.') {
00132             state_ = http_version_minor_start;
00133             return boost::indeterminate;
00134         } else if (is_digit(input)) {
00135             req.http_version_major = req.http_version_major * 10 + input - '0';
00136             return boost::indeterminate;
00137         } else {
00138             return false;
00139         }
00140     }
00141
00142
00143     case http_version_minor_start:
00144         if (is_digit(input)) {
00145             req.http_version_minor = req.http_version_minor * 10 + input - '0';
```

```
00146         state_ = http_version_minor;
00147         return boost::indeterminate;
00148
00149     } else {
00150         return false;
00151     }
00152
00153     case http_version_minor:
00154         if (input == '\r') {
00155             state_ = expecting_newline_1;
00156             return boost::indeterminate;
00157
00158         } else if (is_digit(input)) {
00159             req.http_version_minor = req.http_version_minor * 10 + input - '0';
00160             return boost::indeterminate;
00161
00162         } else {
00163             return false;
00164         }
00165
00166     case expecting_newline_1:
00167         if (input == '\n') {
00168             state_ = header_line_start;
00169             return boost::indeterminate;
00170
00171         } else {
00172             return false;
00173         }
00174
00175     case header_line_start:
00176         if (input == '\r') {
00177             state_ = expecting_newline_3;
00178             return boost::indeterminate;
00179
00180         } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00181             return false;
00182
00183         } else {
00184             state_ = header_name;
00185             return boost::indeterminate;
00186         }
00187
00188     case header_lws:
00189         if (input == '\r') {
00190             state_ = expecting_newline_2;
00191             return boost::indeterminate;
00192
00193         } else if (input == ' ' || input == '\t') {
00194             return boost::indeterminate;
00195
00196         } else if (is_ctl(input)) {
00197             return false;
00198
00199         } else {
00200             state_ = header_value;
00201             return boost::indeterminate;
00202         }
00203
00204     case header_name:
00205         if (input == ':') {
00206             state_ = space_before_header_value;
00207             return boost::indeterminate;
00208
00209         } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00210             return false;
00211
00212         } else {
00213             return boost::indeterminate;
00214         }
00215
00216     case space_before_header_value:
00217         if (input == ' ') {
00218             state_ = header_value;
00219             return boost::indeterminate;
```

```

00220
00221     } else {
00222         return false;
00223     }
00224
00225     case header_value:
00226         if (input == '\r') {
00227             state_ = expecting_newline_2;
00228             return boost::indeterminate;
00229
00230         } else if (is_ctl(input)) {
00231             return false;
00232
00233         } else {
00234             return boost::indeterminate;
00235         }
00236
00237     case expecting_newline_2:
00238         if (input == '\n') {
00239             state_ = header_line_start;
00240             return boost::indeterminate;
00241
00242         } else {
00243             return false;
00244         }
00245
00246     case expecting_newline_3:
00247         return (input == '\n');
00248
00249     default:
00250         return false;
00251     }
00252 }
00253
00254 // //////////////////////////////////////
00255 bool RequestParser::is_char(int c) {
00256     return c >= 0 && c <= 127;
00257 }
00258
00259 // //////////////////////////////////////
00260 bool RequestParser::is_ctl(int c) {
00261     return (c >= 0 && c <= 31) || (c == 127);
00262 }
00263
00264 // //////////////////////////////////////
00265 bool RequestParser::is_tspecial(int c) {
00266     switch (c) {
00267         case '(': case ')': case '<': case '>': case '@':
00268         case ',': case ';': case ':': case '\\': case '"':
00269         case '/': case '[': case ']': case '?': case '=':
00270         case '{': case '}': case ' ': case '\t':
00271             return true;
00272         default:
00273             return false;
00274     }
00275 }
00276
00277 // //////////////////////////////////////
00278 bool RequestParser::is_digit(int c) {
00279     return c >= '0' && c <= '9';
00280 }
00281
00282 }

```

25.211 airinv/server/RequestParser.hpp File Reference

```

#include <boost/logic/tribool.hpp> #include <boost/tuple/tuple.-
hpp>

```

Classes

- class [AIRINV::RequestParser](#)
Parser for incoming requests.

Namespaces

- namespace [AIRINV](#)

25.212 RequestParser.hpp

```

00001 #ifndef __AIRINV_SVR_REQUESTPARSER_HPP
00002 #define __AIRINV_SVR_REQUESTPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 // Boost
00009 #include <boost/logic/tribool.hpp>
00010 #include <boost/tuple/tuple.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct Request;
00015
00016     class RequestParser {
00017     public:
00018         RequestParser();
00019
00020         void reset();
00021
00022     template <typename InputIterator>
00030     boost::tuple<boost::tribool, InputIterator> parse (Request& req,
00031                                                     InputIterator begin,
00032                                                     InputIterator end) {
00033
00034         while (begin != end) {
00035             boost::tribool result = consume(req, *begin++);
00036             if (result || !result)
00037                 return boost::make_tuple(result, begin);
00038         }
00039
00040         boost::tribool result = boost::indeterminate;
00041         return boost::make_tuple(result, begin);
00042     }
00043
00044     private:
00045         boost::tribool consume (Request& req, char input);
00046
00047         static bool is_char(int c);
00048
00049         static bool is_ctl(int c);
00050
00051         static bool is_tspecial(int c);
00052
00053         static bool is_digit(int c);
00054
00055         enum state {
00056             method_start,
00057             method,
00058             uri_start,
00059             uri,
00060             http_version_h,
00061             http_version_t_1,
00062             http_version_t_2,

```

```

00069         http_version_p,
00070         http_version_slash,
00071         http_version_major_start,
00072         http_version_major,
00073         http_version_minor_start,
00074         http_version_minor,
00075         expecting_newline_1,
00076         header_line_start,
00077         header_lws,
00078         header_name,
00079         space_before_header_value,
00080         header_value,
00081         expecting_newline_2,
00082         expecting_newline_3
00083     } state_;
00084 };
00085
00086 }
00087 #endif // __AIRINV_SVR_REQUESTPARSER_HPP

```

25.213 airinv/server/win_main.cpp File Reference

```

#include <iostream> #include <string> #include <boost/asio.-
hpp> #include <boost/bind.hpp> #include <boost/function.-
hpp> #include <boost/lexical_cast.hpp> #include <airinv/server/-
AirInvServer.hpp>

```

25.214 win_main.cpp

```

00001 //
00002 // win_main.cpp
00003 // ~~~~~
00004 //
00005 // Copyright (c) 2003-2008 Christopher M. Kohlhoff (chris at kohlhoff dot com)
00006 //
00007 // Distributed under the Boost Software License, Version 1.0. (See accompanying
00008 // file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)
00009 //
00010
00011 #include <iostream>
00012 #include <string>
00013 #include <boost/asio.hpp>
00014 #include <boost/bind.hpp>
00015 #include <boost/function.hpp>
00016 #include <boost/lexical_cast.hpp>
00017 #include <airinv/server/AirInvServer.hpp>
00018
00019 #if defined(_WIN32)
00020
00021 boost::function0<void> console_ctrl_function;
00022
00023 BOOL WINAPI console_ctrl_handler(DWORD ctrl_type) {
00024     switch (ctrl_type) {
00025     case CTRL_C_EVENT:
00026     case CTRL_BREAK_EVENT:
00027     case CTRL_CLOSE_EVENT:
00028     case CTRL_SHUTDOWN_EVENT:
00029         console_ctrl_function();
00030         return TRUE;
00031     default:
00032         return FALSE;
00033     }
00034 }
00035
00036 int main(int argc, char* argv[]) {
00037

```

```

00038     try {
00039
00040         // Check command line arguments.
00041         if (argc != 5) {
00042             std::cerr << "Usage: http_server <address> <port> <threads> <doc_root>\n"
;
00043             std::cerr << "  For IPv4, try:\n";
00044             std::cerr << "    http_server 0.0.0.0 80 1 .\n";
00045             std::cerr << "  For IPv6, try:\n";
00046             std::cerr << "    http_server 0::0 80 1 .\n";
00047             return 1;
00048         }
00049
00050         // Initialise server.
00051         std::size_t num_threads = boost::lexical_cast<std::size_t>(argv[3]);
00052         AIRINV::AirInvServer s (argv[1], argv[2], argv[4], num_threads);
00053
00054         // Set console control handler to allow server to be stopped.
00055         console_ctrl_function = boost::bind(&AIRINV::AirInvServer::stop, &s);
00056         SetConsoleCtrlHandler(console_ctrl_handler, TRUE);
00057
00058         // Run the server until stopped.
00059         s.run();
00060
00061     } catch (std::exception& e) {
00062         std::cerr << "exception: " << e.what() << "\n";
00063     }
00064     return 0;
00065 }
00066 #endif // defined(_WIN32)

```

25.215 airinv/service/AIRINV_Master_Service.cpp File Reference

```

#include <cassert> #include <cmath> #include <boost/make-
_shared.hpp> #include <stdair/basic/BasChronometer.hpp>
#include <stdair/basic/EventType.hpp> #include <stdair/bom/-
BomKeyManager.hpp> #include <stdair/bom/EventQueue.hpp>
#include <stdair/bom/SnapshotStruct.hpp> #include <stdair/bom/-
RMEventStruct.hpp> #include <stdair/service/Logger.hpp>
#include <stdair/STDAIR_Service.hpp> #include <airinv/basic/-
BasConst_AIRINV_Service.hpp> #include <airinv/factory/-
FacAirinvMasterServiceContext.hpp> #include <airinv/command/-
InventoryParser.hpp> #include <airinv/command/Inventory-
Manager.hpp> #include <airinv/service/AIRINV_Master_-
ServiceContext.hpp> #include <airinv/AIRINV_Service.-
hpp> #include <airinv/AIRINV_Master_Service.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.216 AIRINV_Master_Service.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>

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00006 #include <cmath>
00007 // Boost
00008 #include <boost/make_shared.hpp>
00009 // StdAir
00010 #include <stdair/basic/BasChronometer.hpp>
00011 #include <stdair/basic/EventType.hpp>
00012 #include <stdair/bom/BomKeyManager.hpp>
00013 #include <stdair/bom/EventQueue.hpp>
00014 #include <stdair/bom/SnapshotStruct.hpp>
00015 #include <stdair/bom/RMEventStruct.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 #include <stdair/STDAIR_Service.hpp>
00018 // AirInv
00019 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00020 #include <airinv/factory/FacAirinvMasterServiceContext.hpp>
00021 #include <airinv/command/InventoryParser.hpp>
00022 #include <airinv/command/InventoryManager.hpp>
00023 #include <airinv/service/AIRINV_Master_ServiceContext.hpp>
00024 #include <airinv/AIRINV_Service.hpp>
00025 #include <airinv/AIRINV_Master_Service.hpp>
00026
00027 namespace AIRINV {
00028
00029 // //////////////////////////////////////
00030 AIRINV_Master_Service::AIRINV_Master_Service()
00031 : _airinvMasterServiceContext (NULL) {
00032     assert (false);
00033 }
00034
00035 // //////////////////////////////////////
00036 AIRINV_Master_Service::
00037 AIRINV_Master_Service (const AIRINV_Master_Service& iService)
00038 : _airinvMasterServiceContext (NULL) {
00039     assert (false);
00040 }
00041
00042 // //////////////////////////////////////
00043 AIRINV_Master_Service::
00044 AIRINV_Master_Service (const stdair::BasLogParams& iLogParams,
00045                       const stdair::BasDBParams& iDBParams)
00046 : _airinvMasterServiceContext (NULL) {
00047
00048     // Initialise the STDAIR service handler
00049     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00050         initStdAirService (iLogParams, iDBParams);
00051
00052     // Initialise the service context
00053     initServiceContext();
00054
00055     // Add the StdAir service context to the AIRINV service context
00056     // \note RMOL owns the STDAIR service resources here.
00057     const bool ownStdairService = true;
00058     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00059
00060     // Initialise the (remaining of the) context
00061     initSlaveAirinvService();
00062 }
00063
00064 // //////////////////////////////////////
00065 AIRINV_Master_Service::
00066 AIRINV_Master_Service (const stdair::BasLogParams& iLogParams)
00067 : _airinvMasterServiceContext (NULL) {
00068
00069     // Initialise the STDAIR service handler
00070     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00071         initStdAirService (iLogParams);
00072
00073     // Initialise the service context
00074     initServiceContext();
00075
00076     // Add the StdAir service context to the AIRINV service context
00077     // \note RMOL owns the STDAIR service resources here.
00078     const bool ownStdairService = true;
00079     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);

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00080
00081     // Initialise the (remaining of the) context
00082     initSlaveAirinvService();
00083 }
00084
00085 // //////////////////////////////////////
00086 AIRINV_Master_Service::
00087 AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00088 : _airinvMasterServiceContext (NULL) {
00089
00090     // Initialise the service context
00091     initServiceContext();
00092
00093     // Store the STDAIR service object within the (AIRINV) service context
00094     // \note AirInv does not own the STDAIR service resources here.
00095     const bool doesNotOwnStdairService = false;
00096     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00097
00098     // Initialise the (remaining of the) context
00099     initSlaveAirinvService();
00100 }
00101
00102 // //////////////////////////////////////
00103 AIRINV_Master_Service::~AIRINV_Master_Service() {
00104     // Delete/Clean all the objects from memory
00105     finalise();
00106 }
00107
00108 // //////////////////////////////////////
00109 void AIRINV_Master_Service::finalise() {
00110     assert (_airinvMasterServiceContext != NULL);
00111     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00112     _airinvMasterServiceContext->reset();
00113 }
00114
00115 // //////////////////////////////////////
00116 void AIRINV_Master_Service::initServiceContext() {
00117     // Initialise the context
00118     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00119         FacAirinvMasterServiceContext::instance().create();
00120     _airinvMasterServiceContext = &lAIRINV_Master_ServiceContext;
00121 }
00122
00123 // //////////////////////////////////////
00124 void AIRINV_Master_Service::
00125 addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00126                  const bool iOwnStdairService) {
00127
00128     // Retrieve the AirInv Master service context
00129     assert (_airinvMasterServiceContext != NULL);
00130     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00131         *_airinvMasterServiceContext;
00132
00133     // Store the STDAIR service object within the (AIRINV) service context
00134     lAIRINV_Master_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00135                                                      iOwnStdairService);
00136 }
00137
00138 // //////////////////////////////////////
00139 stdair::STDAIR_ServicePtr_T AIRINV_Master_Service::
00140 initStdAirService (const stdair::BasLogParams& iLogParams,
00141                   const stdair::BasDBParams& iDBParams) {
00142
00143     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00144         boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00145
00146     return lSTDAIR_Service_ptr;
00147 }
00148
00149 // //////////////////////////////////////
00150 stdair::STDAIR_ServicePtr_T AIRINV_Master_Service::
00151 initStdAirService (const stdair::BasLogParams& iLogParams) {
00152
00153     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =

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00168         boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00169
00170     return lSTDAIR_Service_ptr;
00171 }
00172
00173 // //////////////////////////////////////
00174 void AIRINV_Master_Service::initSlaveAirinvService() {
00175
00176     // Retrieve the AirInv Master service context
00177     assert (_airinvMasterServiceContext != NULL);
00178     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00179         *_airinvMasterServiceContext;
00180
00181     // Retrieve the StdAir service
00182     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00183         lAIRINV_Master_ServiceContext.getSTDAIR_ServicePtr();
00184     assert (lSTDAIR_Service_ptr != NULL);
00185
00186     AIRINV_ServicePtr_T lAIRINV_Service_ptr =
00187         boost::make_shared<AIRINV_Service> (lSTDAIR_Service_ptr);
00188
00189     // Store the AIRINV service object within the AIRINV Master service
00190     context.
00191     lAIRINV_Master_ServiceContext.setAIRINV_Service (lAIRINV_Service_ptr);
00192 }
00193
00194 // //////////////////////////////////////
00195 void AIRINV_Master_Service::
00196 parseAndLoad (const stdair::Filename_T& iInventoryInputFilename) {
00197
00198     // Retrieve the AirInv Master service context
00199     if (_airinvMasterServiceContext == NULL) {
00200         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00201             "has not been initialised")
00202     };
00203
00204     }
00205     assert (_airinvMasterServiceContext != NULL);
00206
00207     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00208         *_airinvMasterServiceContext;
00209
00210     // Retrieve the slave AIRINV service object from the (AIRINV)
00211     // service context
00212     AIRINV_Service& lAIRINV_Service =
00213         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00214
00215     // Delegate the file parsing and BOM building to the dedicated service
00216     lAIRINV_Service.parseAndLoad (iInventoryInputFilename);
00217 }
00218
00219 // //////////////////////////////////////
00220 void AIRINV_Master_Service::
00221 parseAndLoad (const stdair::Filename_T& iScheduleInputFilename,
00222               const stdair::Filename_T& iODInputFilename,
00223               const AIRRAC::YieldFilePath& iYieldFilename) {
00224
00225     // Retrieve the AirInv Master service context
00226     if (_airinvMasterServiceContext == NULL) {
00227         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00228             "has not been initialised")
00229     };
00230
00231     }
00232     assert (_airinvMasterServiceContext != NULL);
00233
00234     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00235         *_airinvMasterServiceContext;
00236
00237     // Retrieve the slave AirInv service object from the (AirInv)
00238     // service context
00239     AIRINV_Service& lAIRINV_Service =
00240         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00241
00242     // Delegate the file parsing and BOM building to the dedicated service
00243     lAIRINV_Service.parseAndLoad (iScheduleInputFilename, iODInputFilename,

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00248                                     iYieldFilename);
00249     }
00250
00251     // //////////////////////////////////////
00252 void AIRINV_Master_Service::buildSampleBom() {
00253
00254     // Retrieve the AirInv Master service context
00255     if (_airinvMasterServiceContext == NULL) {
00256         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00257             "has not been initialised")
00258     }
00259     assert (_airinvMasterServiceContext != NULL);
00260
00261     // Retrieve the AirInv service context and whether it owns the Stdair
00262     // service
00263     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00264         *_airinvMasterServiceContext;
00265     const bool doesOwnStdairService =
00266         lAIRINV_Master_ServiceContext.getOwnStdairServiceFlag();
00267
00268     // Retrieve the StdAir service object from the (AirInv) service context
00269     stdair::STDAIR_Service& lSTDAIR_Service =
00270         lAIRINV_Master_ServiceContext.getSTDAIR_Service();
00271
00272     if (doesOwnStdairService == true) {
00273         //
00274         lSTDAIR_Service.buildSampleBom();
00275     }
00276
00277     AIRINV_Service& lAIRINV_Service =
00278         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00279     lAIRINV_Service.buildSampleBom();
00280
00281 }
00282
00283 // //////////////////////////////////////
00284 std::string AIRINV_Master_Service::
00285 jsonExport (const stdair::AirlineCode_T& iAirlineCode,
00286             const stdair::FlightNumber_T& iFlightNumber,
00287             const stdair::Date_T& iDepartureDate) const {
00288
00289     // Retrieve the AirInv Master service context
00290     if (_airinvMasterServiceContext == NULL) {
00291         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00292             "has not been initialised")
00293     }
00294     assert (_airinvMasterServiceContext != NULL);
00295
00296     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00297         *_airinvMasterServiceContext;
00298
00299     // Retrieve the slave AirInv (slave) service object from
00300     // the (AirInv master) service context
00301     AIRINV_Service& lAIRINV_Service =
00302         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00303
00304     // Delegate the BOM dump to the dedicated service
00305     return lAIRINV_Service.jsonExport (iAirlineCode, iFlightNumber,
00306         iDepartureDate);
00307 }
00308
00309 // //////////////////////////////////////
00310 std::string AIRINV_Master_Service::
00311 list (const stdair::AirlineCode_T& iAirlineCode,
00312       const stdair::FlightNumber_T& iFlightNumber) const {
00313     std::ostringstream oFlightListStr;
00314
00315     // Retrieve the AirInv Master service context
00316     if (_airinvMasterServiceContext == NULL) {
00317         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00318             "has not been initialised")
00319     }
00320

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00338     }
00339     assert (_airinvMasterServiceContext != NULL);
00340
00341     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00342         *_airinvMasterServiceContext;
00343
00344     // Retrieve the slave AirInv (slave) service object from
00345     // the (AirInv master) service context
00346     AIRINV_Service& lAIRINV_Service =
00347         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00348
00349     // Delegate the BOM display to the dedicated service
00350     return lAIRINV_Service.list (iAirlineCode, iFlightNumber);
00351 }
00352
00353 // //////////////////////////////////////
00354 bool AIRINV_Master_Service::
00355 check (const stdair::AirlineCode_T& iAirlineCode,
00356        const stdair::FlightNumber_T& iFlightNumber,
00357        const stdair::Date_T& iDepartureDate) const {
00358     std::ostringstream oFlightListStr;
00359
00360     // Retrieve the AirInv Master service context
00361     if (_airinvMasterServiceContext == NULL) {
00362         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00363             "has not been initialised")
00364     };
00365     assert (_airinvMasterServiceContext != NULL);
00366
00367     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00368         *_airinvMasterServiceContext;
00369
00370     // Retrieve the slave AirInv (slave) service object from
00371     // the (AirInv master) service context
00372     AIRINV_Service& lAIRINV_Service =
00373         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00374
00375     // Delegate the BOM display to the dedicated service
00376     return lAIRINV_Service.check (iAirlineCode, iFlightNumber, iDepartureDate);
00377 }
00378
00379 // //////////////////////////////////////
00380 std::string AIRINV_Master_Service::csvDisplay() const {
00381
00382     // Retrieve the AirInv Master service context
00383     if (_airinvMasterServiceContext == NULL) {
00384         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00385             "has not been initialised")
00386     };
00387     assert (_airinvMasterServiceContext != NULL);
00388
00389     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00390         *_airinvMasterServiceContext;
00391
00392     // Retrieve the slave AIRINV service object from
00393     // the (AIRINV) service context
00394     AIRINV_Service& lAIRINV_Service =
00395         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00396
00397     // Delegate the BOM display to the dedicated service
00398     return lAIRINV_Service.csvDisplay();
00399 }
00400
00401 // //////////////////////////////////////
00402 std::string AIRINV_Master_Service::
00403 csvDisplay (const stdair::AirlineCode_T& iAirlineCode,
00404            const stdair::FlightNumber_T& iFlightNumber,
00405            const stdair::Date_T& iDepartureDate) const {
00406
00407     // Retrieve the AirInv Master service context
00408     if (_airinvMasterServiceContext == NULL) {
00409         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "

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00410                                     "has not been initialised")
00411     ;
00412     }
00413     assert (_airinvMasterServiceContext != NULL);
00414     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00415         *_airinvMasterServiceContext;
00416
00417     // Retrieve the slave AIRINV service object from
00418     // the (AIRINV) service context
00419     AIRINV_Service& lAIRINV_Service =
00420         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00421
00422     // Delegate the BOM display to the dedicated service
00423     return lAIRINV_Service.csvDisplay (iAirlineCode, iFlightNumber,
00424                                         iDepartureDate);
00425 }
00426
00427 // //////////////////////////////////////
00428 void AIRINV_Master_Service::
00429     initSnapshotAndRMEvents (const stdair::Date_T& iStartDate,
00430                             const stdair::Date_T& iEndDate) {
00431
00432     // Retrieve the AirInv Master service context
00433     if (_airinvMasterServiceContext == NULL) {
00434         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00435                                                         "has not been initialised")
00436     ;
00437     }
00438     assert (_airinvMasterServiceContext != NULL);
00439     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00440         *_airinvMasterServiceContext;
00441
00442     // Retrieve the StdAir service context
00443     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00444         lAIRINV_Master_ServiceContext.getSTDAIR_ServicePtr();
00445     assert (lSTDAIR_Service_ptr != NULL);
00446
00447     // Retrieve the event queue object instance
00448     stdair::EventQueue& lQueue = lSTDAIR_Service_ptr->getEventQueue();
00449
00450     // Initialise the snapshot events
00451     InventoryManager::initSnapshotEvents (iStartDate, iEndDate, lQueue);
00452
00453     // \todo Browse the list of inventories and itinialise the RM events of
00454     //         each inventory.
00455
00456     // Retrieve the slave AIRINV service object from the (AIRINV)
00457     // service context
00458     AIRINV_Service& lAIRINV_Service =
00459         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00460     lQueue.addStatus (stdair::EventType::RM, 0);
00461     stdair::RMEventList_T lRMEventList =
00462         lAIRINV_Service.initRMEvents (iStartDate, iEndDate);
00463     InventoryManager::addRMEventsToEventQueue (lQueue, lRMEventList);
00464 }
00465
00466 // //////////////////////////////////////
00467 void AIRINV_Master_Service::
00468     calculateAvailability (stdair::TravelSolutionStruct& ioTravelSolution,
00469                           const stdair::PartnershipTechnique&
00470                               iPartnershipTechnique) {
00471
00472     // Retrieve the AirInv Master service context
00473     if (_airinvMasterServiceContext == NULL) {
00474         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00475                                                         "has not been initialised")
00476     ;
00477     }
00478     assert (_airinvMasterServiceContext != NULL);
00479     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00480         *_airinvMasterServiceContext;

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00480
00481     // Retrieve the slave AIRINV service object from the (AIRINV)
00482     // service context
00483     AIRINV_Service& lAIRINV_Service =
00484         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00485
00486     // Delegate the availability retrieval to the dedicated service
00487     stdair::BasChronometer lAvlChronometer;
00488     lAvlChronometer.start();
00489
00490     lAIRINV_Service.calculateAvailability (ioTravelSolution,
00491 iPartnershipTechnique);
00492
00493     // DEBUG
00494     // const double lAvlMeasure = lAvlChronometer.elapsed();
00495     // STDAIR_LOG_DEBUG ("Availability retrieval: " << lAvlMeasure << " - "
00496     // << lAIRINV_Master_ServiceContext.display());
00497 }
00498
00499 // //////////////////////////////////////
00500 bool AIRINV_Master_Service::sell (const std::string& iSegmentDateKey,
00501     const stdair::ClassCode_T& iClassCode,
00502     const stdair::PartySize_T& iPartySize) {
00503
00504     // Retrieve the AirInv Master service context
00505     if (_airinvMasterServiceContext == NULL) {
00506         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00507             "has not been initialised")
00508     };
00509
00510     assert (_airinvMasterServiceContext != NULL);
00511
00512     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00513         *_airinvMasterServiceContext;
00514
00515     // Retrieve the corresponding inventory key
00516     // const stdair::InventoryKey& lInventoryKey =
00517     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00518
00519     // Retrieve the slave AirInv service object from the (AirInv Master)
00520     // service context
00521     AIRINV_Service& lAIRINV_Service =
00522         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00523
00524     // Delegate the booking to the dedicated command
00525     stdair::BasChronometer lSellChronometer;
00526     lSellChronometer.start();
00527
00528     // Delegate the BOM building to the dedicated service
00529     const bool hasBeenSaleSuccessful =
00530         lAIRINV_Service.sell (iSegmentDateKey, iClassCode, iPartySize);
00531
00532     // const double lSellMeasure = lSellChronometer.elapsed();
00533
00534     // DEBUG
00535     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
00536     // << lAIRINV_Master_ServiceContext.display());
00537
00538     //
00539     return hasBeenSaleSuccessful;
00540 }
00541
00542 // //////////////////////////////////////
00543 bool AIRINV_Master_Service::cancel (const std::string& iSegmentDateKey,
00544     const stdair::ClassCode_T& iClassCode,
00545     const stdair::PartySize_T& iPartySize) {
00546
00547     // Retrieve the AirInv Master service context
00548     if (_airinvMasterServiceContext == NULL) {
00549         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00550             "has not been initialised")
00551     };
00552
00553     assert (_airinvMasterServiceContext != NULL);

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00551
00552     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00553         *_airinvMasterServiceContext;
00554
00555     // Retrieve the corresponding inventory key
00556     // const stdair::InventoryKey& lInventoryKey =
00557     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00558
00559     // Retrieve the slave AirInv service object from the (AirInv Master)
00560     // service context
00561     AIRINV_Service& lAIRINV_Service =
00562         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00563
00564     // Delegate the booking to the dedicated command
00565     stdair::BasChronometer lCancelChronometer;
00566     lCancelChronometer.start();
00567
00568     // Delegate the BOM building to the dedicated service
00569     const bool hasBeenSaleSuccessful =
00570         lAIRINV_Service.cancel (iSegmentDateKey, iClassCode, iPartySize);
00571
00572     // const double lCancelMeasure = lCancelChronometer.elapsed();
00573
00574     // DEBUG
00575     // STDAIR_LOG_DEBUG ("Booking cancel: " << lCancelMeasure << " - "
00576     //                   << lAIRINV_Master_ServiceContext.display());
00577
00578     //
00579     return hasBeenSaleSuccessful;
00580 }
00581
00582 // //////////////////////////////////////
00583 void AIRINV_Master_Service::
00584 takeSnapshots (const stdair::SnapshotStruct& iSnapshot) {
00585
00586     // Retrieve the AirInv Master service context
00587     if (_airinvMasterServiceContext == NULL) {
00588         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00589             "has not been initialised")
00589     ;
00590     }
00591     assert (_airinvMasterServiceContext != NULL);
00592
00593     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00594         *_airinvMasterServiceContext;
00595
00596     // Retrieve the slave AIRINV service object from the (AIRINV)
00597     // service context
00598     AIRINV_Service& lAIRINV_Service =
00599         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00600
00601     // Retrieve the snapshot time and the airline code.
00602     const stdair::DateTime_T& lSnapshotTime = iSnapshot.getSnapshotTime();
00603     const stdair::AirlineCode_T& lAirlineCode = iSnapshot.getAirlineCode();
00604
00605     lAIRINV_Service.takeSnapshots (lAirlineCode, lSnapshotTime);
00606 }
00607
00608 // //////////////////////////////////////
00609 void AIRINV_Master_Service::
00610 optimise (const stdair::RMEventStruct& iRMEvent,
00611          const stdair::ForecastingMethod& iForecastingMethod,
00612          const stdair::PartnershipTechnique& iPartnershipTechnique) {
00613
00614     // Retrieve the AirInv Master service context
00615     if (_airinvMasterServiceContext == NULL) {
00616         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00617             "has not been initialised")
00617     ;
00618     }
00619     assert (_airinvMasterServiceContext != NULL);
00620
00621     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00622         *_airinvMasterServiceContext;

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00623
00624     // Retrieve the slave AIRINV service object from the (AIRINV)
00625     // service context
00626     AIRINV_Service& lAIRINV_Service =
00627         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00628
00629     // Retrieve the snapshot time and the airline code.
00630     const stdair::DateTime_T& lRMEventTime = iRMEvent.getRMEventTime();
00631     const stdair::AirlineCode_T& lAirlineCode = iRMEvent.getAirlineCode();
00632     const stdair::KeyDescription_T& lFDDescription =
00633         iRMEvent.getFlightDateDescription();
00634
00635     lAIRINV_Service.optimise (lAirlineCode, lFDDescription, lRMEventTime,
00636                             iForecastingMethod, iPartnershipTechnique);
00637 }
00638 }

```

25.217 airinv/service/AIRINV_Master_ServiceContext.cpp File Reference

```

#include <cassert> #include <sstream> #include <airinv/basic/-
BasConst_AIRINV_Service.hpp> #include <airinv/service/AI-
RINV_Master_ServiceContext.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.218 AIRINV_Master_ServiceContext.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Airinv
00008 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00009 #include <airinv/service/AIRINV_Master_ServiceContext.hpp>
00010
00011 namespace AIRINV {
00012
00013     // //////////////////////////////////////
00014     AIRINV_Master_ServiceContext::AIRINV_Master_ServiceContext()
00015         : _ownStdairService (false) {
00016     }
00017
00018     // //////////////////////////////////////
00019     AIRINV_Master_ServiceContext::~AIRINV_Master_ServiceContext () {
00020     }
00021
00022     // //////////////////////////////////////
00023     const std::string AIRINV_Master_ServiceContext::shortDisplay() const {
00024         std::ostringstream oStr;
00025         oStr << "AIRINV_Master_ServiceContext -- Owns StdAir service: "
00026             << _ownStdairService;
00027         return oStr.str();
00028     }
00029
00030     // //////////////////////////////////////
00031     const std::string AIRINV_Master_ServiceContext::display() const {
00032         std::ostringstream oStr;
00033         oStr << shortDisplay();
00034         return oStr.str();
00035     }

```



```

00036
00037 // //////////////////////////////////////
00038 const std::string AIRINV_Master_ServiceContext::describe() const {
00039     return shortDisplay();
00040 }
00041
00042 // //////////////////////////////////////
00043 void AIRINV_Master_ServiceContext::reset() {
00044     if (_ownStdairService == true) {
00045         _stdairService.reset();
00046     }
00047 }
00048
00049 }

```

25.219 airinv/service/AIRINV_Master_ServiceContext.hpp File Reference

```

#include <string> #include <boost/shared_ptr.hpp> #include
<stdair/stdair_service_types.hpp> #include <stdair/bom/-
Inventory.hpp> #include <stdair/service/ServiceAbstract.-
hpp> #include <airinv/AIRINV_Types.hpp>

```

Classes

- class [AIRINV::AIRINV_Master_ServiceContext](#)

Namespaces

- namespace [AIRINV](#)

25.220 AIRINV_Master_ServiceContext.hpp

```

00001 #ifndef __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
00002 #define __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/bom/Inventory.hpp>
00014 #include <stdair/service/ServiceAbstract.hpp>
00015 // AirInv
00016 #include <airinv/AIRINV_Types.hpp>
00017
00018 namespace AIRINV {
00019
00020     class AIRINV_Service;
00021
00022     class AIRINV_Master_ServiceContext : public stdair::ServiceAbstract {
00023     public:
00024         friend class AIRINV_Master_Service;
00025         friend class FacAirinvMasterServiceContext;
00026
00027     private:
00028         // ////////////////////////////////// Getters //////////////////////////////////
00029         stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {

```

```

00041         return _stdairService;
00042     }
00043
00044     stdair::STDAIR_Service& getSTDAIR_Service() const {
00045         assert (_stdairService != NULL);
00046         return *_stdairService;
00047     }
00048
00049     const bool getOwnStdairServiceFlag() const {
00050         return _ownStdairService;
00051     }
00052
00053     AIRINV_Service& getAIRINV_Service() const {
00054         assert (_airinvService != NULL);
00055         return *_airinvService;
00056     }
00057
00058     // ////////////////////////////////// Setters //////////////////////////////////
00059     void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00060                             const bool iOwnStdairService) {
00061         _stdairService = ioSTDAIR_ServicePtr;
00062         _ownStdairService = iOwnStdairService;
00063     }
00064
00065     void setAIRINV_Service (AIRINV_ServicePtr_T ioAIRINV_ServicePtr) {
00066         _airinvService = ioAIRINV_ServicePtr;
00067     }
00068
00069 private:
00070     // ////////////////////////////////// Display Methods //////////////////////////////////
00071     const std::string shortDisplay() const;
00072
00073     const std::string display() const;
00074
00075     const std::string describe() const;
00076
00077 private:
00078     AIRINV_Master_ServiceContext ();
00079     AIRINV_Master_ServiceContext (const AIRINV_Master_ServiceContext&);
00080
00081     ~AIRINV_Master_ServiceContext ();
00082
00083     void reset();
00084
00085 private:
00086     // ////////////////////////////////// Children //////////////////////////////////
00087     stdair::STDAIR_ServicePtr_T _stdairService;
00088
00089     bool _ownStdairService;
00090
00091 private:
00092     // ////////////////////////////////// Attributes //////////////////////////////////
00093     AIRINV_ServicePtr_T _airinvService;
00094 };
00095
00096 }
00097
00098 #endif // __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP

```

25.221 airinv/service/AIRINV_Service.cpp File Reference

```

#include <cassert>          #include <boost/make_shared.hpp>
#include <stdair/basic/BasChronometer.hpp> #include <stdair/bom/-
BomKeyManager.hpp>      #include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp> #include <stdair/bom/-

```

```

Inventory.hpp>      #include <stdair/bom/FlightDate.hpp> ×
#include <stdair/bom/AirlineFeature.hpp> #include <stdair/bom/-
RMEventStruct.hpp> #include <stdair/factory/FacBomManager.-
hpp> #include <stdair/service/Logger.hpp> #include <stdair/-
STDAIR_Service.hpp>      #include <rmol/RMOL_Service.hpp>
#include <airrac/AIRRAC_Service.hpp> #include <airinv/basic/-
BasConst_AIRINV_Service.hpp>      #include <airinv/factory/-
FacAirinvServiceContext.hpp>      #include <airinv/command/-
ScheduleParser.hpp>      #include <airinv/command/Inventory-
Parser.hpp>      #include <airinv/command/InventoryManager.-
hpp>      #include <airinv/service/AIRINV_ServiceContext.-
hpp> #include <airinv/AIRINV_Service.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.222 AIRINV_Service.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/make_shared.hpp>
00008 // StdAir
00009 #include <stdair/basic/BasChronometer.hpp>
00010 #include <stdair/bom/BomKeyManager.hpp>
00011 #include <stdair/bom/BomManager.hpp>
00012 #include <stdair/bom/BomKeyManager.hpp>
00013 #include <stdair/bom/BomRoot.hpp>
00014 #include <stdair/bom/Inventory.hpp>
00015 #include <stdair/bom/FlightDate.hpp>
00016 #include <stdair/bom/AirlineFeature.hpp>
00017 #include <stdair/bom/RMEventStruct.hpp>
00018 #include <stdair/factory/FacBomManager.hpp>
00019 #include <stdair/service/Logger.hpp>
00020 #include <stdair/STDAIR_Service.hpp>
00021 // RMOL
00022 #include <rmol/RMOL_Service.hpp>
00023 // AirRAC
00024 #include <airrac/AIRRAC_Service.hpp>
00025 // AirInv
00026 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00027 #include <airinv/factory/FacAirinvServiceContext.hpp>
00028 #include <airinv/command/ScheduleParser.hpp>
00029 #include <airinv/command/InventoryParser.hpp>
00030 #include <airinv/command/InventoryManager.hpp>
00031 #include <airinv/service/AIRINV_ServiceContext.hpp>
00032 #include <airinv/AIRINV_Service.hpp>
00033
00034 namespace AIRINV {
00035
00036 // //////////////////////////////////////
00037 AIRINV_Service::AIRINV_Service () : _airinvServiceContext (NULL) {
00038     assert (false);
00039 }
00040
00041 // //////////////////////////////////////
00042 AIRINV_Service::AIRINV_Service (const AIRINV_Service& iService)
00043 : _airinvServiceContext (NULL) {
00044     assert (false);

```

```
00045 }
00046
00047 // //////////////////////////////////////
00048 AIRINV_Service::AIRINV_Service (const stdair::BasLogParams& iLogParams)
00049 : _airinvServiceContext (NULL) {
00050
00051     // Initialise the STDAIR service handler
00052     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00053         initStdAirService (iLogParams);
00054
00055     // Initialise the service context
00056     initServiceContext();
00057
00058     // Add the StdAir service context to the AIRINV service context
00059     // \note AIRINV owns the STDAIR service resources here.
00060     const bool ownStdairService = true;
00061     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00062
00063     // Initialise the RMOL service.
00064     initRMOLService();
00065
00066     // Initialise the AIRRAC service.
00067     initAIRRACService();
00068
00069     // Initialise the (remaining of the) context
00070     initAirinvService();
00071 }
00072
00073 // //////////////////////////////////////
00074 AIRINV_Service::AIRINV_Service (const stdair::BasLogParams& iLogParams,
00075                                 const stdair::BasDBParams& iDBParams)
00076 : _airinvServiceContext (NULL) {
00077
00078     // Initialise the STDAIR service handler
00079     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00080         initStdAirService (iLogParams, iDBParams);
00081
00082     // Initialise the service context
00083     initServiceContext();
00084
00085     // Add the StdAir service context to the AIRINV service context
00086     // \note AIRINV owns the STDAIR service resources here.
00087     const bool ownStdairService = true;
00088     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00089
00090     // Initialise the RMOL service.
00091     initRMOLService();
00092
00093     // Initialise the AIRRAC service.
00094     initAIRRACService();
00095
00096     // Initialise the (remaining of the) context
00097     initAirinvService();
00098 }
00099 // //////////////////////////////////////
00100 AIRINV_Service::
00101 AIRINV_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00102 : _airinvServiceContext (NULL) {
00103
00104     // Initialise the service context
00105     initServiceContext();
00106
00107     // Store the STDAIR service object within the (AIRINV) service context
00108     // \note AirInv does not own the STDAIR service resources here.
00109     const bool doesNotOwnStdairService = false;
00110     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00111
00112     // Initialise the RMOL service.
00113     initRMOLService();
00114
00115     // Initialise the AIRRAC service.
00116     initAIRRACService();
00117
00118     // Initialise the (remaining of the) context
```

```

00119     initAirinvService();
00120
00121 }
00122
00123 // //////////////////////////////////////
00124 AIRINV_Service::~AIRINV_Service() {
00125     // Delete/Clean all the objects from memory
00126     finalise();
00127 }
00128
00129 // //////////////////////////////////////
00130 void AIRINV_Service::finalise() {
00131     assert (_airinvServiceContext != NULL);
00132     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00133     _airinvServiceContext->reset();
00134 }
00135
00136 // //////////////////////////////////////
00137 void AIRINV_Service::initServiceContext() {
00138     // Initialise the context
00139     AIRINV_ServiceContext& lAIRINV_ServiceContext =
00140         FacAirinvServiceContext::instance().create();
00141     _airinvServiceContext = &lAIRINV_ServiceContext;
00142 }
00143
00144 // //////////////////////////////////////
00145 void AIRINV_Service::
00146 addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00147                  const bool iOwnStdairService) {
00148
00149     // Retrieve the Airinv service context
00150     assert (_airinvServiceContext != NULL);
00151     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00152
00153     // Store the STDAIR service object within the (AIRINV) service context
00154     lAIRINV_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00155                                               iOwnStdairService);
00156 }
00157
00158 // //////////////////////////////////////
00159 stdair::STDAIR_ServicePtr_T AIRINV_Service::
00160 initStdAirService (const stdair::BasLogParams& iLogParams,
00161                   const stdair::BasDBParams& iDBParams) {
00162
00163     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00164         boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00165
00166     return lSTDAIR_Service_ptr;
00167 }
00168
00169 // //////////////////////////////////////
00170 stdair::STDAIR_ServicePtr_T AIRINV_Service::
00171 initStdAirService (const stdair::BasLogParams& iLogParams) {
00172
00173     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00174         boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00175
00176     return lSTDAIR_Service_ptr;
00177 }
00178
00179 // //////////////////////////////////////
00180 void AIRINV_Service::initRMOLService() {
00181
00182     // Retrieve the AirInv service context
00183     assert (_airinvServiceContext != NULL);
00184     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00185
00186     // Retrieve the StdAir service context
00187     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00188         lAIRINV_ServiceContext.getSTDAIR_ServicePtr();
00189
00190     RMOL::RMOL_ServicePtr_T lRMOL_Service_ptr =
00191         boost::make_shared<RMOL::RMOL_Service> (lSTDAIR_Service_ptr);
00192
00193 }

```

```

00214     // Store the RMOL service object within the (AIRINV) service context
00215     lAIRINV_ServiceContext.setRMOL_Service (lRMOL_Service_ptr);
00216 }
00217
00218 // //////////////////////////////////////
00219 void AIRINV_Service::initAIRRACService() {
00220
00221     // Retrieve the AirInv service context
00222     assert (_airinvServiceContext != NULL);
00223     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00224
00225     // Retrieve the StdAir service context
00226     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00227         lAIRINV_ServiceContext.getSTDAIR_ServicePtr();
00228
00229     AIRRAC::AIRRAC_ServicePtr_T lAIRRAC_Service_ptr =
00230         boost::make_shared<AIRRAC::AIRRAC_Service> (lSTDAIR_Service_ptr);
00231
00232     // Store the AIRRAC service object within the (AIRINV) service context
00233     lAIRINV_ServiceContext.setAIRRAC_Service (lAIRRAC_Service_ptr);
00234 }
00235
00236 // //////////////////////////////////////
00237 void AIRINV_Service::initAirinvService() {
00238     // Do nothing at this stage. A sample BOM tree may be built by
00239     // calling the buildSampleBom() method
00240 }
00241
00242 // //////////////////////////////////////
00243 void AIRINV_Service::
00244     parseAndLoad (const stdair::Filename_T& iInventoryInputFilename) {
00245
00246     // Retrieve the BOM root object.
00247     assert (_airinvServiceContext != NULL);
00248     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00249     stdair::STDAIR_Service& lSTDAIR_Service =
00250         lAIRINV_ServiceContext.getSTDAIR_Service();
00251     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00252
00253     // Initialise the airline inventories
00254     InventoryParser::buildInventory (iInventoryInputFilename, lBomRoot);
00255 }
00256
00257 // //////////////////////////////////////
00258 void AIRINV_Service::
00259     parseAndLoad (const stdair::Filename_T& iScheduleInputFilename,
00260                  const stdair::Filename_T& iODInputFilename,
00261                  const AIRRAC::YieldFilePath& iYieldFilename) {
00262
00263     // Retrieve the BOM root object.
00264     assert (_airinvServiceContext != NULL);
00265     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00266     stdair::STDAIR_Service& lSTDAIR_Service =
00267         lAIRINV_ServiceContext.getSTDAIR_Service();
00268     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00269
00270     // Initialise the airline inventories
00271     ScheduleParser::generateInventories (iScheduleInputFilename, lBomRoot);
00272
00273     // Parse the yield structures.
00274     AIRRAC::AIRRAC_Service& lAIRRAC_Service =
00275         lAIRINV_ServiceContext.getAIRRAC_Service();
00276     lAIRRAC_Service.parseAndLoad (iYieldFilename);
00277
00278     // Update yield values for booking classes and O&D.
00279     lAIRRAC_Service.updateYields();
00280 }
00281
00282 // //////////////////////////////////////
00283 void AIRINV_Service::buildSampleBom() {
00284
00285     // Retrieve the AirInv service context
00286     if (_airinvServiceContext == NULL) {
00287         throw stdair::NonInitialisedServiceException("The AirInv service has not

```

```

00295                                     "been initialised");
00296     }
00297     assert (_airinvServiceContext != NULL);
00298
00299     // Retrieve the AirInv service context and whether it owns the Stdair
00300     // service
00301     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00302     const bool doesOwnStdairService =
00303         lAIRINV_ServiceContext.getOwnStdairServiceFlag();
00304
00305     // Retrieve the StdAir service object from the (AirInv) service context
00306     stdair::STDAIR_Service& lSTDAIR_Service =
00307         lAIRINV_ServiceContext.getSTDAIR_Service();
00308
00313     if (doesOwnStdairService == true) {
00314         //
00315         lSTDAIR_Service.buildSampleBom();
00316     }
00317
00328     AIRRAC::AIRRAC_Service& lAIRRAC_Service =
00329         lAIRINV_ServiceContext.getAIRRAC_Service();
00330     lAIRRAC_Service.buildSampleBom();
00331
00337     RMOL::RMOL_Service& lRMOL_Service= lAIRINV_ServiceContext.getRMOL_Service()
;
00338     lRMOL_Service.buildSampleBom();
00339
00365     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00366     InventoryManager::buildSimilarSegmentCabinSets (lBomRoot);
00367
00371     // InventoryManager::setDefaultBidPriceVector (lBomRoot);
00372 }
00373
00374 // ////////////////////////////////////////
00375 std::string AIRINV_Service::
00376 jsonExport (const stdair::AirlineCode_T& iAirlineCode,
00377             const stdair::FlightNumber_T& iFlightNumber,
00378             const stdair::Date_T& iDepartureDate) const {
00379
00380     // Retrieve the AIRINV service context
00381     if (_airinvServiceContext == NULL) {
00382         throw stdair::NonInitialisedServiceException ("The AirInv service "
00383                                                         "has not been initialised")
;
00384     }
00385     assert (_airinvServiceContext != NULL);
00386
00387     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00388
00389     // Retrieve the STDAIR service object from the (AIRINV) service context
00390     stdair::STDAIR_Service& lSTDAIR_Service =
00391         lAIRINV_ServiceContext.getSTDAIR_Service();
00392
00393     // Delegate the JSON export to the dedicated service
00394     return lSTDAIR_Service.jsonExport (iAirlineCode, iFlightNumber,
00395                                       iDepartureDate);
00396 }
00397
00398 // ////////////////////////////////////////
00399 std::string AIRINV_Service::
00400 list (const stdair::AirlineCode_T& iAirlineCode,
00401       const stdair::FlightNumber_T& iFlightNumber) const {
00402     std::ostringstream oFlightListStr;
00403
00404     if (_airinvServiceContext == NULL) {
00405         throw stdair::NonInitialisedServiceException ("The AirInv service "
00406                                                         "has not been initialised")
;
00407     }
00408     assert (_airinvServiceContext != NULL);
00409     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00410
00411     // \todo Check that the current AIRINV_Service is actually operating for

```

```

00412     //         the given airline
00413
00414     // Retrieve the STDAIR service object from the (AirInv) service context
00415     stdair::STDAIR_Service& lSTDAIR_Service =
00416         lAIRINV_ServiceContext.getSTDAIR_Service();
00417
00418     // Delegate the BOM display to the dedicated service
00419     return lSTDAIR_Service.list (iAirlineCode, iFlightNumber);
00420 }
00421
00422 // //////////////////////////////////////
00423 bool AIRINV_Service::
00424 check (const stdair::AirlineCode_T& iAirlineCode,
00425        const stdair::FlightNumber_T& iFlightNumber,
00426        const stdair::Date_T& iDepartureDate) const {
00427     std::ostringstream oFlightListStr;
00428
00429     if (_airinvServiceContext == NULL) {
00430         throw stdair::NonInitialisedServiceException ("The AirInv service "
00431             "has not been initialised");
00432     };
00433     assert (_airinvServiceContext != NULL);
00434     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00435
00436     // \todo Check that the current AIRINV_Service is actually operating for
00437     //         the given airline
00438
00439     // Retrieve the STDAIR service object from the (AirInv) service context
00440     stdair::STDAIR_Service& lSTDAIR_Service =
00441         lAIRINV_ServiceContext.getSTDAIR_Service();
00442
00443     // Delegate the BOM display to the dedicated service
00444     return lSTDAIR_Service.check (iAirlineCode, iFlightNumber, iDepartureDate);
00445 }
00446
00447 // //////////////////////////////////////
00448 std::string AIRINV_Service::csvDisplay() const {
00449
00450     // Retrieve the AIRINV service context
00451     if (_airinvServiceContext == NULL) {
00452         throw stdair::NonInitialisedServiceException ("The AirInv service "
00453             "has not been initialised");
00454     };
00455     assert (_airinvServiceContext != NULL);
00456     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00457
00458     // Retrieve the STDAIR service object from the (AirInv) service context
00459     stdair::STDAIR_Service& lSTDAIR_Service =
00460         lAIRINV_ServiceContext.getSTDAIR_Service();
00461
00462     // Delegate the BOM display to the dedicated service
00463     return lSTDAIR_Service.csvDisplay();
00464 }
00465
00466 // //////////////////////////////////////
00467 std::string AIRINV_Service::
00468 csvDisplay (const stdair::AirlineCode_T& iAirlineCode,
00469            const stdair::FlightNumber_T& iFlightNumber,
00470            const stdair::Date_T& iDepartureDate) const {
00471
00472     // Retrieve the AIRINV service context
00473     if (_airinvServiceContext == NULL) {
00474         throw stdair::NonInitialisedServiceException ("The AirInv service "
00475             "has not been initialised");
00476     };
00477     assert (_airinvServiceContext != NULL);
00478     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00479
00480     // Retrieve the STDAIR service object from the (AirInv) service context

```



```

00483     stdair::STDAIR_Service& lSTDAIR_Service =
00484         lAIRINV_ServiceContext.getSTDAIR_Service();
00485
00486     // Delegate the BOM display to the dedicated service
00487     return lSTDAIR_Service.csvDisplay (iAirlineCode, iFlightNumber,
00488         iDepartureDate);
00489 }
00490
00491 // //////////////////////////////////////
00492 stdair::RMEventList_T AIRINV_Service::
00493 initRMEvents (const stdair::Date_T& iStartDate,
00494     const stdair::Date_T& iEndDate) {
00495
00496     if (_airinvServiceContext == NULL) {
00497         throw stdair::NonInitialisedServiceException ("The AirInv service "
00498             "has not been initialised")
00499     };
00500
00501     assert (_airinvServiceContext != NULL);
00502     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00503
00504     // \todo Retrieve the corresponding inventory
00505     stdair::STDAIR_Service& lSTDAIR_Service =
00506         lAIRINV_ServiceContext.getSTDAIR_Service();
00507     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00508
00509     stdair::RMEventList_T oRMEventList;
00510     const stdair::InventoryList_T& lInventoryList =
00511         stdair::BomManager::getList<stdair::Inventory> (lBomRoot);
00512     for (stdair::InventoryList_T::const_iterator itInv = lInventoryList.begin()
00513         ;
00514         itInv != lInventoryList.end(); ++itInv) {
00515         const stdair::Inventory* lInv_ptr = *itInv;
00516         assert (lInv_ptr != NULL);
00517
00518         InventoryManager::initRMEvents (*lInv_ptr, oRMEventList,
00519             iStartDate, iEndDate);
00520     }
00521     return oRMEventList;
00522 }
00523 // //////////////////////////////////////
00524 void AIRINV_Service::
00525 calculateAvailability (stdair::TravelSolutionStruct& ioTravelSolution,
00526     const stdair::PartnershipTechnique&
00527     iPartnershipTechnique) {
00528
00529     if (_airinvServiceContext == NULL) {
00530         throw stdair::NonInitialisedServiceException ("The AirInv service "
00531             "has not been initialised")
00532     };
00533
00534     assert (_airinvServiceContext != NULL);
00535     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00536
00537     // Retrieve the corresponding inventory.
00538     stdair::STDAIR_Service& lSTDAIR_Service =
00539         lAIRINV_ServiceContext.getSTDAIR_Service();
00540     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00541
00542     // Delegate the booking to the dedicated command
00543     stdair::BasChronometer lAvlChronometer;
00544     lAvlChronometer.start();
00545     InventoryManager::calculateAvailability (lBomRoot, ioTravelSolution,
00546         iPartnershipTechnique);
00547     // const double lAvlMeasure = lAvlChronometer.elapsed();
00548
00549     // DEBUG
00550     // STDAIR_LOG_DEBUG ("Availability retrieval: " << lAvlMeasure << " - "
00551         // << lAIRINV_ServiceContext.display());
00552 }
00553 // //////////////////////////////////////

```

```

00552 bool AIRINV_Service::sell (const std::string& iSegmentDateKey,
00553                           const stdair::ClassCode_T& iClassCode,
00554                           const stdair::PartySize_T& iPartySize) {
00555     bool isSellSuccessful = false;
00556
00557     if (_airinvServiceContext == NULL) {
00558         throw stdair::NonInitialisedServiceException ("The AirInv service "
00559                                                       "has not been initialised")
00560     };
00561     assert (_airinvServiceContext != NULL);
00562     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00563
00564     // \todo Check that the current AIRINV_Service is actually operating for
00565     //         the given airline (inventory key)
00566     // Retrieve the corresponding inventory key
00567     const stdair::InventoryKey& lInventoryKey =
00568         stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00569
00570     // Retrieve the root of the BOM tree
00571     stdair::STDAIR_Service& lSTDAIR_Service =
00572         lAIRINV_ServiceContext.getSTDAIR_Service();
00573     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00574
00575     // Retrieve the corresponding inventory
00576     stdair::Inventory& lInventory = stdair::BomManager::
00577         getObject<stdair::Inventory> (lBomRoot, lInventoryKey.toString());
00578
00579     // Delegate the booking to the dedicated command
00580     stdair::BasChronometer lSellChronometer; lSellChronometer.start();
00581     isSellSuccessful = InventoryManager::sell (lInventory, iSegmentDateKey,
00582                                               iClassCode, iPartySize);
00583     // const double lSellMeasure = lSellChronometer.elapsed();
00584
00585     // DEBUG
00586     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
00587                       << lAIRINV_ServiceContext.display());
00588
00589     return isSellSuccessful;
00590 }
00591
00592 ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00593 bool AIRINV_Service::cancel (const std::string& iSegmentDateKey,
00594                             const stdair::ClassCode_T& iClassCode,
00595                             const stdair::PartySize_T& iPartySize) {
00596     bool isCancellationSuccessful = false;
00597
00598     if (_airinvServiceContext == NULL) {
00599         throw stdair::NonInitialisedServiceException ("The AirInv service "
00600                                                       "has not been initialised")
00601     };
00602     assert (_airinvServiceContext != NULL);
00603     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00604
00605     // \todo Check that the current AIRINV_Service is actually operating for
00606     //         the given airline (inventory key)
00607     // Retrieve the corresponding inventory key
00608     const stdair::InventoryKey& lInventoryKey =
00609         stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00610
00611     // Retrieve the root of the BOM tree
00612     stdair::STDAIR_Service& lSTDAIR_Service =
00613         lAIRINV_ServiceContext.getSTDAIR_Service();
00614     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00615
00616     // Retrieve the corresponding inventory
00617     stdair::Inventory& lInventory = stdair::BomManager::
00618         getObject<stdair::Inventory> (lBomRoot, lInventoryKey.toString());
00619
00620     // Delegate the booking to the dedicated command
00621     stdair::BasChronometer lCancellationChronometer;
00622     lCancellationChronometer.start();
00623     isCancellationSuccessful = InventoryManager::cancel (lInventory,

```

```

00624                                     iSegmentDateKey,
00625                                     iClassCode,iPartySize)
00626 ;
00627 // const double lCancellationMeasure = lCancellationChronometer.elapsed();
00628 // DEBUG
00629 // STDAIR_LOG_DEBUG ("Booking cancellation: "
00630 //                  << lCancellationMeasure << " - "
00631 //                  << lAIRINV_ServiceContext.display());
00632
00633     return isCancellationSuccessful;
00634 }
00635
00636 // //////////////////////////////////////
00637 void AIRINV_Service::takeSnapshots (const stdair::AirlineCode_T& iAirlineCode
00638                                     const stdair::DateTime_T& iSnapshotTime)
00639 {
00640     if (_airinvServiceContext == NULL) {
00641         throw stdair::NonInitialisedServiceException ("The AirInv service "
00642                                                         "has not been initialised")
00643     };
00644     assert (_airinvServiceContext != NULL);
00645     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00646
00647     // TODO: Retrieve the corresponding inventory.
00648     stdair::STDAIR_Service& lSTDAIR_Service =
00649         lAIRINV_ServiceContext.getSTDAIR_Service();
00650     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00651
00652     const stdair::InventoryList_T lInventoryList =
00653         stdair::BomManager::getList<stdair::Inventory> (lBomRoot);
00654     for (stdair::InventoryList_T::const_iterator itInv = lInventoryList.begin()
00655 ;
00656         itInv != lInventoryList.end(); ++itInv) {
00657         const stdair::Inventory* lInv_ptr = *itInv;
00658         assert (lInv_ptr != NULL);
00659         InventoryManager::takeSnapshots (*lInv_ptr, iSnapshotTime);
00660     }
00661 }
00662
00663 // //////////////////////////////////////
00664 void AIRINV_Service::optimise (const stdair::AirlineCode_T& iAirlineCode,
00665                               const stdair::KeyDescription_T& iFDDescription
00666                               const stdair::DateTime_T& iRMEEventTime,
00667                               const stdair::ForecastingMethod&
00668                               iForecastingMethod,
00669                               const stdair::PartnershipTechnique&
00670                               iPartnershipTechnique) {
00671     if (_airinvServiceContext == NULL) {
00672         throw stdair::NonInitialisedServiceException ("The AirInv service "
00673                                                         "has not been initialised")
00674     };
00675     assert (_airinvServiceContext != NULL);
00676     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00677
00678     // Retrieve the corresponding inventory & flight-date
00679     stdair::STDAIR_Service& lSTDAIR_Service =
00680         lAIRINV_ServiceContext.getSTDAIR_Service();
00681     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00682     stdair::Inventory& lInventory =
00683         stdair::BomManager::getObject<stdair::Inventory> (lBomRoot, iAirlineCode)
00684 ;
00685     stdair::FlightDate& lFlightDate =
00686         stdair::BomManager::getObject<stdair::FlightDate> (lInventory,
00687                                                         iFDDescription);
00688
00689     // Retrieve the RMOL service.
00690     RMOL::RMOL_Service& lRMOL_Service =lAIRINV_ServiceContext.getRMOL_Service()

```

```

;
00688
00689 // Optimise the flight-date.
00690 bool isOptimised = lRMOL_Service.optimise (lFlightDate, iRMEventTime,
00691                                           iForecastingMethod,
                                           iPartnershipTechnique);
00692
00693 // Update the inventory with the new controls.
00694 if (isOptimised == true) {
00695     InventoryManager::updateBookingControls (lFlightDate);
00696 }
00697 }
00698 }

```

25.223 airinv/service/AIRINV_ServiceContext.cpp File Reference

```

#include <cassert> #include <sstream> #include <airinv/basic/-
BasConst_AIRINV_Service.hpp> #include <airinv/service/AI-
RINV_ServiceContext.hpp>

```

Namespaces

- namespace [AIRINV](#)

25.224 AIRINV_ServiceContext.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // AirInv
00008 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00009 #include <airinv/service/AIRINV_ServiceContext.hpp>
00010
00011 namespace AIRINV {
00012
00013 // //////////////////////////////////////
00014 AIRINV_ServiceContext::AIRINV_ServiceContext()
00015 : _ownStdairService (false), _airlineCode (DEFAULT_AIRLINE_CODE) {
00016 }
00017
00018 // //////////////////////////////////////
00019 AIRINV_ServiceContext::
00020 AIRINV_ServiceContext (const stdair::AirlineCode_T& iAirlineCode)
00021 : _ownStdairService (false), _airlineCode (iAirlineCode) {
00022 }
00023
00024 // //////////////////////////////////////
00025 AIRINV_ServiceContext::AIRINV_ServiceContext (const AIRINV_ServiceContext&)
00026 : _ownStdairService (false), _airlineCode (DEFAULT_AIRLINE_CODE) {
00027 }
00028
00029 // //////////////////////////////////////
00030 AIRINV_ServiceContext::~AIRINV_ServiceContext() {
00031 }
00032
00033 // //////////////////////////////////////
00034 const std::string AIRINV_ServiceContext::shortDisplay() const {
00035     std::ostringstream oStr;
00036     oStr << "AIRINV_ServiceContext[" << _airlineCode
00037         << "]" -- Owns StdAir service: " << _ownStdairService;
00038     return oStr.str();

```

```

00039     }
00040
00041     // //////////////////////////////////////
00042     const std::string AIRINV_ServiceContext::display() const {
00043         std::ostringstream ostr;
00044         ostr << shortDisplay();
00045         return ostr.str();
00046     }
00047
00048     // //////////////////////////////////////
00049     const std::string AIRINV_ServiceContext::describe() const {
00050         return shortDisplay();
00051     }
00052
00053     // //////////////////////////////////////
00054     void AIRINV_ServiceContext::reset() {
00055         if (_ownStdairService == true) {
00056             _stdairService.reset();
00057         }
00058     }
00059
00060 }

```

25.225 airinv/service/AIRINV_ServiceContext.hpp File Reference

```

#include <string> #include <boost/shared_ptr.hpp> #include
<stdair/stdair_service_types.hpp> #include <stdair/service/-
ServiceAbstract.hpp> #include <rmol/RMOL_Types.hpp> ×
#include <airrac/AIRAC_Types.hpp> #include <airinv/AI-
RINV_Types.hpp>

```

Classes

- class [AIRINV::AIRINV_ServiceContext](#)
Class holding the context of the AirInv services.

Namespaces

- namespace [AIRINV](#)

25.226 AIRINV_ServiceContext.hpp

```

00001 #ifndef __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
00002 #define __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/service/ServiceAbstract.hpp>
00014 // RMOL
00015 #include <rmol/RMOL_Types.hpp>
00016 // AIRRAC
00017 #include <airrac/AIRAC_Types.hpp>

```

```

00018 // AirInv
00019 #include <airinv/AIRINV_Types.hpp>
00020
00021 namespace AIRINV {
00022
00026 class AIRINV_ServiceContext : public stdair::ServiceAbstract {
00032     friend class AIRINV_Service;
00033     friend class FacAirinvServiceContext;
00034
00035 private:
00036     // ////////////////////////////////// Getters //////////////////////////////////
00040     stdair::AirlineCode_T getAirlineCode() const {
00041         return _airlineCode;
00042     }
00043
00047     stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {
00048         return _stdairService;
00049     }
00050
00054     stdair::STDAIR_Service& getSTDAIR_Service() const {
00055         assert (_stdairService != NULL);
00056         return *_stdairService;
00057     }
00058
00062     const bool getOwnStdairServiceFlag() const {
00063         return _ownStdairService;
00064     }
00065
00069     RMOL::RMOL_Service& getRMOL_Service() const {
00070         assert (_rmolService != NULL);
00071         return *_rmolService;
00072     }
00073
00077     AIRRAC::AIRRAC_Service& getAIRRAC_Service() const {
00078         assert (_airracService != NULL);
00079         return *_airracService;
00080     }
00081
00082 private:
00083     // ////////////////////////////////// Setters //////////////////////////////////
00088     void setAirlineCode (const stdair::AirlineCode_T& iAirlineCode) {
00089         _airlineCode = iAirlineCode;
00090     }
00091
00095     void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00096                             const bool iOwnStdairService) {
00097         _stdairService = ioSTDAIR_ServicePtr;
00098         _ownStdairService = iOwnStdairService;
00099     }
00100
00104     void setRMOL_Service (RMOL::RMOL_ServicePtr_T ioRMOL_ServicePtr) {
00105         _rmolService = ioRMOL_ServicePtr;
00106     }
00107
00111     void setAIRRAC_Service (AIRRAC::AIRRAC_ServicePtr_T ioAIRRAC_ServicePtr) {
00112         _airracService = ioAIRRAC_ServicePtr;
00113     }
00114
00115 private:
00116     // ////////////////////////////////// Display Methods //////////////////////////////////
00121     const std::string shortDisplay() const;
00122
00126     const std::string display() const;
00127
00131     const std::string describe() const;
00132
00133 private:
00136
00139     AIRINV_ServiceContext (const stdair::AirlineCode_T&);
00143     AIRINV_ServiceContext ();
00147     AIRINV_ServiceContext (const AIRINV_ServiceContext&);

```

```

00148
00152     ~AIRINV_ServiceContext();
00153
00157     void reset();
00158
00159
00160     private:
00161         // ////////////////////////////////// Children //////////////////////////////////
00165         stdair::STDAIR_ServicePtr_T _stdairService;
00166
00170         bool _ownStdairService;
00171
00175         RMOL::RMOL_ServicePtr_T _rmolService;
00176
00180         AIRRAC::AIRRAC_ServicePtr_T _airracService;
00181
00182     private:
00183         // ////////////////////////////////// Attributes //////////////////////////////////
00188         stdair::AirlineCode_T _airlineCode;
00189     };
00190
00191 }
00192 #endif // __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP

```

25.227 airinv/service/ServiceAbstract.cpp File Reference

```
#include <airinv/service/ServiceAbstract.hpp>
```

Namespaces

- namespace [AIRINV](#)

25.228 ServiceAbstract.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // AIRINV
00005 #include <airinv/service/ServiceAbstract.hpp>
00006
00007 namespace AIRINV {
00008
00009 }

```

25.229 airinv/service/ServiceAbstract.hpp File Reference

```
#include <iosfwd>
```

Classes

- class [AIRINV::ServiceAbstract](#)

Namespaces

- namespace [AIRINV](#)

Functions

- `template<class charT , class traits >`
`std::basic_ostream< charT, traits > & operator<< (std::basic_ostream< charT,`
`traits > &ioOut, const AIRINV::ServiceAbstract &iService)`
- `template<class charT , class traits >`
`std::basic_istream< charT, traits > & operator>> (std::basic_istream< charT,`
`traits > &ioIn, AIRINV::ServiceAbstract &iService)`

25.229.1 Function Documentation

25.229.1.1 `template<class charT , class traits > std::basic_ostream<charT, traits>&`
`operator<< (std::basic_ostream< charT, traits > & ioOut, const`
`AIRINV::ServiceAbstract & iService) [inline]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (p653) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 42 of file [ServiceAbstract.hpp](#).

25.229.1.2 `template<class charT , class traits > std::basic_istream<charT,`
`traits>& operator>> (std::basic_istream< charT, traits > & ioIn,`
`AIRINV::ServiceAbstract & ioService) [inline]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (pp655-657) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 70 of file [ServiceAbstract.hpp](#).

References [AIRINV::ServiceAbstract::fromStream\(\)](#).

25.230 ServiceAbstract.hpp

```

00001 #ifndef __AIRINV_SVC_SERVICEABSTRACT_HPP
00002 #define __AIRINV_SVC_SERVICEABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <iosfwd>
00009 // #include <sstream>
00010
00011 namespace AIRINV {
00012
00013     class ServiceAbstract {
00014     public:
00015
00016         virtual ~ServiceAbstract() {}
00017
00018         virtual void toStream (std::ostream& ioOut) const {}
00019
00020         virtual void fromStream (std::istream& ioIn) {}
00021
00022     protected:

```



```

00030     ServiceAbstract() {}
00031 };
00032 }
00033
00039 template <class charT, class traits>
00040 inline
00041 std::basic_ostream<charT, traits>&
00042 operator<< (std::basic_ostream<charT, traits>& ioOut,
00043           const AIRINV::ServiceAbstract& iService) {
00044     std::basic_ostringstream<charT,traits> ostr;
00050     ostr.copyfmt (ioOut);
00051     ostr.width (0);
00052
00053     // Fill string stream
00054     iService.toStream (ostr);
00055
00056     // Print string stream
00057     ioOut << ostr.str();
00058
00059     return ioOut;
00060 }
00061
00067 template <class charT, class traits>
00068 inline
00069 std::basic_istream<charT, traits>&
00070 operator>> (std::basic_istream<charT, traits>& ioIn,
00071           AIRINV::ServiceAbstract& ioService) {
00072     // Fill Service object with input stream
00073     ioService.fromStream (ioIn);
00074     return ioIn;
00075 }
00076
00077 #endif // __AIRINV_SVC_SERVICEABSTRACT_HPP

```

25.231 airinv/ui/cmdline/airinv.cpp File Reference

25.232 airinv.cpp

```

00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 #include <boost/regex.hpp>
00015 #include <boost/swap.hpp>
00016 #include <boost/algorithm/string/case_conv.hpp>
00017 // StdAir
00018 #include <stdair/basic/BasLogParams.hpp>
00019 #include <stdair/basic/BasDBParams.hpp>
00020 #include <stdair/service/Logger.hpp>
00021 // AirInv
00022 #include <airinv/AIRINV_Master_Service.hpp>
00023 #include <airinv/config/airinv-paths.hpp>
00024 // GNU Readline Wrapper
00025 #include <airinv/ui/cmdline/SReadline.hpp>
00026
00027 // ////////// Constants //////////
00031 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinv.log");
00032
00036 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00037                                                         "/invdump01.csv");
00041 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00042                                                         "/schedule01.csv");
00046 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00047                                                    "/ond01.csv");

```

```

00048
00052 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00053                                                    "/yieldstore01.csv");
00054
00059 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00060
00065 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00066
00070 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00071
00076 typedef std::vector<std::string> TokenList_T;
00077
00081 struct Command_T {
00082     typedef enum {
00083         NOP = 0,
00084         QUIT,
00085         HELP,
00086         LIST,
00087         DISPLAY,
00088         SELECT,
00089         SELL,
00090         LAST_VALUE
00091     } Type_T;
00092 };
00093
00094 // ////////// Parsing of Options & Configuration //////////
00095 // A helper function to simplify the main part.
00096 template<class T> std::ostream& operator<< (std::ostream& os,
00097                                           const std::vector<T>& v) {
00098     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00099     return os;
00100 }
00101
00105 int readConfiguration (int argc, char* argv[],
00106                       bool& ioIsBuiltin, bool& ioIsForSchedule,
00107                       stdair::Filename_T& ioInventoryFilename,
00108                       stdair::Filename_T& ioScheduleInputFilename,
00109                       stdair::Filename_T& ioODInputFilename,
00110                       stdair::Filename_T& ioYieldInputFilename,
00111                       std::string& ioLogFilename) {
00112     // Default for the built-in input
00113     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00114
00115     // Default for the inventory or schedule option
00116     ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00117
00118     // Declare a group of options that will be allowed only on command line
00119     boost::program_options::options_description generic ("Generic options");
00120     generic.add_options()
00121         ("prefix", "print installation prefix")
00122         ("version,v", "print version string")
00123         ("help,h", "produce help message");
00124
00125     // Declare a group of options that will be allowed both on command
00126     // line and in config file
00127
00128     boost::program_options::options_description config ("Configuration");
00129     config.add_options()
00130         ("builtin,b",
00131          "The sample BOM tree can be either built-in or parsed from an input file.
00132          That latter must then be given with the -i/--inventory or -s/--schedule option")
00133         ("for_schedule,f",
00134          "The BOM tree should be built from a schedule file (instead of from an
00135          inventory dump)")
00136         ("inventory,i",
00137          boost::program_options::value< std::string >(&ioInventoryFilename)->
00138          default_value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00139          "(CSV) input file for the inventory")
00140         ("schedule,s",
00141          boost::program_options::value< std::string >(&ioScheduleInputFilename)->
00142          default_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00143          "(CSV) input file for the schedule")
00144         ("ond,o",
00145          boost::program_options::value< std::string >(&ioODInputFilename)->

```

```

        default_value(K_AIRINV_DEFAULT_OND_FILENAME),
00142     "(CSV) input file for the O&D")
00143     ("yield,y",
00144     boost::program_options::value< std::string >(&ioYieldInputFilename)->
        default_value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00145     "(CSV) input file for the yield")
00146     ("log,l",
00147     boost::program_options::value< std::string >(&ioLogFilename)->
        default_value(K_AIRINV_DEFAULT_LOG_FILENAME),
00148     "Filename for the logs")
00149     ;
00150
00151     // Hidden options, will be allowed both on command line and
00152     // in config file, but will not be shown to the user.
00153     boost::program_options::options_description hidden ("Hidden options");
00154     hidden.add_options()
00155         ("copyright",
00156         boost::program_options::value< std::vector<std::string> >(),
00157         "Show the copyright (license)");
00158
00159     boost::program_options::options_description cmdline_options;
00160     cmdline_options.add(generic).add(config).add(hidden);
00161
00162     boost::program_options::options_description config_file_options;
00163     config_file_options.add(config).add(hidden);
00164     boost::program_options::options_description visible ("Allowed options");
00165     visible.add(generic).add(config);
00166
00167     boost::program_options::positional_options_description p;
00168     p.add ("copyright", -1);
00169
00170     boost::program_options::variables_map vm;
00171     boost::program_options::
00172         store (boost::program_options::command_line_parser (argc, argv).
00173             options (cmdline_options).positional(p).run(), vm);
00174
00175     std::ifstream ifs ("airinv.cfg");
00176     boost::program_options::store (parse_config_file (ifs, config_file_options),
00177         vm);
00178     boost::program_options::notify (vm);
00179
00180     if (vm.count ("help")) {
00181         std::cout << visible << std::endl;
00182         return K_AIRINV_EARLY_RETURN_STATUS;
00183     }
00184
00185     if (vm.count ("version")) {
00186         std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00187         return K_AIRINV_EARLY_RETURN_STATUS;
00188     }
00189
00190     if (vm.count ("prefix")) {
00191         std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192         return K_AIRINV_EARLY_RETURN_STATUS;
00193     }
00194
00195     if (vm.count ("builtin")) {
00196         ioIsBuiltin = true;
00197     }
00198     const std::string isBuiltinStr = (ioIsBuiltin == true)? "yes": "no";
00199     std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00200
00201     if (vm.count ("for_schedule")) {
00202         ioIsForSchedule = true;
00203     }
00204     const std::string isForScheduleStr = (ioIsForSchedule == true)? "yes": "no";
00205     std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206         << std::endl;
00207
00208     if (ioIsBuiltin == false) {
00209
00210         if (ioIsForSchedule == false) {
00211             // The BOM tree should be built from parsing an inventory dump
00212             if (vm.count ("inventory")) {

```

```

00213         ioInventoryFilename = vm["inventory"].as< std::string >();
00214         std::cout << "Input inventory filename is: " << ioInventoryFilename
00215             << std::endl;
00216     }
00217     } else {
00218         // The built-in option is not selected. However, no inventory dump
00219         // file is specified
00220         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00221             << " -f/--for_schedule and -s/--schedule options "
00222             << "must be specified" << std::endl;
00223     }
00224 }
00225 } else {
00226     // The BOM tree should be built from parsing a schedule (and O&D) file
00227     if (vm.count ("schedule")) {
00228         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230             << std::endl;
00231     }
00232     } else {
00233         // The built-in option is not selected. However, no schedule file
00234         // is specified
00235         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236             << " -f/--for_schedule and -s/--schedule options "
00237             << "must be specified" << std::endl;
00238     }
00239 }
00240 if (vm.count ("ond")) {
00241     ioODInputFilename = vm["ond"].as< std::string >();
00242     std::cout << "Input O&D filename is: " << ioODInputFilename << std
00243 ::endl;
00244 }
00245 if (vm.count ("yield")) {
00246     ioYieldInputFilename = vm["yield"].as< std::string >();
00247     std::cout << "Input yield filename is: " << ioYieldInputFilename << std
00248 ::endl;
00249 }
00250 }
00251 if (vm.count ("log")) {
00252     ioLogFilename = vm["log"].as< std::string >();
00253     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00254 }
00255 }
00256 return 0;
00257 }
00258 }
00259 // //////////////////////////////////////
00260 void initReadline (swift::SReadline& ioInputReader) {
00261 // Prepare the list of my own completers
00262 std::vector<std::string> Completers;
00263 // The following is supported:
00264 // - "identifiers"
00265 // - special identifier %file - means to perform a file name completion
00266 Completers.push_back ("help");
00267 Completers.push_back ("list %airline_code %flight_number");
00268 Completers.push_back ("select %airline_code %flight_number %flight_date");
00269 Completers.push_back ("display");
00270 Completers.push_back ("sell %booking_class %party_size %origin %destination");
00271 ;
00272 Completers.push_back ("quit");
00273 }
00274 // Now register the completers.
00275 // Actually it is possible to re-register another set at any time
00276 ioInputReader.RegisterCompletions (Completers);
00277 }
00278 }
00279 // //////////////////////////////////////
00280 Command_T::Type_T extractCommand (TokenList_T& ioTokenList) {

```

```

00284 Command_T::Type_T oCommandType = Command_T::LAST_VALUE;
00285
00286 // Interpret the user input
00287 if (ioTokenList.empty() == false) {
00288     TokenList_T::iterator itTok = ioTokenList.begin();
00289     std::string lCommand(*itTok);
00290     boost::algorithm::to_lower(lCommand);
00291
00292     if (lCommand == "help") {
00293         oCommandType = Command_T::HELP;
00294     } else if (lCommand == "list") {
00295         oCommandType = Command_T::LIST;
00296     } else if (lCommand == "display") {
00297         oCommandType = Command_T::DISPLAY;
00298     } else if (lCommand == "select") {
00299         oCommandType = Command_T::SELECT;
00300     } else if (lCommand == "sell") {
00301         oCommandType = Command_T::SELL;
00302     } else if (lCommand == "quit") {
00303         oCommandType = Command_T::QUIT;
00304     }
00305
00306     // Remove the first token (the command), as the corresponding information
00307     // has been extracted in the form of the returned command type enumeration
00308     ioTokenList.erase(itTok);
00309
00310 } else {
00311     oCommandType = Command_T::NOP;
00312 }
00313 return oCommandType;
00314 }
00315
00316 ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00317 void parseFlightKey(const TokenList_T& iTokenList,
00318                    stdair::AirlineCode_T& ioAirlineCode,
00319                    stdair::FlightNumber_T& ioFlightNumber) {
00320     // Interpret the user input
00321     if (iTokenList.empty() == false) {
00322
00323         // Read the airline code
00324         TokenList_T::const_iterator itTok = iTokenList.begin();
00325         if (itTok->empty() == false) {
00326             ioAirlineCode = *itTok;
00327             boost::algorithm::to_upper(ioAirlineCode);
00328         }
00329
00330         // Read the flight-number
00331         ++itTok;
00332         if (itTok != iTokenList.end()) {
00333             if (itTok->empty() == false) {
00334                 try {
00335                     ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T>(*itTok);
00336                 } catch (boost::bad_lexical_cast& eCast) {
00337                     std::cerr << "The flight number ('" << *itTok
00338                               << "') cannot be understood. "
00339                               << "The default value (all) is kept."
00340                               << std::endl;
00341                     return;
00342                 }
00343             }
00344         } else {
00345             return;
00346         }
00347     }
00348 }

```

```

00357     }
00358 }
00359
00360 ///////////////////////////////////////////////////////////////////
00361 void parseFlightDateKey (const TokenList_T& iTokenList,
00362                         stdair::AirlineCode_T& ioAirlineCode,
00363                         stdair::FlightNumber_T& ioFlightNumber,
00364                         stdair::Date_T& ioDepartureDate) {
00365     //
00366     const std::string kMonthStr[12] = {"Jan", "Feb", "Mar", "Apr", "May", "Jun",
00367                                         "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"};
00368     //
00369     unsigned short ioDepartureDateYear = ioDepartureDate.year();
00370     unsigned short ioDepartureDateMonth = ioDepartureDate.month();
00371     std::string ioDepartureDateMonthStr = kMonthStr[ioDepartureDateMonth-1];
00372     unsigned short ioDepartureDateDay = ioDepartureDate.day();
00373
00374     // Interpret the user input
00375     if (iTokenList.empty() == false) {
00376
00377         // Read the airline code
00378         TokenList_T::const_iterator itTok = iTokenList.begin();
00379         if (itTok->empty() == false) {
00380             ioAirlineCode = *itTok;
00381             boost::algorithm::to_upper (ioAirlineCode);
00382         }
00383
00384         // Read the flight-number
00385         ++itTok;
00386         if (itTok != iTokenList.end()) {
00387             if (itTok->empty() == false) {
00388                 try {
00389                     ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok)
00390
00391 ;
00392
00393                 } catch (boost::bad_lexical_cast& eCast) {
00394                     std::cerr << "The flight number ('" << *itTok
00395                                 << "') cannot be understood. "
00396                                 << "The default value (all) is kept."
00397                                 << std::endl;
00398                     return;
00399                 }
00400             }
00401
00402         } else {
00403             return;
00404         }
00405
00406         // Read the year for the departure date
00407         ++itTok;
00408         if (itTok != iTokenList.end()) {
00409             if (itTok->empty() == false) {
00410                 try {
00411                     ioDepartureDateYear = boost::lexical_cast<unsigned short> (*itTok);
00412                     if (ioDepartureDateYear < 100) {
00413                         ioDepartureDateYear += 2000;
00414                     }
00415
00416                 } catch (boost::bad_lexical_cast& eCast) {
00417                     std::cerr << "The year of the flight departure date ('" << *itTok
00418                                 << "') cannot be understood. The default value ("
00419                                 << ioDepartureDateYear << ") is kept. " << std::endl;
00420                     return;
00421                 }
00422             }
00423         }
00424
00425     } else {
00426         return;
00427     }
00428 }
00429

```

```

00430 // Read the month for the departure date
00431 ++itTok;
00432 if (itTok != iTokenList.end()) {
00433     if (itTok->empty() == false) {
00434         try {
00435             const boost::regex lMonthRegex ("^(\\d{1,2})$");
00436             const bool isMonthANumber = regex_match (*itTok, lMonthRegex);
00437             if (isMonthANumber == true) {
00438                 const unsigned short lMonth =
00439                     boost::lexical_cast<unsigned short> (*itTok);
00440                 if (lMonth > 12) {
00441                     throw boost::bad_lexical_cast();
00442                 }
00443                 ioDepartureDateMonthStr = kMonthStr[lMonth-1];
00444             } else {
00445                 const std::string lMonthStr (*itTok);
00446                 if (lMonthStr.size() < 3) {
00447                     throw boost::bad_lexical_cast();
00448                 }
00449                 std::string lMonthStr1 (lMonthStr.substr (0, 1));
00450                 boost::algorithm::to_upper (lMonthStr1);
00451                 std::string lMonthStr23 (lMonthStr.substr (1, 2));
00452                 boost::algorithm::to_lower (lMonthStr23);
00453                 ioDepartureDateMonthStr = lMonthStr1 + lMonthStr23;
00454             }
00455         } catch (boost::bad_lexical_cast& eCast) {
00456             std::cerr << "The month of the flight departure date ('" << *itTok
00457                 << "') cannot be understood. The default value ("
00458                 << ioDepartureDateMonthStr << ") is kept. " << std::endl;
00459             return;
00460         }
00461     } else {
00462         return;
00463     }
00464 }
00465 // Read the day for the departure date
00466 ++itTok;
00467 if (itTok != iTokenList.end()) {
00468     if (itTok->empty() == false) {
00469         try {
00470             ioDepartureDateDay = boost::lexical_cast<unsigned short> (*itTok);
00471         } catch (boost::bad_lexical_cast& eCast) {
00472             std::cerr << "The day of the flight departure date ('" << *itTok
00473                 << "') cannot be understood. The default value ("
00474                 << ioDepartureDateDay << ") is kept. " << std::endl;
00475             return;
00476         }
00477     } else {
00478         return;
00479     }
00480 }
00481 // Re-compose the departure date
00482 std::ostringstream lDepartureDateStr;
00483 lDepartureDateStr << ioDepartureDateYear << "-" << ioDepartureDateMonthStr
00484     << "-" << ioDepartureDateDay;
00485 try {
00486     ioDepartureDate =
00487         boost::gregorian::from_simple_string (lDepartureDateStr.str());
00488 } catch (boost::gregorian::bad_month& eCast) {

```

```

00504         std::cerr << "The flight departure date ('" << lDepartureDateStr.str()
00505         << "') cannot be understood. The default value ("
00506         << ioDepartureDate << ") is kept." << std::endl;
00507         return;
00508     }
00509 }
00510 }
00511 }
00512 }
00513 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00514 void parseBookingClassKey (const TokenList_T& iTokenList,
00515                          stdair::ClassCode_T& ioBookingClass,
00516                          stdair::PartySize_T& ioPartySize,
00517                          stdair::AirportCode_T& ioOrigin,
00518                          stdair::AirportCode_T& ioDestination) {
00519     // Interpret the user input
00520     if (iTokenList.empty() == false) {
00521         // Read the booking class
00522         TokenList_T::const_iterator itTok = iTokenList.begin();
00523         if (itTok->empty() == false) {
00524             ioBookingClass = *itTok;
00525             boost::algorithm::to_upper (ioBookingClass);
00526         }
00527         // Read the party size
00528         ++itTok;
00529         if (itTok != iTokenList.end()) {
00530             if (itTok->empty() == false) {
00531                 try {
00532                     ioPartySize = boost::lexical_cast<stdair::PartySize_T> (*itTok);
00533                 } catch (boost::bad_lexical_cast& eCast) {
00534                     std::cerr << "The party size ('" << *itTok
00535                     << "') cannot be understood. The default value ("
00536                     << ioPartySize << ") is kept." << std::endl;
00537                     return;
00538                 }
00539             } else {
00540                 return;
00541             }
00542         }
00543         // Read the origin
00544         ++itTok;
00545         if (itTok != iTokenList.end()) {
00546             if (itTok->empty() == false) {
00547                 ioOrigin = *itTok;
00548                 boost::algorithm::to_upper (ioOrigin);
00549             } else {
00550                 return;
00551             }
00552         }
00553         // Read the destination
00554         ++itTok;
00555         if (itTok != iTokenList.end()) {
00556             if (itTok->empty() == false) {
00557                 ioDestination = *itTok;
00558                 boost::algorithm::to_upper (ioDestination);
00559             } else {
00560                 return;
00561             }
00562         }
00563     }
00564 }
00565 }
00566 }
00567 }
00568 }
00569 }
00570 }
00571 }
00572 }
00573 }
00574 }
00575 }
00576 }
00577 }

```



```

00578 // //////////////////////////////////////
00579 std::string toString (const TokenList_T& iTokenList) {
00580     std::ostringstream oStr;
00581
00582     // Re-create the string with all the tokens, trimmed by read-line
00583     unsigned short idx = 0;
00584     for (TokenList_T::const_iterator iTok = iTokenList.begin();
00585          iTok != iTokenList.end(); ++iTok, ++idx) {
00586         if (idx != 0) {
00587             oStr << " ";
00588         }
00589         oStr << *iTok;
00590     }
00591
00592     return oStr.str();
00593 }
00594
00595 // //////////////////////////////////////
00596 TokenList_T extractTokenList (const TokenList_T& iTokenList,
00597                               const std::string& iRegularExpression) {
00598     TokenList_T oTokenList;
00599
00600     // Re-create the string with all the tokens (which had been trimmed
00601     // by read-line)
00602     const std::string lFullLine = toString (iTokenList);
00603
00604     // See the caller for the regular expression
00605     boost::regex expression (iRegularExpression);
00606
00607     std::string::const_iterator start = lFullLine.begin();
00608     std::string::const_iterator end = lFullLine.end();
00609
00610     boost::match_results<std::string::const_iterator> what;
00611     boost::match_flag_type flags = boost::match_default | boost::format_sed;
00612     regex_search (start, end, what, expression, flags);
00613
00614     // Put the matched strings in the list of tokens to be returned back
00615     // to the caller
00616     const unsigned short lMatchSetSize = what.size();
00617     for (unsigned short matchIdx = 1; matchIdx != lMatchSetSize; ++matchIdx) {
00618         const std::string lMatchedString (std::string (what[matchIdx].first,
00619                                                         what[matchIdx].second));
00620
00621         //if (lMatchedString.empty() == false) {
00622             oTokenList.push_back (lMatchedString);
00623         //}
00624     }
00625
00626     // DEBUG
00627     // std::cout << "After (token list): " << oTokenList << std::endl;
00628
00629     return oTokenList;
00630 }
00631
00632 // //////////////////////////////////////
00633 TokenList_T extractTokenListForFlight (const TokenList_T& iTokenList) {
00634     const std::string lRegEx ("^([[:alpha:]]{2,3})?"
00635                               "[[:space:]]*([[:digit:]]{1,4})?$");
00636
00637     //
00638     const TokenList_T oTokenList = extractTokenList (iTokenList, lRegEx);
00639     return oTokenList;
00640 }
00641
00642 // //////////////////////////////////////
00643 TokenList_T extractTokenListForFlightDate (const TokenList_T& iTokenList) {
00644     const std::string lRegEx ("^([[:alpha:]]{2,3})?"
00645                               "[[:space:]]*([[:digit:]]{1,4})?"
00646                               "[/ ]*"
00647                               "([[:digit:]]{2,4})?[/-]?[[:space:]]*"
00648                               "([[:alpha:]]{3}|[[:digit:]]{1,2})?[/-]?[[:space:]]*"
00649                               "([[:digit:]]{1,2})?$");
00650
00651     //
00652     const TokenList_T oTokenList = extractTokenList (iTokenList, lRegEx);
00653     return oTokenList;
00654 }
00655
00656 //

```

```

00667     const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00668     return oTokenList;
00669 }
00670
00671 // //////////////////////////////////////
00672 TokenList_T extractTokenListForClass (const TokenList_T& iTokenList) {
00681     const std::string lRegEx ("^([[:alpha:]])?"
00682                               "[[:space:]]*([[:digit:]]{1,3})?"
00683                               "[[:space:]]*([[:alpha:]]{3})?"
00684                               "[[:space:]]*([[:alpha:]]{3})?$$");
00685
00686     //
00687     const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegEx);
00688     return oTokenList;
00689 }
00690
00691
00692 // ////////////////////////////////// M A I N //////////////////////////////////
00693 int main (int argc, char* argv[]) {
00694
00695     // State whether the BOM tree should be built-in or parsed from an
00696     // input file
00697     bool isBuiltin;
00698     bool isForSchedule;
00699
00700     // Input file names
00701     stdair::Filename_T lInventoryFilename;
00702     stdair::Filename_T lScheduleInputFilename;
00703     stdair::Filename_T lODInputFilename;
00704     stdair::Filename_T lYieldInputFilename;
00705
00706     // Readline history
00707     const unsigned int lHistorySize (100);
00708     const std::string lHistoryFilename ("airinv.hist");
00709     const std::string lHistoryBackupFilename ("airinv.hist.bak");
00710
00711     // Default parameters for the interactive session
00712     stdair::AirlineCode_T lLastInteractiveAirlineCode;
00713     stdair::FlightNumber_T lLastInteractiveFlightNumber;
00714     stdair::Date_T lLastInteractiveDate;
00715     stdair::AirlineCode_T lInteractiveAirlineCode;
00716     stdair::FlightNumber_T lInteractiveFlightNumber;
00717     stdair::Date_T lInteractiveDate;
00718     stdair::AirportCode_T lInteractiveOrigin;
00719     stdair::AirportCode_T lInteractiveDestination;
00720     stdair::ClassCode_T lInteractiveBookingClass;
00721     stdair::PartySize_T lInteractivePartySize;
00722
00723     // Parameters for the sale
00724     std::string lSegmentDateKey;
00725
00726     // Output log File
00727     stdair::Filename_T lLogFilename;
00728
00729     // Call the command-line option parser
00730     const int lOptionParserStatus =
00731         readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename
00732
00733             lScheduleInputFilename, lODInputFilename,
00734             lYieldInputFilename, lLogFilename);
00735
00736     if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00737         return 0;
00738     }
00739
00740     // Set the log parameters
00741     std::ofstream logOutputFile;
00742     // Open and clean the log outputfile
00743     logOutputFile.open (lLogFilename.c_str());
00744     logOutputFile.clear();
00745
00746     // Initialise the inventory service
00747     const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00748     AIRINV::AIRINV_Master_Service airinvService (lLogParams);

```

```

00748
00749 // DEBUG
00750 STDAIR_LOG_DEBUG ("Welcome to AirInv");
00751
00752 // Check wether or not a (CSV) input file should be read
00753 if (isBuiltin == true) {
00754
00755     // Build the sample BOM tree for RMOL
00756     airinvService.buildSampleBom();
00757
00758     // Update the default parameters for the following interactive session
00759     lInteractiveAirlineCode = "BA";
00760     lInteractiveFlightNumber = 9;
00761     lInteractiveDate = stdair::Date_T (2011, 06, 10);
00762     lInteractiveBookingClass = "Q";
00763     lInteractivePartySize = 2;
00764     lInteractiveOrigin = "LHR";
00765     lInteractiveDestination = "SYD";
00766
00767 } else {
00768     if (isForSchedule == true) {
00769         // Build the BOM tree from parsing a schedule file (and O&D list)
00770         AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00771         airinvService.parseAndLoad (lScheduleInputFilename, lODInputFilename,
00772                                     lYieldFilePath);
00773
00774         // Update the default parameters for the following interactive session
00775         lInteractiveAirlineCode = "SQ";
00776         lInteractiveFlightNumber = 11;
00777         lInteractiveDate = stdair::Date_T (2010, 01, 15);
00778         lInteractiveBookingClass = "Y";
00779         lInteractivePartySize = 2;
00780         lInteractiveOrigin = "SIN";
00781         lInteractiveDestination = "BKK";
00782
00783     } else {
00784         // Build the BOM tree from parsing an inventory dump file
00785         airinvService.parseAndLoad (lInventoryFilename);
00786
00787         // Update the default parameters for the following interactive session
00788         lInteractiveAirlineCode = "SV";
00789         lInteractiveFlightNumber = 5;
00790         lInteractiveDate = stdair::Date_T (2010, 03, 11);
00791         lInteractiveBookingClass = "Y";
00792         lInteractivePartySize = 2;
00793         lInteractiveOrigin = "KBP";
00794         lInteractiveDestination = "JFK";
00795     }
00796 }
00797
00798 // Save the last state
00799 lLastInteractiveAirlineCode = lInteractiveAirlineCode;
00800 lLastInteractiveFlightNumber = lInteractiveFlightNumber;
00801 lLastInteractiveDate = lInteractiveDate;
00802
00803 // DEBUG
00804 STDAIR_LOG_DEBUG ("=====");
00805 STDAIR_LOG_DEBUG ("=          Beginning of the interactive session          =");
00806 STDAIR_LOG_DEBUG ("=====");
00807
00808 // Initialise the GNU readline wrapper
00809 swift::SReadline lReader (lHistoryFilename, lHistorySize);
00810 initReadline (lReader);
00811
00812 // Now we can ask user for a line
00813 std::string lUserInput;
00814 bool EndOfInput (false);
00815 Command_T::Type_T lCommandType (Command_T::NOP);
00816
00817 while (lCommandType != Command_T::QUIT && EndOfInput == false) {
00818     // Prompt
00819     std::ostringstream oPromptStr;
00820     oPromptStr << "airinv "
00821                 << lInteractiveAirlineCode << lInteractiveFlightNumber

```

```

00822         << " / " << lInteractiveDate
00823         << "> ";
00824     // Call read-line, which will fill the list of tokens
00825     TokenList_T lTokenListByReadline;
00826     lUserInput = lReader.GetLine (oPromptStr.str(), lTokenListByReadline,
00827                                   EndOfInput);
00828
00829     // The history can be saved to an arbitrary file at any time
00830     lReader.SaveHistory (lHistoryBackupFilename);
00831
00832     // The end-of-input typically corresponds to a CTRL-D typed by the user
00833     if (EndOfInput) {
00834         std::cout << std::endl;
00835         break;
00836     }
00837
00838     // Interpret the user input
00839     lCommandType = extractCommand (lTokenListByReadline);
00840
00841     switch (lCommandType) {
00842
00843         // ////////////////////////////////// Help //////////////////////////////////
00844     case Command_T::HELP: {
00845         std::cout << std::endl;
00846         std::cout << "Commands: " << std::endl;
00847         std::cout << " help" << "\t\t" << "Display this help" << std::endl;
00848         std::cout << " quit" << "\t\t" << "Quit the application" << std::endl;
00849         std::cout << " list" << "\t\t"
00850         << "List airlines, flights and departure dates" << std::endl;
00851         std::cout << " select" << "\t\t"
00852         << "Select a flight-date to become the current one"
00853         << std::endl;
00854         std::cout << " display" << "\t\t"
00855         << "Display the current flight-date" << std::endl;
00856         std::cout << " sell" << "\t\t"
00857         << "Make a booking on the current flight-date" << std::endl;
00858         std::cout << std::endl;
00859         break;
00860     }
00861
00862     // ////////////////////////////////// Quit //////////////////////////////////
00863     case Command_T::QUIT: {
00864         break;
00865     }
00866
00867     // ////////////////////////////////// List //////////////////////////////////
00868     case Command_T::LIST: {
00869         //
00870         TokenList_T lTokenList = extractTokenListForFlight (lTokenListByReadline)
;
00871
00872         stdair::AirlineCode_T lAirlineCode ("all");
00873         stdair::FlightNumber_T lFlightNumber (0);
00874         // Parse the parameters given by the user, giving default values
00875         // in case the user does not specify some (or all) of them
00876         parseFlightKey (lTokenList, lAirlineCode, lFlightNumber);
00877
00878         //
00879         const std::string lFlightNumberStr = (lFlightNumber == 0) ? " (all)":" ";
00880         std::cout << "List of flights for "
00881         << lAirlineCode << " " << lFlightNumber << lFlightNumberStr
00882         << std::endl;
00883
00884         // DEBUG: Display the flight-date
00885         const std::string& lFlightDateListStr =
00886             airinvService.list (lAirlineCode, lFlightNumber);
00887
00888         if (lFlightDateListStr.empty() == false) {
00889             std::cout << lFlightDateListStr << std::endl;
00890             STDAIR_LOG_DEBUG (lFlightDateListStr);
00891         } else {
00892             std::cerr << "There is no result for "
00893             << lAirlineCode << " " << lFlightNumber << lFlightNumberStr

```

```

00895         << ". Just type the list command without any parameter "
00896         << "to see the flight-dates for all the airlines and for all
"
00897         << "the flight numbers."
00898         << std::endl;
00899     }
00900
00901     break;
00902 }
00903
00904 // ////////////////////////////////// Select //////////////////////////////////
00905 case Command_T::SELECT: {
00906     //
00907     TokenList_T lTokenList =
00908         extractTokenListForFlightDate (lTokenListByReadline);
00909
00910     // Check whether the user wants to select the last saved flight-date
00911     if (lTokenList.empty() == false) {
00912         // Read the booking class
00913         TokenList_T::const_iterator itTok = lTokenList.begin();
00914
00915         if (*itTok == "-") {
00916
00917             // Swap the current state with the last state
00918             boost::swap (lInteractiveAirlineCode, lLastInteractiveAirlineCode);
00919             boost::swap (lInteractiveFlightNumber, lLastInteractiveFlightNumber);
00920             boost::swap (lInteractiveDate, lLastInteractiveDate);
00921
00922             break;
00923         }
00924     }
00925
00926     // Parse the parameters given by the user, giving default values
00927     // in case the user does not specify some (or all) of them
00928     parseFlightDateKey (lTokenList, lInteractiveAirlineCode,
00929         lInteractiveFlightNumber, lInteractiveDate);
00930
00931     // Check whether the selected flight-date is valid
00932     const bool isFlightDateValid =
00933         airinvService.check (lInteractiveAirlineCode, lInteractiveFlightNumber,
00934             lInteractiveDate);
00935     if (isFlightDateValid == false) {
00936         std::ostringstream oFDKStr;
00937         oFDKStr << "The " << lInteractiveAirlineCode
00938             << lInteractiveFlightNumber << " / " << lInteractiveDate
00939             << " flight-date is not valid. Make sure it exists (e.g., "
00940             << " with the list command). The current flight-date is kept"
00941             << " selected.";
00942         std::cout << oFDKStr.str() << std::endl;
00943         STDAIR_LOG_ERROR (oFDKStr.str());
00944
00945         // Restore the last state
00946         lInteractiveAirlineCode = lLastInteractiveAirlineCode;
00947         lInteractiveFlightNumber = lLastInteractiveFlightNumber;
00948         lInteractiveDate = lLastInteractiveDate;
00949
00950         break;
00951     }
00952
00953     // DEBUG: Display the flight-date selection
00954     std::ostringstream oFDKStr;
00955     oFDKStr << "Selected the " << lInteractiveAirlineCode
00956         << lInteractiveFlightNumber << " / " << lInteractiveDate
00957         << " flight-date";
00958     std::cout << oFDKStr.str() << std::endl;
00959     STDAIR_LOG_DEBUG (oFDKStr.str());
00960
00961     // Save the last state
00962     lLastInteractiveAirlineCode = lInteractiveAirlineCode;
00963     lLastInteractiveFlightNumber = lInteractiveFlightNumber;
00964     lLastInteractiveDate = lInteractiveDate;
00965
00966     break;
00967 }

```

```

00968
00969 // ////////////////////////////////// Display //////////////////////////////////
00970 case Command_T::DISPLAY: {
00971     // DEBUG: Display the flight-date
00972     const std::string& lCSVFlightDateDump =
00973         airinvService.csvDisplay (lInteractiveAirlineCode,
00974                                     lInteractiveFlightNumber, lInteractiveDate);
00975     std::cout << lCSVFlightDateDump << std::endl;
00976     STDAIR_LOG_DEBUG (lCSVFlightDateDump);
00977
00978     break;
00979 }
00980
00981 // ////////////////////////////////// Sell //////////////////////////////////
00982 case Command_T::SELL: {
00983     //
00984     TokenList_T lTokenList = extractTokenListForClass (lTokenListByReadline);
00985
00986     // Parse the parameters given by the user, giving default values
00987     // in case the user does not specify some (or all) of them
00988     parseBookingClassKey (lTokenList, lInteractiveBookingClass,
00989                             lInteractivePartySize,
00990                             lInteractiveOrigin, lInteractiveDestination);
00991
00992     // DEBUG: Display the flight-date before the sell
00993     const std::string& lCSVFlightDateDumpBefore =
00994         airinvService.csvDisplay (lInteractiveAirlineCode,
00995                                     lInteractiveFlightNumber, lInteractiveDate);
00996     //std::cout << lCSVFlightDateDumpBefore << std::endl;
00997     STDAIR_LOG_DEBUG (lCSVFlightDateDumpBefore);
00998
00999     // Make a booking
01000     std::ostringstream oSDKStr;
01001     oSDKStr << lInteractiveAirlineCode << ", "
01002             << lInteractiveFlightNumber << ", "
01003             << lInteractiveDate << ", "
01004             << lInteractiveOrigin << ", " << lInteractiveDestination;
01005     const std::string lSegmentDateKey (oSDKStr.str());
01006
01007     // Perform the sell
01008     const bool isSellSuccessful =
01009         airinvService.sell (lSegmentDateKey,
01010                             lInteractiveBookingClass, lInteractivePartySize);
01011
01012     // DEBUG
01013     const std::string isSellSuccessfulStr =
01014         (isSellSuccessful == true)? "Yes": "No";
01015     std::ostringstream oSaleStr;
01016     oSaleStr << "Sale (" << lSegmentDateKey << ", "
01017             << lInteractiveBookingClass << ": " << lInteractivePartySize
01018             << ") successful? " << isSellSuccessfulStr;
01019     std::cout << oSaleStr.str() << std::endl;
01020
01021     // DEBUG
01022     STDAIR_LOG_DEBUG (oSaleStr.str());
01023
01024     // DEBUG: Display the flight-date after the sell
01025     const std::string& lCSVFlightDateDumpAfter =
01026         airinvService.csvDisplay (lInteractiveAirlineCode,
01027                                     lInteractiveFlightNumber, lInteractiveDate);
01028     //std::cout << lCSVFlightDateDumpAfter << std::endl;
01029     STDAIR_LOG_DEBUG (lCSVFlightDateDumpAfter);
01030
01031     break;
01032 }
01033
01034 // ////////////////////////////////// Default / No value //////////////////////////////////
01035 case Command_T::NOP: {
01036     break;
01037 }
01038
01039 case Command_T::LAST_VALUE:
01040     default: {
01041         // DEBUG

```

```

01042         std::ostringstream oStr;
01043         oStr << "That command is not yet understood: '" << lUserInput
01044             << "' => " << lTokenListByReadline;
01045         STDAIR_LOG_DEBUG (oStr.str());
01046         std::cout << oStr.str() << std::endl;
01047     }
01048 }
01049 }
01050
01051 // DEBUG
01052 STDAIR_LOG_DEBUG ("End of the session. Exiting.");
01053 std::cout << "End of the session. Exiting." << std::endl;
01054
01055 // Close the Log outputFile
01056 logOutputFile.close();
01057
01058 /*
01059     Note: as that program is not intended to be run on a server in
01060     production, it is better not to catch the exceptions. When it
01061     happens (that an exception is throwned), that way we get the
01062     call stack.
01063 */
01064
01065 return 0;
01066 }

```

25.233 airinv/ui/cmdline/readline_autocomp.hpp File Reference

```

#include <string> #include <iosfwd> #include <cstdio>×
#include <sys/types.h> #include <sys/file.h> #include
<sys/stat.h> #include <sys/errno.h> #include <readline/readline.-
h> #include <readline/history.h>

```

Classes

- struct [COMMAND](#)

Typedefs

- typedef int(* [pt2Func](#))(char *)

Functions

- char * [getwd](#) ()
- char * [xmalloc](#) (size_t)
- int [com_list](#) (char *)
- int [com_view](#) (char *)
- int [com_rename](#) (char *)
- int [com_stat](#) (char *)
- int [com_pwd](#) (char *)
- int [com_delete](#) (char *)
- int [com_help](#) (char *)
- int [com_cd](#) (char *)
- int [com_quit](#) (char *)

- char * [stripwhite](#) (char *iString)
- [COMMAND](#) * [find_command](#) (char *iString)
- char * [dupstr](#) (char *iString)
- int [execute_line](#) (char *line)
- char * [command_generator](#) (char *text, int state)
- char ** [fileman_completion](#) (char *text, int start, int end)
- void [initialize_readline](#) ()
- void [too_dangerous](#) (char *caller)
- int [valid_argument](#) (char *caller, char *arg)

Variables

- [COMMAND](#) [commands](#) []
- int [done](#)
- static char [syscom](#) [1024]

25.233.1 Typedef Documentation

25.233.1.1 typedef int(* pt2Func)(char *)

Definition at line 35 of file [readline_autocomp.hpp](#).

25.233.2 Function Documentation

25.233.2.1 char* getwd ()

[readline_autocomp.hpp](#) -- A tiny application which demonstrates how to use the GNU Readline library. This application interactively allows users to manipulate files and their modes.

Referenced by [com_pwd\(\)](#).

25.233.2.2 char* xmalloc (size_t)

Referenced by [dupstr\(\)](#).

25.233.2.3 void com_list (char * arg)

List the file(s) named in arg.

Definition at line 264 of file [readline_autocomp.hpp](#).

25.233.2.4 int com_view (char * arg)

Definition at line 274 of file [readline_autocomp.hpp](#).

References [valid_argument\(\)](#).

25.233.2.5 int com_rename (char * *arg*)

Definition at line 284 of file [readline_autocomp.hpp](#).

References [too_dangerous\(\)](#).

25.233.2.6 int com_stat (char * *arg*)

Definition at line 289 of file [readline_autocomp.hpp](#).

References [valid_argument\(\)](#).

25.233.2.7 int com_pwd (char * *ignore*)

Definition at line 367 of file [readline_autocomp.hpp](#).

References [getwd\(\)](#).

Referenced by [com_cd\(\)](#).

25.233.2.8 int com_delete (char * *arg*)

Definition at line 315 of file [readline_autocomp.hpp](#).

References [too_dangerous\(\)](#).

25.233.2.9 int com_help (char * *arg*)

Print out help for ARG, or for all of the commands if ARG is not present.

Definition at line 324 of file [readline_autocomp.hpp](#).

References [COMMAND::name](#).

25.233.2.10 int com_cd (char * *arg*)

Definition at line 356 of file [readline_autocomp.hpp](#).

References [com_pwd\(\)](#).

25.233.2.11 int com_quit (char * *arg*)

Definition at line 381 of file [readline_autocomp.hpp](#).

25.233.2.12 char * stripwhite (char * *string*)

Strip whitespace from the start and end of STRING. Return a pointer into STRING.

Definition at line 152 of file [readline_autocomp.hpp](#).

25.233.2.13 **COMMAND** * find_command (char * *name*)

Look up NAME as the name of a command, and return a pointer to that command. Return a NULL pointer if NAME isn't a command name.

Definition at line 136 of file [readline_autocomp.hpp](#).

References [COMMAND::name](#).

Referenced by [execute_line\(\)](#).

25.233.2.14 `char* dupstr (char * iString)`

Duplicate a string

Definition at line 85 of file [readline_autocomp.hpp](#).

References [xmalloc\(\)](#).

Referenced by [command_generator\(\)](#).

25.233.2.15 `int execute_line (char * line)`

Execute a command line.

Definition at line 94 of file [readline_autocomp.hpp](#).

References [find_command\(\)](#), and [COMMAND::func](#).

25.233.2.16 `char * command_generator (char * text, int state)`

Generator function for command completion. STATE lets us know whether to start from scratch; without any state (i.e. STATE == 0), then we start at the top of the list.

Definition at line 222 of file [readline_autocomp.hpp](#).

References [dupstr\(\)](#).

Referenced by [fileman_completion\(\)](#).

25.233.2.17 `char ** fileman_completion (char * text, int start, int end)`

Attempt to complete on the contents of TEXT. START and END bound the region of rl_line_buffer that contains the word to complete. TEXT is the word to complete. We can use the entire contents of rl_line_buffer in case we want to do some simple parsing. Return the array of matches, or NULL if there aren't any.

Definition at line 200 of file [readline_autocomp.hpp](#).

References [command_generator\(\)](#).

Referenced by [initialize_readline\(\)](#).

25.233.2.18 `void initialize_readline ()`

Tell the GNU Readline library how to complete. We want to try to complete on command names if this is the first word in the line, or on filenames if not.

Definition at line 185 of file [readline_autocomp.hpp](#).

References [fileman_completion\(\)](#).

25.233.2.19 `void too_dangerous (char * caller)`

Definition at line 387 of file [readline_autocomp.hpp](#).

Referenced by [com_rename\(\)](#), and [com_delete\(\)](#).

25.233.2.20 `int valid_argument (char * caller, char * arg)`

Definition at line 395 of file [readline_autocomp.hpp](#).

Referenced by [com_view\(\)](#), and [com_stat\(\)](#).

25.233.3 Variable Documentation**25.233.3.1** `COMMAND commands[]`

Initial value:

```
{
  { "cd", (*com_cd)(), "Change to directory DIR" },
  { "delete", com_delete, "Delete FILE" },
  { "help", com_help, "Display this text" },
  { "?", com_help, "Synonym for 'help'" },
  { "list", com_list, "List files in DIR" },
  { "ls", com_list, "Synonym for 'list'" },
  { "pwd", com_pwd, "Print the current working directory" },
  { "quit", com_quit, "Quit using airinv" },
  { "rename", com_rename, "Rename FILE to NEWNAME" },
  { "stat", com_stat, "Print out statistics on FILE" },
  { "view", com_view, "View the contents of FILE" },
  { (char*) NULL, (pt2Func) NULL, (char*) NULL }
}
```

Definition at line 58 of file [readline_autocomp.hpp](#).

25.233.3.2 `int done`

When non-zero, this global means the user is done using this program.

Definition at line 80 of file [readline_autocomp.hpp](#).

25.233.3.3 `char syscom[1024] [static]`

String to pass to system(). This is for the LIST, VIEW and RENAME commands.

Definition at line 259 of file [readline_autocomp.hpp](#).

25.234 readline_autocomp.hpp

```
00001
00006 #ifndef __AIRINV_READLINE_AUTOCOMP_HPP
00007 #define __AIRINV_READLINE_AUTOCOMP_HPP
00008
00009 // STL
00010 #include <string>
00011 #include <iosfwd>
00012 #include <cstdio>
00013 #include <sys/types.h>
00014 #include <sys/file.h>
00015 #include <sys/stat.h>
00016 #include <sys/errno.h>
00017
00018 #include <readline/readline.h>
00019 #include <readline/history.h>
00020
00021 extern char* getwd();
```

```

00022 extern char* xmalloc (size_t);
00023
00024 /* The names of functions that actually do the manipulation. */
00025 int com_list (char*);
00026 int com_view (char*);
00027 int com_rename (char*);
00028 int com_stat (char*);
00029 int com_pwd (char*);
00030 int com_delete (char*);
00031 int com_help (char*);
00032 int com_cd (char*);
00033 int com_quit (char*);
00034
00035 typedef int (*pt2Func) (char*);
00036
00041 typedef struct {
00045     char const* name;
00046
00050     pt2Func *func;
00051
00055     char *doc;
00056 } COMMAND;
00057
00058 COMMAND commands[] = {
00059     { "cd", (*com_cd)(), "Change to directory DIR" },
00060     { "delete", com_delete, "Delete FILE" },
00061     { "help", com_help, "Display this text" },
00062     { "?", com_help, "Synonym for 'help'" },
00063     { "list", com_list, "List files in DIR" },
00064     { "ls", com_list, "Synonym for 'list'" },
00065     { "pwd", com_pwd, "Print the current working directory" },
00066     { "quit", com_quit, "Quit using airinv" },
00067     { "rename", com_rename, "Rename FILE to NEWNAME" },
00068     { "stat", com_stat, "Print out statistics on FILE" },
00069     { "view", com_view, "View the contents of FILE" },
00070     { (char*) NULL, (pt2Func) NULL, (char*) NULL }
00071 };
00072
00073 // Forward declarations
00074 char* stripwhite (char* iString);
00075 COMMAND* find_command (char* iString);
00076
00080 int done;
00081
00085 char* dupstr (char* iString) {
00086     char* r = xmalloc (std::strlen (iString) + 1);
00087     strcpy (r, iString);
00088     return r;
00089 }
00090
00094 int execute_line (char* line) {
00095     register int i;
00096     COMMAND* command;
00097     char* word;
00098
00099     /* Isolate the command word. */
00100     i = 0;
00101     while (line[i] && whitespace (line[i])) {
00102         i++;
00103     }
00104     word = line + i;
00105
00106     while (line[i] && !whitespace (line[i])) {
00107         i++;
00108     }
00109
00110     if (line[i]) {
00111         line[i++] = '\0';
00112     }
00113
00114     command = find_command (word);
00115
00116     if (!command) {
00117         std::cerr << word << ": No such command for airinv." << std::endl;

```

```

00118     return -1;
00119 }
00120
00121 /* Get argument to command, if any. */
00122 while (whitespace (line[i])) {
00123     i++;
00124 }
00125
00126 word = line + i;
00127
00128 /* Call the function. */
00129 return (*(command->func)) (word);
00130 }
00131
00136 COMMAND* find_command (char* name) {
00137     register int i;
00138
00139     for (i = 0; commands[i].name; i++) {
00140         if (strcmp (name, commands[i].name) == 0) {
00141             return (&commands[i]);
00142         }
00143     }
00144
00145     return (COMMAND*) NULL;
00146 }
00147
00152 char* stripwhite (char* string) {
00153     register char *s, *t;
00154
00155     for (s = string; whitespace (*s); s++) {
00156     }
00157
00158     if (*s == 0) {
00159         return s;
00160     }
00161
00162     t = s + strlen (s) - 1;
00163     while (t > s && whitespace (*t)) {
00164         t--;
00165     }
00166     *++t = '\0';
00167
00168     return s;
00169 }
00170
00171 /* ***** */
00172 /*
00173 /*                      Interface to Readline Completion          */
00174 /*
00175 /* ***** */
00176
00177 char* command_generator (char* text, int state);
00178 char** fileman_completion (char* text, int start, int end);
00179
00185 void initialize_readline() {
00186     /* Allow conditional parsing of the ~/.inputrc file. */
00187     rl_readline_name = "airlnv";
00188
00189     /* Tell the completer that we want a crack first. */
00190     rl_attempted_completion_function = (rl_completion_func_t*) fileman_completion
;
00191 }
00192
00200 char** fileman_completion (char* text, int start, int end) {
00201     char **matches;
00202
00203     matches = (char**) NULL;
00204
00210     if (start == 0) {
00211         matches = completion_matches (text, command_generator);
00212     }
00213
00214     return matches;
00215 }

```

```

00216
00222 char* command_generator (char* text, int state) {
00223     static int list_index, len;
00224     char* name;
00225
00231     if (!state) {
00232         list_index = 0;
00233         len = strlen (text);
00234     }
00235
00236     /* Return the next name which partially matches from the command list. */
00237     while (name = commands[list_index].name) {
00238         ++list_index;
00239
00240         if (strncmp (name, text, len) == 0) {
00241             return dupstr (name);
00242         }
00243     }
00244
00245     /* If no names matched, then return NULL. */
00246     return (char*) NULL;
00247 }
00248
00249 /* ***** */
00250 /* */
00251 /*             airinv Commands */
00252 /* */
00253 /* ***** */
00254
00259 static char syscom[1024];
00260
00264 void com_list (char* arg) {
00265     if (!arg) {
00266         arg = "";
00267     }
00268
00269     std::ostringstream oStr;
00270     oStr << "ls -FClg " << arg;
00271     return system (oStr.c_str());
00272 }
00273
00274 int com_view (char* arg) {
00275     if (!valid_argument ("view", arg)) {
00276         return 1;
00277     }
00278
00279     std::ostringstream oStr;
00280     oStr << "more " << arg;
00281     return system (syscom);
00282 }
00283
00284 int com_rename (char* arg) {
00285     too_dangerous ("rename");
00286     return 1;
00287 }
00288
00289 int com_stat (char* arg) {
00290     struct stat finfo;
00291
00292     if (!valid_argument ("stat", arg)) {
00293         return 1;
00294     }
00295
00296     if (stat (arg, &finfo) == -1) {
00297         perror (arg);
00298         return 1;
00299     }
00300
00301     std::cout << "Statistics for \"" << arg << "':" << std::endl;
00302
00303     const std::string lPluralEnd1 = (finfo.st_nlink == 1) ? "" : "s";
00304     const std::string lPluralEnd2 = (finfo.st_size == 1) ? "" : "s";
00305     std::cout << arg << " has "
00306             << finfo.st_nlink << " link" << lPluralEnd1 << ", and is "

```

```

00307         << finfo.st_size << " byte" << lPluralEnd2 << " in length."
00308         << std::endl;
00309     std::cout << " Inode Last Change at: " << ctime (&finfo.st_ctime) << std
::endl;
00310     std::cout << " Last access at: " << ctime (&finfo.st_atime) << std::endl;
00311     std::cout << " Last modified at: " << ctime (&finfo.st_mtime) << std::endl;
00312     return 0;
00313 }
00314
00315 int com_delete (char* arg) {
00316     too_dangerous ("delete");
00317     return 1;
00318 }
00319
00324 int com_help (char* arg) {
00325     register int i;
00326     int printed = 0;
00327
00328     for (i = 0; commands[i].name; i++) {
00329         if (!*arg || (strcmp (arg, commands[i].name) == 0)) {
00330             printf ("%s\t\t%s.\n", commands[i].name, commands[i].doc);
00331             printed++;
00332         }
00333     }
00334
00335     if (!printed) {
00336         printf ("No commands match '%s'. Possibilities are:\n", arg);
00337
00338         for (i = 0; commands[i].name; i++) {
00339             /* Print in six columns. */
00340             if (printed == 6) {
00341                 printed = 0;
00342                 printf ("\n");
00343             }
00344             printf ("%s\t", commands[i].name);
00345             printed++;
00346         }
00347
00348         if (printed)
00349             printf ("\n");
00350     }
00351     return 0;
00352 }
00353
00354 /* Change to the directory ARG. */
00356 int com_cd (char* arg) {
00357     if (chdir (arg) == -1) {
00358         perror (arg);
00359         return 1;
00360     }
00361
00362     com_pwd ("");
00363     return 0;
00364 }
00365
00366 /* Print out the current working directory. */
00367 int com_pwd (char* ignore) {
00368     char dir[1024], *s;
00369
00370     s = getwd (dir);
00371     if (s == 0) {
00372         printf ("Error getting pwd: %s\n", dir);
00373         return 1;
00374     }
00375
00376     printf ("Current directory is %s\n", dir);
00377     return 0;
00378 }
00379
00380 /* The user wishes to quit using this program. Just set DONE non-zero. */
00381 int com_quit (char* arg) {
00382     done = 1;
00383     return 0;

```

```

00384 }
00385
00386 /* Function which tells you that you can't do this. */
00387 void too_dangerous (char* caller) {
00388     fprintf (stderr,
00389             "%s: Too dangerous for me to distribute. Write it yourself.\n",
00390             caller);
00391 }
00392
00393 /* Return non-zero if ARG is a valid argument for CALLER, else print
00394  * an error message and return zero. */
00395 int valid_argument (char* caller, char* arg) {
00396     if (!arg || !*arg) {
00397         fprintf (stderr, "%s: Argument required.\n", caller);
00398         return 0;
00399     }
00400
00401     return 1;
00402 }
00403
00404 #endif // _AIRINV_READLINE_AUTOCOMP_HPP

```

25.235 airinv/ui/cmdline/SReadline.hpp File Reference

C++ wrapper around libreadline.

```

#include <cstdio> #include <readline/readline.h> #include
<readline/history.h>      #include <readline/keymaps.h> ×
#include <string> #include <fstream> #include <vector>
#include <stdexcept> #include <map> #include <boost/algorithm/string/trim.-
hpp> #include <boost/tokenizer.hpp> #include <boost/function.-
hpp>

```

Classes

- class [swift::SKeymap](#)
The readline keymap wrapper.
- class [swift::SReadline](#)
The readline library wrapper.

Namespaces

- namespace [swift](#)
The wrapper namespace.

25.235.1 Detailed Description

C++ wrapper around libreadline. Supported: editing, history, custom completers, keymaps. Attention: implementation is not thread safe! It is mainly because the readline library provides pure C interface and has many calls for an "atomic" completion operation

Definition in file [SReadline.hpp](#).

25.236 SReadline.hpp

```

00001
00011 //
00012 // Date:      17 December 2005
00013 //           03 April   2006
00014 //           20 April   2006
00015 //           07 May     2006
00016 //
00017 // Copyright (c) Sergey Satskiy 2005 - 2006
00018 //           <sergesatsky@yahoo.com>
00019 //
00020 // Permission to copy, use, modify, sell and distribute this software
00021 // is granted provided this copyright notice appears in all copies.
00022 // This software is provided "as is" without express or implied
00023 // warranty, and with no claim as to its suitability for any purpose.
00024 //
00025
00026 #ifndef SREADLINE_H
00027 #define SREADLINE_H
00028
00029 #include <cstdio>
00030
00031 #include <readline/readline.h>
00032 #include <readline/history.h>
00033 #include <readline/keymaps.h>
00034
00035 #include <string>
00036 #include <fstream>
00037 #include <vector>
00038 #include <stdexcept>
00039 #include <map>
00040
00041 #include <boost/algorithm/string/trim.hpp>
00042 #include <boost/tokenizer.hpp>
00043 #include <boost/function.hpp>
00044
00045 namespace {
00050     typedef std::vector<std::string> TokensStorage;
00055
00059     typedef std::vector<TokensStorage> CompletionsStorage;
00060
00064     typedef boost::function<int (int, int)> KeyCallback;
00065
00069     typedef std::map<int, KeyCallback> KeysBind;
00070
00074     const size_t DefaultHistoryLimit (64);
00075
00079     CompletionsStorage Completions;
00080
00084     TokensStorage Tokens;
00085
00089     std::map<Keymap, KeysBind> Keymaps;
00090
00094     bool KeymapWasSetup (false);
00095
00099     Keymap Earlykeymap (0);
00100
00101
00108     char* Generator (const char* text, int State);
00109
00110
00118     char** UserCompletion (const char* text, int start, int end);
00119
00120
00128     int KeyDispatcher (int Count, int Key);
00129
00130
00135     int StartupHook (void);
00136
00137
00145     template <typename Container>

```

```

00146 bool AreTokensEqual (const Container& Pattern, const Container& Input) {
00147     if (Input.size() > Pattern.size()) {
00148         return false;
00149     }
00150
00151     typename Container::const_iterator k (Pattern.begin());
00152     typename Container::const_iterator j (Input.begin());
00153     for ( ; j != Input.end(); ++k, ++j) {
00154         const std::string lPattern = *k;
00155         if (lPattern == "%file") {
00156             continue;
00157         }
00158
00159         const std::string lInput = *j;
00160         if (lPattern != lInput) {
00161             return false;
00162         }
00163     }
00164     return true;
00165 }
00166
00167 // See description near the prototype
00168 template <typename ContainerType>
00169 void SplitTokens (const std::string& Source, ContainerType& Container) {
00170     typedef boost::tokenizer<boost::char_separator<char> > TokenizerType;
00171
00172     // Set of token separators
00173     boost::char_separator<char> Separators (" \t\n");
00174     // Tokens provider
00175     TokenizerType Tokenizer (Source, Separators);
00176
00177     Container.clear();
00178     for (TokenizerType::const_iterator k (Tokenizer.begin());
00179          k != Tokenizer.end(); ++k) {
00180         // Temporary storage for the token, in order to trim that latter
00181         std::string SingleToken (*k);
00182
00183         boost::algorithm::trim (SingleToken);
00184         Container.push_back (SingleToken);
00185     }
00186 }
00187
00188 // See description near the prototype
00189 char** UserCompletion (const char* text, int start, int end) {
00190     // No default completion at all
00191     rl_attempted_completion_over = 1;
00192
00193     if (Completions.empty() == true) {
00194         return NULL;
00195     }
00196
00197     // Memorise all the previous tokens
00198     std::string PreInput (rl_line_buffer, start);
00199     SplitTokens (PreInput, Tokens);
00200
00201     // Detect whether we should call the standard file name completer
00202     // or a custom one
00203     bool FoundPretender (false);
00204
00205     for (CompletionsStorage::const_iterator k (Completions.begin());
00206          k != Completions.end(); ++k) {
00207         const TokensStorage& lTokenStorage = *k;
00208         if (AreTokensEqual (lTokenStorage, Tokens) == false) {
00209             continue;
00210         }
00211
00212         if (lTokenStorage.size() > Tokens.size()) {
00213             FoundPretender = true;
00214             if (lTokenStorage [Tokens.size()] == "%file") {
00215                 // Standard file name completer - called for the "%file" keyword
00216                 return rl_completion_matches (text, rl_filename_completion_function);
00217             }
00218         }
00219     }

```

```

00220
00221     if (FoundPretender) {
00222         return rl_completion_matches (text, Generator);
00223     }
00224     return NULL;
00225 }
00226
00227 // See description near the prototype
00228 char* Generator (const char* text, int State) {
00229     static int Length;
00230     static CompletionsStorage::const_iterator Iterator;
00231
00232     if ( State == 0 ) {
00233         Iterator = Completions.begin();
00234         Length = strlen (text);
00235     }
00236
00237     for ( ; Iterator != Completions.end(); ++Iterator) {
00238         const TokensStorage& lCompletion = *Iterator;
00239         if (AreTokensEqual (lCompletion, Tokens) == false) {
00240             continue;
00241         }
00242
00243         if (lCompletion.size() > Tokens.size()) {
00244             if (lCompletion [Tokens.size()] == "%file") {
00245                 continue;
00246             }
00247
00248             const char* lCompletionCharStr (lCompletion [Tokens.size()].c_str());
00249             if (strcmp (text, lCompletionCharStr, Length) == 0) {
00250                 // Readline will free the allocated memory
00251                 const size_t lCompletionSize = strlen (lCompletionCharStr) + 1;
00252                 char* NewString (static_cast<char*> (malloc (lCompletionSize)));
00253                 strcpy (NewString, lCompletionCharStr);
00254
00255                 ++Iterator;
00256
00257                 return NewString;
00258             }
00259         }
00260     }
00261
00262     return NULL;
00263 }
00264
00265 // See the description near the prototype
00266 int KeyDispatcher (int Count, int Key) {
00267     std::map< Keymap, KeysBind >::iterator Set (Keymaps.find (rl_get_keymap()))
00268 ;
00269     if (Set == Keymaps.end()) {
00270         // Most probably it happens because the header was
00271         // included into many compilation units and the
00272         // keymap setting calls were made in different files.
00273         // This is the problem of "global" data.
00274         // The storage of all the registered keymaps is in anonymous
00275         // namespace.
00276         throw std::runtime_error ("Error selecting a keymap.");
00277     }
00278
00279     (Set->second)[Key] (Count, Key);
00280     return 0;
00281 }
00282
00283 // See the description near the prototype
00284 int StartupHook (void) {
00285     if (KeymapWasSetup) {
00286         rl_set_keymap (Earlykeymap);
00287     }
00288     return 0;
00289 }
00290
00291 } // Anonymous namespace
00292

```

```

00293
00299 namespace swift {
00300
00307     class SKeymap {
00308     private:
00309         // Readline keymap
00310         Keymap keymap;
00311
00312     public:
00319         explicit SKeymap (bool PrintableBound = false) : keymap (NULL) {
00320             if (PrintableBound == true) {
00321                 // Printable characters are bound
00322                 keymap = rl_make_keymap();
00323
00324             } else {
00325                 // Empty keymap
00326                 keymap = rl_make_bare_keymap();
00327             }
00328
00329             if (keymap == NULL) {
00330                 throw std::runtime_error ("Cannot allocate keymap.");
00331             }
00332
00333             // Register a new keymap in the global list
00334             Keymaps [keymap] = KeysBind();
00335         }
00336
00342         explicit SKeymap (Keymap Pattern) : keymap (rl_copy_keymap (Pattern)) {
00343             if ( keymap == NULL ) {
00344                 throw std::runtime_error( "Cannot allocate keymap." );
00345             }
00346
00347             // Register a new keymap in the global list
00348             Keymaps [keymap] = KeysBind();
00349         }
00350
00354         ~SKeymap() {
00355             // Deregister the keymap
00356             Keymaps.erase (keymap);
00357             rl_discard_keymap (keymap);
00358         }
00359
00366         void Bind (int Key, KeyCallback Callback) {
00367             Keymaps [keymap][Key] = Callback;
00368
00369             if (rl_bind_key_in_map (Key, KeyDispatcher, keymap) != 0) {
00370                 // Remove from the map just bound key
00371                 Keymaps [keymap].erase (Key);
00372                 throw std::runtime_error ("Invalid key.");
00373             }
00374         }
00375
00381         void Unbind (int Key) {
00382             rl_unbind_key_in_map (Key, keymap);
00383             Keymaps [keymap].erase (Key);
00384         }
00385
00386         // void Bind (const std::string& Sequence, boost::function<int (int,
00387         // int)>);
00388         // void Unbind (std::string& Sequence);
00389     public:
00395         SKeymap (const SKeymap& rhs) {
00396             if (this == &rhs) {
00397                 return;
00398             }
00399             keymap = rl_copy_keymap (rhs.keymap);
00400         }
00401
00407         SKeymap& operator= (const SKeymap& rhs) {
00408             if (this == &rhs) {
00409                 return *this;
00410             }
00411             keymap = rl_copy_keymap (rhs.keymap);

```

```

00412         return *this;
00413     }
00414
00415     friend class SReadline;
00416 };
00417
00424 class SReadline {
00425 public:
00431     SReadline (const size_t Limit = DefaultHistoryLimit)
00432         : HistoryLimit (Limit), HistoryFileName (""),
00433           OriginalCompletion (rl_attempted_completion_function) {
00434         rl_startup_hook = StartupHook;
00435         rl_attempted_completion_function = UserCompletion;
00436         using_history();
00437     }
00438
00446     SReadline (const std::string& historyFileName,
00447               const size_t Limit = DefaultHistoryLimit)
00448         : HistoryLimit (Limit), HistoryFileName (historyFileName),
00449           OriginalCompletion (rl_attempted_completion_function) {
00450         rl_startup_hook = StartupHook;
00451         rl_attempted_completion_function = UserCompletion;
00452         using_history();
00453         LoadHistory (HistoryFileName);
00454     }
00455
00460     ~SReadline() {
00461         rl_attempted_completion_function = OriginalCompletion;
00462         SaveHistory (HistoryFileName);
00463     }
00464
00471     std::string GetLine (const std::string& Prompt) {
00472         bool Unused;
00473         return GetLine (Prompt, Unused);
00474     }
00475
00484     template <typename Container>
00485     std::string GetLine (const std::string& Prompt, Container& ReadTokens) {
00486         bool Unused;
00487         return GetLine (Prompt, ReadTokens, Unused);
00488     }
00489
00499     template <typename Container>
00500     std::string GetLine (const std::string& Prompt, Container& ReadTokens,
00501                         bool& BreakOut) {
00502         std::string Input (GetLine (Prompt, BreakOut));
00503         SplitTokens (Input, ReadTokens);
00504         return Input;
00505     }
00506
00507
00515     std::string GetLine (const std::string& Prompt, bool& BreakOut) {
00516         BreakOut = true;
00517
00518         char* ReadLine (readline (Prompt.c_str()));
00519         if (ReadLine == NULL) {
00520             return std::string();
00521         }
00522
00523         // It's OK
00524         BreakOut = false;
00525         std::string Input (ReadLine);
00526         free (ReadLine); ReadLine = NULL;
00527
00528         boost::algorithm::trim (Input);
00529         if (Input.empty() == false) {
00530             if (history_length == 0
00531                 || Input != history_list()[ history_length - 1 ]->line) {
00532                 add_history (Input.c_str());
00533
00534                 if (history_length >= static_cast<int> (HistoryLimit)) {
00535                     stifle_history (HistoryLimit);
00536                 }
00537             }

```

```

00538     }
00539
00540     return Input;
00541 }
00542
00543
00544 template <typename ContainerType>
00550 void GetHistory (ContainerType& Container) {
00551     for (int k (0); k < history_length; ++k ) {
00552         Container.push_back (history_list()[k]->line);
00553     }
00554 }
00555
00562 bool SaveHistory (std::ostream& OS) {
00563     if (!OS) {
00564         return false;
00565     }
00566
00567     for (int k (0); k < history_length; ++k) {
00568         OS << history_list()[ k ]->line << std::endl;
00569     }
00570     return true;
00571 }
00572
00579 bool SaveHistory (const std::string& FileName) {
00580     if (FileName.empty() == true) {
00581         return false;
00582     }
00583
00584     std::ofstream OS (FileName.c_str());
00585     return SaveHistory (OS);
00586 }
00587
00592 void ClearHistory() {
00593     clear_history();
00594 }
00595
00602 bool LoadHistory (std::istream& IS) {
00603     if (!IS) {
00604         return false;
00605     }
00606
00607     ClearHistory();
00608     std::string OneLine;
00609
00610     while (!getline (IS, OneLine).eof()) {
00611         boost::algorithm::trim( OneLine );
00612         if ((history_length == 0)
00613             || OneLine != history_list()[history_length - 1]->line) {
00614             add_history (OneLine.c_str());
00615         }
00616     }
00617     stifle_history (HistoryLimit);
00618     return true;
00619 }
00620
00627 bool LoadHistory (const std::string& FileName) {
00628     if (FileName.empty() == true) {
00629         return false;
00630     }
00631
00632     std::ifstream IS (FileName.c_str());
00633     return LoadHistory (IS);
00634 }
00635
00655 template <typename ContainerType>
00656 void RegisterCompletions (const ContainerType& Container) {
00657     Completions.clear();
00658     for (typename ContainerType::const_iterator k (Container.begin());
00659          k != Container.end(); ++k) {
00660         std::vector<std::string> OneLine;
00661         const std::string& kStr = static_cast<std::string> (*k);
00662
00663         SplitTokens (kStr, OneLine);

```

```
00664         Completions.push_back (OneLine);
00665     }
00666 }
00667
00673 void SetKeymap (SKeymap& NewKeymap) {
00674     rl_set_keymap (NewKeymap.keymap);
00675     KeymapWasSetup = true;
00676     Earlykeymap = NewKeymap.keymap;
00677 }
00678
00679
00680 private:
00681     // ////////////////////////////////// Attributes //////////////////////////////////
00685     const size_t HistoryLimit;
00686
00690     const std::string HistoryFileName;
00691
00695     rl_completion_func_t* OriginalCompletion;
00696 };
00697
00698 }; // namespace swift
00699
00700 #endif
00701
```

25.237 doc/local/authors.doc File Reference

25.238 doc/local/codingrules.doc File Reference

25.239 doc/local/copyright.doc File Reference

25.240 doc/local/documentation.doc File Reference

25.241 doc/local/features.doc File Reference

25.242 doc/local/help_wanted.doc File Reference

25.243 doc/local/howto_release.doc File Reference

25.244 doc/local/index.doc File Reference

25.245 doc/local/installation.doc File Reference

25.246 doc/local/linking.doc File Reference

25.247 doc/local/test.doc File Reference

25.248 doc/local/users_guide.doc File Reference

25.249 doc/local/verification.doc File Reference

25.250 doc/tutorial/tutorial.doc File Reference

25.251 test/airinv/InventoryTestSuite.cpp File Reference

25.252 InventoryTestSuite.cpp

```

00001
00005 // //////////////////////////////////////
00006 // Import section
00007 // //////////////////////////////////////
00008 // STL
00009 #include <sstream>
00010 #include <fstream>
00011 #include <string>
00012 // Boost Unit Test Framework (UTF)
00013 #define BOOST_TEST_DYN_LINK
00014 #define BOOST_TEST_MAIN
00015 #define BOOST_TEST_MODULE InventoryTestSuite
00016 #include <boost/test/unit_test.hpp>
00017 // StdAir
00018 #include <stdair/basic/BasLogParams.hpp>
00019 #include <stdair/basic/BasDBParams.hpp>
00020 #include <stdair/basic/BasFileMgr.hpp>
00021 #include <stdair/bom/TravelSolutionStruct.hpp>
00022 #include <stdair/bom/BookingRequestStruct.hpp>
00023 #include <stdair/service/Logger.hpp>
00024 #include <stdair/stdair_exceptions.hpp>
00025 // Airinv
00026 #include <airinv/AIRINV_Types.hpp>
00027 #include <airinv/AIRINV_Master_Service.hpp>
00028 #include <airinv/config/airinv-paths.hpp>
00029
00030 namespace boost_utf = boost::unit_test;
00031
00032 // (Boost) Unit Test XML Report
00033 std::ofstream utfReportStream ("InventoryTestSuite_utfresults.xml");
00034
00035 struct UnitTestConfig {
00036     UnitTestConfig() {
00037         boost_utf::unit_test_log.set_stream (utfReportStream);
00038         boost_utf::unit_test_log.set_format (boost_utf::XML);
00039         boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
00040         //boost_utf::unit_test_log.set_threshold_level
00041         (boost_utf::log_successful_tests);
00042     }
00043
00044     ~UnitTestConfig() {
00045     }
00046 };
00047
00048 bool testInventoryHelper (const unsigned short iTestFlag,
00049                          const stdair::Filename_T& iInventoryInputFilename,
00050                          const stdair::Filename_T& iScheduleInputFilename,
00051                          const stdair::Filename_T& iODInputFilename,
00052                          const stdair::Filename_T& iYieldInputFilename,
00053                          const bool isBuiltin,
00054                          const bool isForSchedule) {
00055
00056     // Output log File
00057     std::ostringstream oStr;
00058     oStr << "InventoryTestSuite_" << iTestFlag << ".log";
00059     const stdair::Filename_T lLogFilename (oStr.str());
00060
00061     // Set the log parameters
00062     std::ofstream logOutputFile;
00063     // Open and clean the log outputfile
00064     logOutputFile.open (lLogFilename.c_str());
00065     logOutputFile.clear();
00066
00067     // Initialise the AirInv service object
00068     const bool lForceMultipleInit = true;
00069     stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
00070                                     logOutputFile,

```



```

00079                                     lForceMultipleInit);
00080
00081 // Initialise the inventory service
00082 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00083
00084 // Parameters for the sale
00085 std::string lSegmentDateKey;
00086 stdair::ClassCode_T lClassCode;
00087 const stdair::PartySize_T lPartySize (2);
00088
00089 // Check wether or not a (CSV) input file should be read
00090 if (isBuiltin == true) {
00091
00092     // Build the default sample BOM tree (filled with inventories) for AirInv
00093     airinvService.buildSampleBom();
00094
00095     // Define a specific segment-date key for the sample BOM tree
00096     lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00097     lClassCode = "Q";
00098 } else {
00099
00100     if (isForSchedule == true) {
00101         // Build the BOM tree from parsing a schedule file (and O&D list)
00102         AIRRAC::YieldFilePath lYieldFilePath (iYieldInputFilename);
00103         airinvService.parseAndLoad (iScheduleInputFilename, iODInputFilename,
00104                                     lYieldFilePath);
00105
00106         // Define a specific segment-date key for the schedule-based inventory
00107         lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00108         lClassCode = "Y";
00109     } else {
00110
00111         // Build the BOM tree from parsing an inventory dump file
00112         airinvService.parseAndLoad (iInventoryInputFilename);
00113
00114         // Define a specific segment-date key for the inventory parsed file
00115         //const std::string lSegmentDateKey ("SV, 5, 2010-03-11, KBP, JFK,
00116         08:00:00");
00117         lSegmentDateKey = "SV, 5, 2010-03-11, KBP, JFK, 08:00:00";
00118         lClassCode = "J";
00119     }
00120 }
00121
00122 // Make a booking
00123 const bool hasSaleBeenSuccessful =
00124     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00125
00126 // DEBUG: Display the list of travel solutions
00127 const std::string& lCSVDump = airinvService.csvDisplay();
00128 STDAIR_LOG_DEBUG (lCSVDump);
00129
00130 // Close the log file
00131 logOutputFile.close();
00132
00133 if (hasSaleBeenSuccessful == false) {
00134     STDAIR_LOG_DEBUG ("No sale can be made for '" << lSegmentDateKey
00135                     << "'");
00136 }
00137
00138 return hasSaleBeenSuccessful;
00139
00140 }
00141
00142 // ////////////////////////////////// Main: Unit Test Suite //////////////////////////////////
00143
00144 // Set the UTF configuration (re-direct the output to a specific file)
00145 BOOST_GLOBAL_FIXTURE (UnitTestFixture);
00146
00147 // Start the test suite
00148 BOOST_AUTO_TEST_SUITE (master_test_suite)
00149
00150
00151

```

```

00152
00155 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell) {
00156
00157     // Input file name
00158     const stdair::Filename_T lInventoryInputFilename (STDAIR_SAMPLE_DIR
00159                                                         "/invdump01.csv");
00160
00161     // State whether the BOM tree should be built-in or parsed from an input file
00162     const bool isBuiltin = false;
00163     // State whether the BOM tree should be built from a schedule file (instead
00164     // of from an inventory dump)
00165     const bool isForSchedule = false;
00166
00167     // Try sell a default segment.
00168     bool hasTestBeenSuccessful = false;
00169     BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00170                           testInventoryHelper (0, lInventoryInputFilename,
00171                                                " ", " ", " ", isBuiltin,
00172                                                isForSchedule));
00173     BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00174 }
00175
00176 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_built_in) {
00177
00178     // State whether the BOM tree should be built-in or parsed from an input file
00179     const bool isBuiltin = true;
00180     // State whether the BOM tree should be built from a schedule file (instead
00181     // of from an inventory dump)
00182     const bool isForSchedule = false;
00183
00184     // Try sell a default segment.
00185     bool hasTestBeenSuccessful = false;
00186     BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00187                           testInventoryHelper (1, " ", " ", " ", " ", " ",
00188                                                isBuiltin, isForSchedule));
00189     BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00190 }
00191
00192 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_schedule) {
00193
00194     // Input file names
00195     const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00196                                                         "/schedule01.csv");
00197     const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00198                                                  "/ond01.csv");
00199     const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00200                                                    "/yieldstore01.csv");
00201
00202     // State whether the BOM tree should be built-in or parsed from an input file
00203     const bool isBuiltin = false;
00204     // State whether the BOM tree should be built from a schedule file (instead
00205     // of from an inventory dump)
00206     const bool isForSchedule = true;
00207
00208     // Try sell a default segment.
00209     bool hasTestBeenSuccessful = false;
00210     BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00211                           testInventoryHelper (2, " ",
00212                                                lScheduleInputFilename,
00213                                                lODInputFilename,
00214                                                lYieldInputFilename,
00215                                                isBuiltin, isForSchedule));
00216     BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00217 }
00218
00219 BOOST_AUTO_TEST_CASE (airinv_error_inventory_input_file) {
00220
00221     // Inventory input file name
00222     const stdair::Filename_T lMissingInventoryFilename (STDAIR_SAMPLE_DIR
00223                                                         "/missingFile.csv");
00224 }

```

```

00234 // State whether the BOM tree should be built-in or parsed from an input file
00235 const bool isBuiltin = false;
00236 // State whether the BOM tree should be built from a schedule file (instead
of from an inventory dump)
00237 const bool isForSchedule = false;
00238
00239 // Try sell a default segment.
00240 BOOST_CHECK_THROW (testInventoryHelper (3, lMissingInventoryFilename,
00241                                     " ", " ", " ", isBuiltin,
isForSchedule),
00242                     AIRINV::InventoryInputFileNotFoundException);
00243
00244 }
00245
00250 BOOST_AUTO_TEST_CASE (airinv_error_schedule_input_file) {
00251
00252     // Schedule input file name
00253     const stdair::Filename_T lMissingScheduleFilename (STDAIR_SAMPLE_DIR
00254                                                         "/missingFile.csv");
00255
00256     // State whether the BOM tree should be built-in or parsed from an input file
00257     const bool isBuiltin = false;
00258     // State whether the BOM tree should be built from a schedule file (instead
of from an inventory dump)
00259     const bool isForSchedule = true;
00260
00261     // Try sell a default segment.
00262     BOOST_CHECK_THROW (testInventoryHelper (4, " ", lMissingScheduleFilename,
00263                                     " ", " ", isBuiltin, isForSchedule),
00264                     AIRINV::ScheduleInputFileNotFoundException);
00265
00266 }
00267
00272 BOOST_AUTO_TEST_CASE (airinv_error_yield_input_file) {
00273
00274     // Input file names
00275     const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00276                                                         "/schedule01.csv");
00277     const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00278                                                  "/ond01.csv");
00279     const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00280                                                    "/missingFile.csv");
00281
00282     // State whether the BOM tree should be built-in or parsed from an input file
00283     const bool isBuiltin = false;
00284     // State whether the BOM tree should be built from a schedule file (instead
of from an inventory dump)
00285     const bool isForSchedule = true;
00286
00287     // Try sell a default segment.
00288     BOOST_CHECK_THROW (testInventoryHelper (5, " ",
00289                                     lScheduleInputFilename,
00290                                     lODInputFilename,
00291                                     lYieldInputFilename,
00292                                     isBuiltin, isForSchedule),
00293                     AIRRAC::YieldInputFileNotFoundException);
00294
00295 }
00296
00301 BOOST_AUTO_TEST_CASE (airinv_error_flight_date_duplication) {
00302
00303     // Input file names
00304     const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00305                                                         "/scheduleError01.csv");
00306     const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00307                                                  "/ond01.csv");
00308     const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00309                                                    "/missingFile.csv");
00310
00311     // State whether the BOM tree should be built-in or parsed from an input file
00312     const bool isBuiltin = false;
00313     // State whether the BOM tree should be built from a schedule file (instead
of from an inventory dump)
00314     const bool isForSchedule = true;

```

```

00315
00316 // Try sell a default segment.
00317 BOOST_CHECK_THROW (testInventoryHelper (6, " ",
00318                                         lScheduleInputFilename,
00319                                         lODInputFilename,
00320                                         lYieldInputFilename,
00321                                         isBuiltin, isForSchedule),
00322                     AIRINV::FlightDateDuplicationException);
00323
00324 }
00325
00330 BOOST_AUTO_TEST_CASE (airinv_error_schedule_parsing_failed) {
00331
00332 // Input file names
00333 const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00334                                                    "/scheduleError02.csv");
00335 const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00336                                              "/ond01.csv");
00337 const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00338                                                "/yieldstore01.csv");
00339
00340 // State whether the BOM tree should be built-in or parsed from an input file
00341 const bool isBuiltin = false;
00342 // State whether the BOM tree should be built from a schedule file (instead
00343 // of from an inventory dump)
00344 const bool isForSchedule = true;
00345
00346 // Try sell a default segment.
00347 BOOST_CHECK_THROW (testInventoryHelper (7, " ",
00348                                         lScheduleInputFilename,
00349                                         lODInputFilename,
00350                                         lYieldInputFilename,
00351                                         isBuiltin, isForSchedule),
00352                     AIRINV::ScheduleFileParsingFailedException);
00353 }
00354
00355 // End the test suite
00356 BOOST_AUTO_TEST_SUITE_END()
00357
00358

```

25.253 test/airinv/InventoryTestSuite.hpp File Reference

```

#include <iosfwd>      #include <cppunit/extensions/Helper-
Macros.h>

```

Classes

- class [InventoryTestSuite](#)

Functions

- [CPPUNIT_TEST_SUITE_REGISTRATION](#) ([InventoryTestSuite](#))

25.253.1 Function Documentation

25.253.1.1 CPPUNIT_TEST_SUITE_REGISTRATION ([InventoryTestSuite](#))

25.254 InventoryTestSuite.hpp

```
00001 // STL
00002 #include <iosfwd>
00003 // CPPUNIT
00004 #include <cppunit/extensions/HelperMacros.h>
00005
00006 class InventoryTestSuite : public CppUnit::TestFixture {
00007     CPPUNIT_TEST_SUITE (InventoryTestSuite);
00008     CPPUNIT_TEST (simpleInventory);
00009     // CPPUNIT_TEST (errorCase);
00010     CPPUNIT_TEST_SUITE_END ();
00011 public:
00012     void simpleInventory();
00013     // void errorCase ();
00014     InventoryTestSuite ();
00015 private:
00016     void simpleInventoryHelper();
00017 protected:
00018     std::stringstream _describeKey;
00019 };
00020
00021 CPPUNIT_TEST_SUITE_REGISTRATION (InventoryTestSuite);
```

Index

- ~AIRINV_Service
 - AIRINV::AIRINV_Service, [162](#)
- ~AirInvServer
 - AIRINV::AirInvServer, [168](#)
- ~BomAbstract
 - AIRINV::BomAbstract, [176](#)
- ~FacAirinvMasterServiceContext
 - AIRINV::FacAirinvMasterServiceContext, [227](#)
- ~FacAirinvServiceContext
 - AIRINV::FacAirinvServiceContext, [229](#)
- ~FacBomAbstract
 - AIRINV::FacBomAbstract, [231](#)
- ~FacServiceAbstract
 - AIRINV::FacServiceAbstract, [233](#)
- ~FacSupervisor
 - AIRINV::FacSupervisor, [235](#)
- ~SKeymap
 - swift::SKeymap, [325](#)
- ~SReadline
 - swift::SReadline, [327](#)
- ~ServiceAbstract
 - AIRINV::ServiceAbstract, [322](#)
- AIRINV::FlightRequestStatus
 - INTERNAL_ERROR, [259](#)
 - LAST_VALUE, [259](#)
 - NOT_FOUND, [259](#)
 - OK, [259](#)
- AIRINV::FlightTypeCode
 - DOMESTIC, [261](#)
 - GROUND_HANDLING, [262](#)
 - INTERNATIONAL, [261](#)
 - LAST_VALUE, [262](#)
- AIRINV::FlightVisibilityCode
 - HIDDEN, [264](#)
 - LAST_VALUE, [264](#)
 - NORMAL, [264](#)
 - PSEUDO, [264](#)
- DOMESTIC
 - AIRINV::FlightTypeCode, [261](#)
- GROUND_HANDLING
 - AIRINV::FlightTypeCode, [262](#)
- HIDDEN
 - AIRINV::FlightVisibilityCode, [264](#)
- INTERNAL_ERROR
 - AIRINV::FlightRequestStatus, [259](#)
- INTERNATIONAL
 - AIRINV::FlightTypeCode, [261](#)
- LAST_VALUE
 - AIRINV::FlightRequestStatus, [259](#)
 - AIRINV::FlightTypeCode, [262](#)
 - AIRINV::FlightVisibilityCode, [264](#)
- NORMAL
 - AIRINV::FlightVisibilityCode, [264](#)
- NOT_FOUND
 - AIRINV::FlightRequestStatus, [259](#)
- OK
 - AIRINV::FlightRequestStatus, [259](#)
- PSEUDO
 - AIRINV::FlightVisibilityCode, [264](#)
- AIRINV, [135](#)
 - AIRINV_ServicePtr_T, [138](#)
 - AirportList_T, [140](#)
 - AirportOrderedList_T, [140](#)
 - BookingClassStructList_T, [140](#)
 - BucketStructList_T, [140](#)
 - ConnectionShrPtr_T, [141](#)
 - DepartureDateSegmentCabinMap_T, [141](#)
 - FRAT5Curve_T, [138](#)
 - FareFamilyStructList_T, [140](#)
 - LegCabinStructList_T, [140](#)
 - LegStructList_T, [140](#)
 - SegmentCabinStructList_T, [141](#)
 - SegmentStructList_T, [141](#)
 - SimilarSegmentCabinSetMap_T, [141](#)
 - ThreadShrPtrList_T, [141](#)
 - ThreadShrPtr_T, [141](#)
 - bounded1_2_p_t, [139](#)
 - bounded1_3_p_t, [140](#)
 - bounded1_4_p_t, [140](#)
 - bounded2_p_t, [139](#)
 - bounded4_p_t, [140](#)
 - char_t, [138](#)
 - chset_t, [139](#)
 - int1_p_t, [138](#)
 - iterator_t, [138](#)
 - repeat_p_t, [139](#)
 - rule_t, [138](#)
 - scanner_t, [138](#)

- uint1_2_p_t, 139
- uint1_3_p_t, 139
- uint1_4_p_t, 139
- uint2_p_t, 138
- uint4_p_t, 139
- AIRINV::AIRINV_Master_Service, 152
 - calculateAvailability, 155
 - cancel, 156
 - check, 158
 - csvDisplay, 158
 - jsonExport, 157
 - list, 157
 - optimise, 157
 - sell, 156
 - takeSnapshots, 156
- AIRINV::AIRINV_Master_ServiceContext, 159
- AIRINV::AIRINV_Service, 160
 - buildSampleBom, 162
 - calculateAvailability, 163
 - cancel, 163
 - check, 165
 - csvDisplay, 165, 166
 - initRMEvents, 163
 - jsonExport, 164
 - list, 165
 - optimise, 164
 - parseAndLoad, 162
 - sell, 163
 - takeSnapshots, 164
- AIRINV::AIRINV_ServiceContext, 166
- AIRINV::AirInvServer, 167
 - ~AirInvServer, 168
 - AirInvServer, 168
 - run, 168
 - stop, 168
- AIRINV::BomAbstract, 175
 - ~BomAbstract, 176
 - BomAbstract, 176
 - FacBomAbstract, 177
 - describeKey, 176
 - describeShortKey, 176
 - fromStream, 176
 - toStream, 176
 - toString, 176
- AIRINV::BomRootHelper, 178
 - fillFromRouting, 179
- AIRINV::BookingClassHelper, 179
- AIRINV::BookingClassStruct, 179
 - BookingClassStruct, 180
 - _classCode, 181
 - _cumulatedProtection, 181
 - _etb, 183
 - _nbOfBookings, 182
 - _nbOfGroupBookings, 182
 - _nbOfPendingGroupBookings, 182
 - _nbOfStaffBookings, 183
 - _nbOfWLBookings, 183
 - _nego, 182
 - _netClassAvailability, 183
 - _netRevenueAvailability, 183
 - _noShowPercentage, 182
 - _overbookingPercentage, 182
 - _parentClassCode, 181
 - _parentSubclassCode, 181
 - _protection, 182
 - _segmentAvailability, 183
 - _subclassCode, 181
 - describe, 181
 - fill, 180
 - getFullSubclassCode, 180
- AIRINV::BookingException, 184
- AIRINV::BucketStruct, 184
 - BucketStruct, 185
 - _availability, 185
 - _nbOfSeats, 185
 - _seatIndex, 186
 - _yieldRangeUpperValue, 185
 - describe, 185
 - fill, 185
- AIRINV::Connection, 188
 - Connection, 188
 - socket, 188
 - start, 188
- AIRINV::DCPEventGenerator, 193
 - DCPFileParser, 194
 - DCPParser, 194
- AIRINV::DCPEventStruct, 194
 - DCPEventStruct, 195
 - _DCP, 201
 - _advancePurchase, 200
 - _airlineCode, 201
 - _airlineCodeList, 201
 - _cabinCode, 200
 - _changeFees, 200
 - _channel, 200
 - _classCode, 201
 - _classCodeList, 201
 - _dateRangeEnd, 199
 - _dateRangeStart, 199

- [_destination](#), 199
 - [_itCurrentAirlineCode](#), 198
 - [_itCurrentClassCode](#), 199
 - [_itDay](#), 198
 - [_itHours](#), 198
 - [_itMinutes](#), 198
 - [_itMonth](#), 198
 - [_itSeconds](#), 198
 - [_itYear](#), 198
 - [_minimumStay](#), 201
 - [_nonRefundable](#), 200
 - [_origin](#), 199
 - [_pos](#), 200
 - [_saturdayStay](#), 200
 - [_timeRangeEnd](#), 199
 - [_timeRangeStart](#), 199
 - [beginAirline](#), 196
 - [beginClassCode](#), 197
 - [describe](#), 196
 - [getAirlineListSize](#), 196
 - [getClassCodeListSize](#), 196
 - [getCurrentAirlineCode](#), 197
 - [getCurrentClassCode](#), 197
 - [getDate](#), 196
 - [getFirstAirlineCode](#), 196
 - [getFirstClassCode](#), 197
 - [getTime](#), 196
 - [hasNotReachedEndAirline](#), 197
 - [hasNotReachedEndClassCode](#), 197
 - [iterateAirline](#), 197
 - [iterateClassCode](#), 198
- [AIRINV::DCPPParser](#), 202
 - [DCPRuleGeneration](#), 202
- [AIRINV::DCPPParserHelper](#), 142
 - [day_p](#), 144
 - [hour_p](#), 143
 - [int1_p](#), 143
 - [minute_p](#), 143
 - [month_p](#), 143
 - [second_p](#), 143
 - [uint1_4_p](#), 143
 - [uint2_p](#), 143
 - [uint4_p](#), 143
 - [year_p](#), 143
- [AIRINV::DCPPParserHelper::DCPRule-Parser](#), 203
 - [DCP](#), 209
 - [advancePurchase](#), 208
 - [cabinCode](#), 208
 - [changeFees](#), 208
 - [channel](#), 208
 - [comments](#), 206
 - [date](#), 207
 - [dateRangeEnd](#), 207
 - [dateRangeStart](#), 207
 - [destination](#), 207
 - [list_class](#), 209
 - [minimumStay](#), 208
 - [nonRefundable](#), 208
 - [origin](#), 207
 - [position](#), 208
 - [saturdayStay](#), 208
 - [segment](#), 209
 - [start](#), 206
 - [time](#), 207
 - [timeRangeEnd](#), 207
 - [timeRangeStart](#), 207
- [AIRINV::DCPPParserHelper::Parser-SemanticAction](#), 301
 - [ParserSemanticAction](#), 302
- [AIRINV::DCPPParserHelper::doEndDCP](#), 219
 - [_bomRoot](#), 220
 - [doEndDCP](#), 220
 - [operator\(\)](#), 220
- [AIRINV::DCPPParserHelper::storeAdvance-Purchase](#), 334
 - [operator\(\)](#), 335
 - [storeAdvancePurchase](#), 334
- [AIRINV::DCPPParserHelper::storeAirline-Code](#), 335
 - [operator\(\)](#), 336
 - [storeAirlineCode](#), 336
- [AIRINV::DCPPParserHelper::storeCabin-Code](#), 353
 - [operator\(\)](#), 353
 - [storeCabinCode](#), 353
- [AIRINV::DCPPParserHelper::storeChange-Fees](#), 356
 - [operator\(\)](#), 357
 - [storeChangeFees](#), 356
- [AIRINV::DCPPParserHelper::storeChannel](#), 357
 - [_DCPRule](#), 358
 - [operator\(\)](#), 358
 - [storeChannel](#), 358
- [AIRINV::DCPPParserHelper::storeClass](#), 359
 - [_DCPRule](#), 360
 - [operator\(\)](#), 360

- storeClass, [359](#)
- AIRINV::DCPPParserHelper::storeDCP, [377](#)
 - operator(), [377](#)
 - storeDCP, [377](#)
- AIRINV::DCPPParserHelper::storeDCPID, [378](#)
 - operator(), [379](#)
- AIRINV::DCPPParserHelper::storeDateRangeEnd, [372](#)
 - operator(), [373](#)
 - storeDateRangeEnd, [373](#)
- AIRINV::DCPPParserHelper::storeDateRangeStart, [375](#)
 - operator(), [376](#)
 - storeDateRangeStart, [376](#)
- AIRINV::DCPPParserHelper::storeDestination, [380](#)
 - _DCPRule, [381](#)
 - operator(), [381](#)
 - storeDestination, [380](#)
- AIRINV::DCPPParserHelper::storeEndRangeTime, [384](#)
 - operator(), [385](#)
 - storeEndRangeTime, [385](#)
- AIRINV::DCPPParserHelper::storeMinimumStay, [418](#)
 - operator(), [419](#)
 - storeMinimumStay, [419](#)
- AIRINV::DCPPParserHelper::storeNonRefundable, [434](#)
 - operator(), [435](#)
 - storeNonRefundable, [435](#)
- AIRINV::DCPPParserHelper::storeOrigin, [444](#)
 - _DCPRule, [445](#)
 - operator(), [445](#)
 - storeOrigin, [444](#)
- AIRINV::DCPPParserHelper::storePOS, [452](#)
 - operator(), [452](#)
 - storePOS, [452](#)
- AIRINV::DCPPParserHelper::storeSaturdayStay, [459](#)
 - operator(), [460](#)
 - storeSaturdayStay, [460](#)
- AIRINV::DCPPParserHelper::storeStartRangeTime, [482](#)
 - operator(), [483](#)
 - storeStartRangeTime, [483](#)
- AIRINV::DCPRuleFileParser, [202](#)
 - DCPRuleFileParser, [203](#)
 - generateDCPRules, [203](#)
- AIRINV::DefaultMap, [209](#)
 - createPickupFRAT5Curve, [210](#)
- AIRINV::FacAirinvMasterServiceContext, [227](#)
 - ~FacAirinvMasterServiceContext, [227](#)
 - FacAirinvMasterServiceContext, [227](#)
 - create, [228](#)
 - instance, [228](#)
- AIRINV::FacAirinvServiceContext, [228](#)
 - ~FacAirinvServiceContext, [229](#)
 - FacAirinvServiceContext, [229](#)
 - create, [230](#)
 - instance, [229](#)
- AIRINV::FacBomAbstract, [230](#)
 - ~FacBomAbstract, [231](#)
 - BomPool_T, [231](#)
 - FacBomAbstract, [231](#)
 - FacSupervisor, [232](#)
 - _pool, [232](#)
 - getID, [231](#)
 - getIDString, [232](#)
- AIRINV::FacServiceAbstract, [232](#)
 - ~FacServiceAbstract, [233](#)
 - FacServiceAbstract, [233](#)
 - ServicePool_T, [233](#)
 - _pool, [234](#)
 - clean, [234](#)
- AIRINV::FacSupervisor, [234](#)
 - ~FacSupervisor, [235](#)
 - BomFactoryPool_T, [235](#)
 - FacSupervisor, [235](#), [236](#)
 - ServiceFactoryPool_T, [235](#)
 - cleanBomLayer, [237](#)
 - cleanFactory, [237](#)
 - cleanServiceLayer, [237](#)
 - instance, [236](#)
 - registerBomFactory, [236](#)
 - registerServiceFactory, [236](#)
- AIRINV::FareFamilyStruct, [238](#)
 - FareFamilyStruct, [238](#)
 - _classList, [239](#)
 - _classes, [239](#)
 - _familyCode, [239](#)
 - describe, [239](#)
 - fill, [239](#)

- AIRINV::FlightDateDuplicationException, [240](#)
 - FlightDateDuplicationException, [240](#)
- AIRINV::FlightDateHelper, [241](#)
 - fillFromRouting, [241](#)
 - updateAvailabilityPool, [241](#)
 - updateBookingControls, [241](#)
- AIRINV::FlightDateStruct, [242](#)
 - FlightDateStruct, [243](#)
 - _airlineCode, [245](#)
 - _airportList, [247](#)
 - _airportOrderedList, [247](#)
 - _areSegmentDefinitionsSpecific, [248](#)
 - _dateOffset, [246](#)
 - _flightDate, [245](#)
 - _flightNumber, [245](#)
 - _flightTypeCode, [245](#)
 - _flightVisibilityCode, [246](#)
 - _itBookingClass, [248](#)
 - _itBucket, [248](#)
 - _itDay, [246](#)
 - _itHours, [246](#)
 - _itLeg, [247](#)
 - _itLegCabin, [247](#)
 - _itMinutes, [247](#)
 - _itMonth, [246](#)
 - _itSeconds, [247](#)
 - _itSegment, [248](#)
 - _itSegmentCabin, [248](#)
 - _itYear, [246](#)
 - _legAlreadyDefined, [247](#)
 - _legList, [246](#)
 - _segmentList, [246](#)
 - addAirport, [244](#)
 - addFareFamily, [244](#), [245](#)
 - addSegmentCabin, [244](#)
 - buildSegments, [244](#)
 - describe, [243](#)
 - getDate, [243](#)
 - getTime, [243](#)
- AIRINV::FlightPeriodFileParser, [249](#)
 - FlightPeriodFileParser, [250](#)
 - generateInventories, [250](#)
- AIRINV::FlightPeriodStruct, [252](#)
 - FlightPeriodStruct, [253](#)
 - _airlineCode, [255](#)
 - _airportList, [257](#)
 - _airportOrderedList, [258](#)
 - _areSegmentDefinitionsSpecific, [258](#)
 - _dateOffset, [257](#)
 - _dateRange, [255](#)
 - _dateRangeEnd, [256](#)
 - _dateRangeStart, [256](#)
 - _dow, [255](#)
 - _flightNumber, [255](#)
 - _itDay, [257](#)
 - _itHours, [257](#)
 - _itLeg, [256](#)
 - _itLegCabin, [256](#)
 - _itMinutes, [257](#)
 - _itMonth, [257](#)
 - _itSeconds, [257](#)
 - _itSegment, [258](#)
 - _itSegmentCabin, [258](#)
 - _itYear, [257](#)
 - _legAlreadyDefined, [256](#)
 - _legList, [256](#)
 - _segmentList, [256](#)
 - addAirport, [254](#)
 - addFareFamily, [255](#)
 - addSegmentCabin, [254](#)
 - buildSegments, [254](#)
 - describe, [253](#)
 - getDate, [253](#)
 - getTime, [253](#)
- AIRINV::FlightRequestStatus, [258](#)
 - EN_FlightRequestStatus, [259](#)
 - FlightRequestStatus, [260](#)
 - describe, [260](#)
 - describeLabels, [260](#)
 - getCode, [260](#)
 - getCodeLabel, [260](#)
 - getLabel, [260](#)
- AIRINV::FlightTypeCode, [261](#)
 - EN_FlightTypeCode, [261](#)
 - FlightTypeCode, [262](#)
 - describe, [263](#)
 - describeLabels, [262](#)
 - getCode, [262](#)
 - getCodeLabel, [262](#)
 - getLabel, [262](#)
- AIRINV::FlightVisibilityCode, [263](#)
 - EN_FlightVisibilityCode, [264](#)
 - FlightVisibilityCode, [264](#)
 - describe, [265](#)
 - describeLabels, [264](#)
 - getCode, [265](#)
 - getCodeLabel, [264](#)
 - getLabel, [264](#)
- AIRINV::GuillotineBlockHelper, [266](#)

- takeSnapshots, 266
- AIRINV::InventoryBuilder, 268
 - InventoryParserHelper::doEndFlightDate, 269
- AIRINV::InventoryFileParser, 269
 - InventoryFileParser, 269
 - buildInventory, 270
- AIRINV::InventoryFileParsingFailedException, 270
 - InventoryFileParsingFailedException, 270
- AIRINV::InventoryGenerator, 271
 - FFFlightPeriodFileParser, 271
 - FlightPeriodFileParser, 271
 - ScheduleParser, 271
 - ScheduleParserHelper::doEndFlight, 271
- AIRINV::InventoryHelper, 272
 - calculateAvailability, 272
 - cancel, 273
 - fillFromRouting, 272
 - getYieldAndBidPrice, 272
 - sell, 272
 - takeSnapshots, 273
- AIRINV::InventoryInputFileNotFound-Exception, 273
 - InventoryInputFileNotFound-Exception, 274
- AIRINV::InventoryManager, 274
 - AIRINV_Service, 276
 - buildGuillotineBlock, 275
 - buildSimilarSegmentCabinSets, 275
 - createDirectAccesses, 274, 275
 - setDefaultBidPriceVector, 275, 276
- AIRINV::InventoryParser, 276
 - buildInventory, 277
- AIRINV::InventoryParserHelper, 144
 - airline_code_p, 146
 - airport_p, 146
 - cabin_code_p, 147
 - class_code_list_p, 147
 - class_code_p, 147
 - day_p, 146
 - dow_p, 146
 - family_code_p, 148
 - flight_number_p, 146
 - hours_p, 146
 - int1_p, 147
 - minutes_p, 146
 - month_p, 146
 - passenger_type_p, 147
 - seconds_p, 147
 - stay_duration_p, 147
 - uint1_2_p, 147
 - uint1_3_p, 148
 - uint1_4_p, 148
 - uint2_p, 147
 - uint4_p, 148
 - year_p, 146
- AIRINV::InventoryParserHelper::InventoryParser, 277
 - InventoryParser, 278
 - _bomRoot, 278
 - _flightDate, 278
 - _nbOfFlights, 278
- AIRINV::InventoryParserHelper::InventoryParser::definition, 210
 - airline_code, 212
 - bucket_details, 213
 - bucket_list, 213
 - class_details, 214
 - class_key, 214
 - class_list, 214
 - class_nego, 214
 - class_protection, 214
 - date, 212
 - definition, 211
 - family_cabin_details, 215
 - family_cabin_list, 215
 - flight_date, 212
 - flight_date_end, 212
 - flight_date_list, 211
 - flight_key, 212
 - flight_number, 212
 - flight_type_code, 212
 - flight_visibility_code, 212
 - leg, 212
 - leg_cabin_details, 213
 - leg_cabin_list, 213
 - leg_details, 213
 - leg_key, 213
 - leg_list, 212
 - parent_subclass_code, 214
 - segment, 213
 - segment_cabin_details, 214
 - segment_cabin_key, 214
 - segment_cabin_list, 214
 - segment_key, 213
 - segment_list, 213
 - start, 211

- time, 213
- AIRINV::InventoryParserHelper::Parser-SemanticAction, 296
- ParserSemanticAction, 297
- _flightDate, 298
- AIRINV::InventoryParserHelper::doEndFlightDate, 223
- _bomRoot, 224
- _flightDate, 224
- _nbOfFlights, 224
- doEndFlightDate, 224
- operator(), 224
- AIRINV::InventoryParserHelper::storeACP, 332
- _flightDate, 333
- operator(), 332
- storeACP, 332
- AIRINV::InventoryParserHelper::storeAU, 341
- _flightDate, 342
- operator(), 341
- storeAU, 341
- AIRINV::InventoryParserHelper::store-AirlineCode, 337
- _flightDate, 338
- operator(), 338
- storeAirlineCode, 337
- AIRINV::InventoryParserHelper::store-BoardingDate, 343
- _flightDate, 344
- operator(), 343
- storeBoardingDate, 343
- AIRINV::InventoryParserHelper::store-BoardingTime, 345
- _flightDate, 346
- operator(), 345
- storeBoardingTime, 345
- AIRINV::InventoryParserHelper::store-BookingCounter, 348
- _flightDate, 349
- operator(), 349
- storeBookingCounter, 349
- AIRINV::InventoryParserHelper::store-BucketAvailability, 351
- _flightDate, 352
- operator(), 351
- storeBucketAvailability, 351
- AIRINV::InventoryParserHelper::store-ClassAvailability, 360
- _flightDate, 361
- operator(), 361
- storeClassAvailability, 361
- AIRINV::InventoryParserHelper::store-ClassCode, 362
- _flightDate, 363
- operator(), 363
- storeClassCode, 363
- AIRINV::InventoryParserHelper::store-ClassETB, 366
- _flightDate, 367
- operator(), 367
- storeClassETB, 367
- AIRINV::InventoryParserHelper::store-CumulatedProtection, 368
- _flightDate, 369
- operator(), 369
- storeCumulatedProtection, 369
- AIRINV::InventoryParserHelper::storeETB, 386
- _flightDate, 387
- operator(), 387
- storeETB, 387
- AIRINV::InventoryParserHelper::storeFClasses, 393
- _flightDate, 394
- operator(), 394
- storeFClasses, 394
- AIRINV::InventoryParserHelper::store-FamilyCode, 390
- _flightDate, 391
- operator(), 390
- storeFamilyCode, 390
- AIRINV::InventoryParserHelper::store-FlightDate, 395
- _flightDate, 396
- operator(), 396
- storeFlightDate, 396
- AIRINV::InventoryParserHelper::store-FlightNumber, 399
- _flightDate, 400
- operator(), 400
- storeFlightNumber, 400
- AIRINV::InventoryParserHelper::store-FlightTypeCode, 401
- _flightDate, 402
- operator(), 402
- storeFlightTypeCode, 402
- AIRINV::InventoryParserHelper::store-FlightVisibilityCode, 403
- _flightDate, 404

- operator(), [404](#)
 - storeFlightVisibilityCode, [404](#)
- AIRINV::InventoryParserHelper::storeGAV, [405](#)
 - _flightDate, [406](#)
 - operator(), [406](#)
 - storeGAV, [406](#)
- AIRINV::InventoryParserHelper::storeLegBoardingPoint, [409](#)
 - _flightDate, [410](#)
 - operator(), [410](#)
 - storeLegBoardingPoint, [409](#)
- AIRINV::InventoryParserHelper::storeLegCabinCode, [411](#)
 - _flightDate, [412](#)
 - operator(), [412](#)
 - storeLegCabinCode, [412](#)
- AIRINV::InventoryParserHelper::storeLegOffPoint, [415](#)
 - _flightDate, [416](#)
 - operator(), [416](#)
 - storeLegOffPoint, [415](#)
- AIRINV::InventoryParserHelper::storeNAV, [420](#)
 - _flightDate, [421](#)
 - operator(), [421](#)
 - storeNAV, [421](#)
- AIRINV::InventoryParserHelper::storeNbOfBkgs, [422](#)
 - _flightDate, [423](#)
 - operator(), [423](#)
 - storeNbOfBkgs, [423](#)
- AIRINV::InventoryParserHelper::storeNbOfGroupBkgs, [424](#)
 - _flightDate, [425](#)
 - operator(), [425](#)
 - storeNbOfGroupBkgs, [425](#)
- AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs, [426](#)
 - _flightDate, [427](#)
 - operator(), [427](#)
- AIRINV::InventoryParserHelper::storeNbOfStaffBkgs, [428](#)
 - _flightDate, [429](#)
 - operator(), [429](#)
 - storeNbOfStaffBkgs, [429](#)
- AIRINV::InventoryParserHelper::storeNbOfWLBkgs, [430](#)
 - _flightDate, [431](#)
 - operator(), [431](#)
- AIRINV::InventoryParserHelper::storeNego, [432](#)
 - _flightDate, [433](#)
 - operator(), [433](#)
 - storeNego, [433](#)
- AIRINV::InventoryParserHelper::storeNoShow, [436](#)
 - _flightDate, [437](#)
 - operator(), [437](#)
 - storeNoShow, [437](#)
- AIRINV::InventoryParserHelper::storeOffDate, [438](#)
 - _flightDate, [439](#)
 - operator(), [439](#)
 - storeOffDate, [439](#)
- AIRINV::InventoryParserHelper::storeOffTime, [440](#)
 - _flightDate, [441](#)
 - operator(), [441](#)
 - storeOffTime, [441](#)
- AIRINV::InventoryParserHelper::storeOverbooking, [445](#)
 - _flightDate, [446](#)
 - operator(), [446](#)
 - storeOverbooking, [446](#)
- AIRINV::InventoryParserHelper::storeParentClassCode, [447](#)
 - _flightDate, [448](#)
 - operator(), [448](#)
 - storeParentClassCode, [448](#)
- AIRINV::InventoryParserHelper::storeParentSubclassCode, [450](#)
 - _flightDate, [451](#)
 - operator(), [450](#)
 - storeParentSubclassCode, [450](#)
- AIRINV::InventoryParserHelper::storeProtection, [453](#)
 - _flightDate, [454](#)
 - operator(), [454](#)
 - storeProtection, [454](#)
- AIRINV::InventoryParserHelper::storeRevenueAvailability, [455](#)
 - _flightDate, [456](#)
 - operator(), [456](#)
 - storeRevenueAvailability, [456](#)
- AIRINV::InventoryParserHelper::storeSaleableCapacity, [457](#)
 - _flightDate, [458](#)
 - operator(), [458](#)
 - storeSaleableCapacity, [458](#)

- AIRINV::InventoryParserHelper::store-
 SeatIndex, [461](#)
 _flightDate, [462](#)
 operator(), [462](#)
 storeSeatIndex, [461](#)
- AIRINV::InventoryParserHelper::store-
 SegmentAvailability, [463](#)
 _flightDate, [464](#)
 operator(), [464](#)
 storeSegmentAvailability, [463](#)
- AIRINV::InventoryParserHelper::store-
 SegmentBoardingPoint, [467](#)
 _flightDate, [468](#)
 operator(), [467](#)
 storeSegmentBoardingPoint, [467](#)
- AIRINV::InventoryParserHelper::store-
 SegmentCabinBookingCounter, [469](#)
 _flightDate, [470](#)
 operator(), [470](#)
- AIRINV::InventoryParserHelper::store-
 SegmentCabinCode, [471](#)
 _flightDate, [472](#)
 operator(), [472](#)
 storeSegmentCabinCode, [472](#)
- AIRINV::InventoryParserHelper::store-
 SegmentOffPoint, [475](#)
 _flightDate, [476](#)
 operator(), [476](#)
 storeSegmentOffPoint, [475](#)
- AIRINV::InventoryParserHelper::store-
 SnapshotDate, [480](#)
 _flightDate, [481](#)
 operator(), [481](#)
 storeSnapshotDate, [481](#)
- AIRINV::InventoryParserHelper::store-
 SubclassCode, [484](#)
 _flightDate, [485](#)
 operator(), [485](#)
 storeSubclassCode, [484](#)
- AIRINV::InventoryParserHelper::storeUP-
 R, [486](#)
 _flightDate, [487](#)
 operator(), [487](#)
 storeUPR, [486](#)
- AIRINV::InventoryParserHelper::store-
 YieldUpperRange, [488](#)
 _flightDate, [489](#)
 operator(), [489](#)
 storeYieldUpperRange, [488](#)
- AIRINV::LegCabinHelper, [283](#)
- AIRINV::LegCabinStruct, [284](#)
 _acp, [286](#)
 _adjustment, [285](#)
 _au, [285](#)
 _avPool, [286](#)
 _bucketList, [287](#)
 _cabinCode, [285](#)
 _dcsRegrade, [285](#)
 _etb, [286](#)
 _gav, [286](#)
 _groupNbOfBookings, [286](#)
 _nav, [286](#)
 _nbOfBookings, [286](#)
 _saleableCapacity, [285](#)
 _staffNbOfBookings, [286](#)
 _upr, [286](#)
 _wlNbOfBookings, [286](#)
 describe, [285](#)
 fill, [285](#)
- AIRINV::LegStruct, [287](#)
 LegStruct, [288](#)
 _boardingDate, [289](#)
 _boardingDateOffset, [289](#)
 _boardingPoint, [289](#)
 _boardingTime, [289](#)
 _cabinList, [290](#)
 _elapsed, [290](#)
 _offDate, [289](#)
 _offDateOffset, [289](#)
 _offPoint, [289](#)
 _offTime, [289](#)
 describe, [288](#)
 fill, [288](#)
- AIRINV::Reply, [303](#)
 _status, [304](#)
 content, [304](#)
 to_buffers, [304](#)
- AIRINV::Request, [305](#)
 _airlineCode, [305](#)
 _departureDate, [306](#)
 _flightDetails, [305](#)
 _flightNumber, [305](#)
 parseFlightDate, [305](#)
- AIRINV::RequestHandler, [306](#)
 RequestHandler, [306](#)
 handleRequest, [307](#)
- AIRINV::RequestParser, [307](#)
 RequestParser, [307](#)
 parse, [308](#)

- reset, [308](#)
- AIRINV::ScheduleFileParsingFailed-Exception, [311](#)
- ScheduleFileParsingFailedException, [311](#)
- AIRINV::ScheduleInputFileNotFound-Exception, [312](#)
- ScheduleInputFileNotFoundException, [312](#)
- AIRINV::ScheduleParser, [312](#)
- generateInventories, [313](#)
- AIRINV::ScheduleParserHelper, [148](#)
 - airline_code_p, [149](#)
 - airport_p, [150](#)
 - cabin_code_p, [150](#)
 - class_code_list_p, [151](#)
 - day_p, [150](#)
 - dow_p, [150](#)
 - family_code_p, [151](#)
 - flight_number_p, [149](#)
 - hours_p, [150](#)
 - int1_p, [151](#)
 - minutes_p, [150](#)
 - month_p, [150](#)
 - seconds_p, [150](#)
 - uint1_4_p, [151](#)
 - uint2_p, [151](#)
 - uint4_p, [151](#)
 - year_p, [149](#)
- AIRINV::ScheduleParserHelper::Flight-PeriodParser, [250](#)
- FlightPeriodParser, [251](#)
- _bomRoot, [251](#)
- _flightPeriod, [251](#)
- AIRINV::ScheduleParserHelper::Flight-PeriodParser::definition, [215](#)
- airline_code, [217](#)
- date, [217](#)
- date_offset, [217](#)
- definition, [216](#)
- dow, [217](#)
- family_cabin_details, [218](#)
- flight_key, [217](#)
- flight_number, [217](#)
- flight_period, [216](#)
- flight_period_end, [217](#)
- flight_period_list, [216](#)
- generic_segment, [218](#)
- leg, [217](#)
- leg_cabin_details, [218](#)
- leg_details, [218](#)
- leg_key, [217](#)
- segment_cabin_details, [218](#)
- segment_key, [218](#)
- segment_section, [218](#)
- specific_segment_list, [218](#)
- start, [216](#)
- time, [217](#)
- AIRINV::ScheduleParserHelper::Parser-SemanticAction, [299](#)
- ParserSemanticAction, [300](#)
- _flightPeriod, [300](#)
- AIRINV::ScheduleParserHelper::doEnd-Flight, [221](#)
- _bomRoot, [222](#)
- _flightPeriod, [222](#)
- doEndFlight, [222](#)
- operator(), [222](#)
- AIRINV::ScheduleParserHelper::store-AirlineCode, [339](#)
- _flightPeriod, [340](#)
- operator(), [340](#)
- storeAirlineCode, [340](#)
- AIRINV::ScheduleParserHelper::store-BoardingTime, [347](#)
- _flightPeriod, [348](#)
- operator(), [348](#)
- storeBoardingTime, [347](#)
- AIRINV::ScheduleParserHelper::store-Capacity, [354](#)
- _flightPeriod, [355](#)
- operator(), [355](#)
- storeCapacity, [355](#)
- AIRINV::ScheduleParserHelper::store-Classes, [364](#)
- _flightPeriod, [366](#)
- operator(), [365](#)
- storeClasses, [365](#)
- AIRINV::ScheduleParserHelper::store-DateRangeEnd, [370](#)
- _flightPeriod, [371](#)
- operator(), [371](#)
- storeDateRangeEnd, [371](#)
- AIRINV::ScheduleParserHelper::store-DateRangeStart, [374](#)
- _flightPeriod, [375](#)
- operator(), [374](#)
- storeDateRangeStart, [374](#)
- AIRINV::ScheduleParserHelper::store-Dow, [381](#)

- [_flightPeriod](#), 382
- [operator\(\)](#), 382
- [storeDow](#), 382
- [AIRINV::ScheduleParserHelper::store-
ElapsedTime](#), 383
- [_flightPeriod](#), 384
- [operator\(\)](#), 384
- [storeElapsedTime](#), 383
- [AIRINV::ScheduleParserHelper::storeF-
Classes](#), 392
- [_flightPeriod](#), 393
- [operator\(\)](#), 392
- [storeFClasses](#), 392
- [AIRINV::ScheduleParserHelper::store-
FamilyCode](#), 388
- [_flightPeriod](#), 389
- [operator\(\)](#), 389
- [storeFamilyCode](#), 389
- [AIRINV::ScheduleParserHelper::store-
FlightNumber](#), 397
- [_flightPeriod](#), 398
- [operator\(\)](#), 398
- [storeFlightNumber](#), 398
- [AIRINV::ScheduleParserHelper::store-
LegBoardingPoint](#), 407
- [_flightPeriod](#), 408
- [operator\(\)](#), 408
- [storeLegBoardingPoint](#), 408
- [AIRINV::ScheduleParserHelper::store-
LegCabinCode](#), 413
- [_flightPeriod](#), 414
- [operator\(\)](#), 414
- [storeLegCabinCode](#), 414
- [AIRINV::ScheduleParserHelper::store-
LegOffPoint](#), 417
- [_flightPeriod](#), 418
- [operator\(\)](#), 418
- [storeLegOffPoint](#), 417
- [AIRINV::ScheduleParserHelper::storeOff-
Time](#), 442
- [_flightPeriod](#), 443
- [operator\(\)](#), 443
- [storeOffTime](#), 443
- [AIRINV::ScheduleParserHelper::store-
SegmentBoardingPoint](#), 465
- [_flightPeriod](#), 466
- [operator\(\)](#), 466
- [storeSegmentBoardingPoint](#), 466
- [AIRINV::ScheduleParserHelper::store-
SegmentCabinCode](#), 473
- [_flightPeriod](#), 474
- [operator\(\)](#), 474
- [storeSegmentCabinCode](#), 474
- [AIRINV::ScheduleParserHelper::store-
SegmentOffPoint](#), 477
- [_flightPeriod](#), 478
- [operator\(\)](#), 478
- [storeSegmentOffPoint](#), 477
- [AIRINV::ScheduleParserHelper::store-
SegmentSpecificity](#), 478
- [_flightPeriod](#), 480
- [operator\(\)](#), 479
- [storeSegmentSpecificity](#), 479
- [AIRINV::SegmentCabinHelper](#), 313
- [buildPseudoBidPriceVector](#), 314
- [initialiseAU](#), 315
- [updateAUs](#), 314
- [updateAvailabilities](#), 315
- [updateBookingControlsUsing-
PseudoBidPriceVector](#), 314
- [updateFromReservation](#), 314
- [AIRINV::SegmentCabinStruct](#), 315
- [_cabinCode](#), 316
- [_fareFamilies](#), 317
- [_itFareFamily](#), 316
- [_nbOfBookings](#), 316
- [describe](#), 316
- [fill](#), 316
- [AIRINV::SegmentDateHelper](#), 317
- [fillFromRouting](#), 317
- [updateDistanceFromElapsedTime](#),
318
- [updateElapsedTimeFromRouting](#),
317
- [AIRINV::SegmentDateNotFoundException](#),
318
- [SegmentDateNotFoundException](#),
319
- [AIRINV::SegmentStruct](#), 319
- [_boardingDate](#), 320
- [_boardingPoint](#), 320
- [_boardingTime](#), 320
- [_cabinList](#), 321
- [_elapsed](#), 321
- [_offDate](#), 321
- [_offPoint](#), 320
- [_offTime](#), 321
- [describe](#), 320
- [fill](#), 320
- [AIRINV::ServiceAbstract](#), 322

- ~ServiceAbstract, [322](#)
- ServiceAbstract, [322](#)
- fromStream, [322](#)
- toStream, [322](#)
- AIRINV::header, [267](#)
- name, [267](#)
- value, [267](#)
- AIRINV_Master_Service
 - AIRINV::InventoryManager, [276](#)
- AIRINV_Master_ServicePtr_T
 - AIRINV, [138](#)
- AIRINV_Service
 - AIRINV::AIRINV_Service, [161](#)
 - AIRINV::AIRINV_ServiceContext, [167](#)
 - AIRINV::InventoryManager, [276](#)
- AIRINV_ServicePtr_Map_T
 - AIRINV, [138](#)
- AIRINV_ServicePtr_T
 - AIRINV, [138](#)
- AirInvClient.cpp
 - main, [688](#)
- AirInvClient_ASIO.cpp
 - main, [689](#)
- AirInvServer
 - AIRINV::AirInvServer, [168](#)
- AirportList_T
 - AIRINV, [140](#)
- AirportOrderedList_T
 - AIRINV, [140](#)
- BINDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [675](#)
- Bind
 - swift::SKeymap, [325](#)
- BomAbstract
 - AIRINV::BomAbstract, [176](#)
- BomAbstract.hpp
 - operator<<, [527](#)
 - operator>>, [527](#)
- BomFactoryPool_T
 - AIRINV::FacSupervisor, [235](#)
- BomPool_T
 - AIRINV::FacBomAbstract, [231](#)
- BookingClassStruct
 - AIRINV::BookingClassStruct, [180](#)
- BookingClassStructList_T
 - AIRINV, [140](#)
- BucketStruct
 - AIRINV::BucketStruct, [185](#)
- BucketStructList_T
 - AIRINV, [140](#)
- COMMAND, [187](#)
 - doc, [187](#)
 - func, [187](#)
 - name, [187](#)
- ClearHistory
 - swift::SReadline, [330](#)
- CmdAbstract, [186](#)
- Connection
 - AIRINV::Connection, [188](#)
- ConnectionShrPtr_T
 - AIRINV, [141](#)
- DATADIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- DATAROOTDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- DCP
 - AIRINV::DCPParserHelper::DCP-
RuleParser, [209](#)
- DCPEventStruct
 - AIRINV::DCPEventStruct, [195](#)
- DCPFileParser
 - AIRINV::DCPEventGenerator, [194](#)
- DCPParser
 - AIRINV::DCPEventGenerator, [194](#)
- DCPParserHelper::doEndDCP
 - AIRINV::DCPEventGenerator, [194](#)
- DCPRuleFileParser
 - AIRINV::DCPRuleFileParser, [203](#)
- DCPRuleGeneration
 - AIRINV::DCPParser, [202](#)
- DCPRuleParser
 - AIRINV::DCPParserHelper::DCP-
RuleParser, [205](#)
- DCP_id
 - AIRINV::DCPParserHelper::DCP-
RuleParser, [206](#)
- DCP_key
 - AIRINV::DCPParserHelper::DCP-
RuleParser, [206](#)
- DCP_rule
 - AIRINV::DCPParserHelper::DCP-
RuleParser, [206](#)
- DCP_rule_end
 - AIRINV::DCPParserHelper::DCP-
RuleParser, [206](#)
- DOCDIR

- airinv-paths.hpp, [674](#)
- airinv-paths.hpp.in, [676](#)
- DepartureDateSegmentCabinMap_T
 - AIRINV, [141](#)
- EN_FlightRequestStatus
 - AIRINV::FlightRequestStatus, [259](#)
- EN_FlightTypeCode
 - AIRINV::FlightTypeCode, [261](#)
- EN_FlightVisibilityCode
 - AIRINV::FlightVisibilityCode, [264](#)
- EXEC_PREFIX
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [675](#)
- FFFlightPeriodFileParser
 - AIRINV::InventoryGenerator, [271](#)
- FRAT5Curve_T
 - AIRINV, [138](#)
- FacAirinvMasterServiceContext
 - AIRINV::AIRINV_Master_Service-Context, [159](#)
 - AIRINV::FacAirinvMasterService-Context, [227](#)
- FacAirinvServiceContext
 - AIRINV::AIRINV_ServiceContext, [167](#)
 - AIRINV::FacAirinvServiceContext, [229](#)
- FacBomAbstract
 - AIRINV::BomAbstract, [177](#)
 - AIRINV::FacBomAbstract, [231](#)
- FacServiceAbstract, [234](#)
 - AIRINV::FacServiceAbstract, [233](#)
- FacSupervisor
 - AIRINV::FacBomAbstract, [232](#)
 - AIRINV::FacSupervisor, [235](#), [236](#)
- FareFamilyStruct
 - AIRINV::FareFamilyStruct, [238](#)
- FareFamilyStructList_T
 - AIRINV, [140](#)
- FileNotFoundException, [240](#)
- FlightDateDuplicationException
 - AIRINV::FlightDateDuplication-Exception, [240](#)
- FlightDateStruct
 - AIRINV::FlightDateStruct, [243](#)
- FlightPeriodFileParser
 - AIRINV::FlightPeriodFileParser, [250](#)
 - AIRINV::InventoryGenerator, [271](#)
- FlightPeriodParser
 - AIRINV::ScheduleParserHelper::FlightPeriodParser, [251](#)
- FlightPeriodStruct
 - AIRINV::FlightPeriodStruct, [253](#)
- FlightRequestStatus
 - AIRINV::FlightRequestStatus, [260](#)
- FlightTypeCode
 - AIRINV::FlightTypeCode, [262](#)
- FlightVisibilityCode
 - AIRINV::FlightVisibilityCode, [264](#)
- GetHistory
 - swift::SReadline, [329](#)
- GetLine
 - swift::SReadline, [328](#), [329](#)
- HTMLDIR
 - airinv-paths.hpp, [674](#)
 - airinv-paths.hpp.in, [676](#)
- INCLUDEDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- INFODIR
 - airinv-paths.hpp, [674](#)
 - airinv-paths.hpp.in, [676](#)
- InventoryFileParser
 - AIRINV::InventoryFileParser, [269](#)
- InventoryFileParsingFailedException
 - AIRINV::InventoryFileParsingFailed-Exception, [270](#)
- InventoryInputFileNotFoundException
 - AIRINV::InventoryInputFileNot-FoundException, [274](#)
- InventoryParser
 - AIRINV::InventoryParserHelper::InventoryParser, [278](#)
- InventoryParserHelper::doEndFlightDate
 - AIRINV::InventoryBuilder, [269](#)
- InventoryTestSuite, [278](#)
 - InventoryTestSuite, [279](#)
 - _describeKey, [279](#)
 - InventoryTestSuite, [279](#)
 - simpleInventory, [279](#)
- LIBDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- LIBEXECDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- LegCabinStructList_T
 - AIRINV, [140](#)
- LegStruct

- AIRINV::LegStruct, [288](#)
- LegStructList_T
 - AIRINV, [140](#)
- LoadHistory
 - swift::SReadline, [330](#)
- MANDIR
 - airinv-paths.hpp, [674](#)
 - airinv-paths.hpp.in, [676](#)
- ObjectCreationDuplicationException, [293](#)
- PACKAGE
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [675](#)
- PACKAGE_NAME
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [675](#)
- PACKAGE_VERSION
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [675](#)
- PDFDIR
 - airinv-paths.hpp, [674](#)
 - airinv-paths.hpp.in, [676](#)
- PREFIXDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [675](#)
- ParserException, [296](#)
- ParserSemanticAction
 - AIRINV::DCPPParserHelper::ParserSemanticAction, [302](#)
 - AIRINV::InventoryParserHelper::ParserSemanticAction, [297](#)
 - AIRINV::ScheduleParserHelper::ParserSemanticAction, [300](#)
- ParsingFileFailedException, [302](#)
- RegisterCompletions
 - swift::SReadline, [331](#)
- RequestHandler
 - AIRINV::RequestHandler, [306](#)
- RequestParser
 - AIRINV::RequestParser, [307](#)
- RootException, [310](#)
- SBINDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- SKeymap
 - swift::SKeymap, [324](#), [325](#)
- SReadline
 - swift::SKeymap, [326](#)
 - swift::SReadline, [327](#)
- STDAIR_SAMPLE_DIR
 - airinv-paths.hpp, [674](#)
 - airinv-paths.hpp.in, [676](#)
- SYSCONFDIR
 - airinv-paths.hpp, [673](#)
 - airinv-paths.hpp.in, [676](#)
- SaveHistory
 - swift::SReadline, [329](#), [330](#)
- ScheduleFileParsingFailedException
 - AIRINV::ScheduleFileParsingFailedException, [311](#)
- ScheduleInputFileNotFoundException
 - AIRINV::ScheduleInputFileNotFound-Exception, [312](#)
- ScheduleParser
 - AIRINV::InventoryGenerator, [271](#)
- ScheduleParserHelper::doEndFlight
 - AIRINV::InventoryGenerator, [271](#)
- SegmentCabinStructList_T
 - AIRINV, [141](#)
- SegmentDateNotFound-Exception, [319](#)
- SegmentDateNotFound-Exception
 - AIRINV::SegmentDateNotFound-Exception, [319](#)
- SegmentStructList_T
 - AIRINV, [141](#)
- ServiceAbstract, [321](#)
 - AIRINV::ServiceAbstract, [322](#)
- ServiceAbstract.hpp
 - operator<<, [743](#)
 - operator>>, [743](#)
- ServiceFactoryPool_T
 - AIRINV::FacSupervisor, [235](#)
- ServicePool_T
 - AIRINV::FacServiceAbstract, [233](#)
- SetKeymap
 - swift::SReadline, [331](#)
- SimilarSegmentCabinSetMap_T
 - AIRINV, [141](#)
- StructAbstract, [491](#)
- TestFixture, [492](#)
- ThreadShrPtrList_T
 - AIRINV, [141](#)
- ThreadShrPtr_T
 - AIRINV, [141](#)
- Unbind
 - swift::SKeymap, [325](#)
- _DCP
 - AIRINV::DCPEventStruct, [201](#)
- _DCPRule
 - AIRINV::DCPPParserHelper::DCP-RuleParser, [209](#)

- AIRINV::DCPParserHelper::doEndD-CP, [220](#)
- AIRINV::DCPParserHelper::Parser-SemanticAction, [302](#)
- AIRINV::DCPParserHelper::store-AdvancePurchase, [335](#)
- AIRINV::DCPParserHelper::store-AirlineCode, [336](#)
- AIRINV::DCPParserHelper::store-CabinCode, [354](#)
- AIRINV::DCPParserHelper::store-ChangeFees, [357](#)
- AIRINV::DCPParserHelper::store-Channel, [358](#)
- AIRINV::DCPParserHelper::store-Class, [360](#)
- AIRINV::DCPParserHelper::store-DateRangeEnd, [373](#)
- AIRINV::DCPParserHelper::store-DateRangeStart, [376](#)
- AIRINV::DCPParserHelper::storeD-CP, [378](#)
- AIRINV::DCPParserHelper::storeD-CPIId, [379](#)
- AIRINV::DCPParserHelper::store-Destination, [381](#)
- AIRINV::DCPParserHelper::store-EndRangeTime, [385](#)
- AIRINV::DCPParserHelper::store-MinimumStay, [419](#)
- AIRINV::DCPParserHelper::store-NonRefundable, [435](#)
- AIRINV::DCPParserHelper::store-Origin, [445](#)
- AIRINV::DCPParserHelper::storeP-OS, [453](#)
- AIRINV::DCPParserHelper::store-SaturdayStay, [460](#)
- AIRINV::DCPParserHelper::store-StartRangeTime, [483](#)
- _acp
 - AIRINV::LegCabinStruct, [286](#)
- _adjustment
 - AIRINV::LegCabinStruct, [285](#)
- _advancePurchase
 - AIRINV::DCPEventStruct, [200](#)
- _airlineCode
 - AIRINV::DCPEventStruct, [201](#)
 - AIRINV::FlightDateStruct, [245](#)
 - AIRINV::FlightPeriodStruct, [255](#)
- AIRINV::Request, [305](#)
- stdair::BomPropertyTree, [178](#)
- _airlineCodeList
 - AIRINV::DCPEventStruct, [201](#)
- _airportCodeList
 - stdair::BomPropertyTree, [178](#)
- _airportList
 - AIRINV::FlightDateStruct, [247](#)
 - AIRINV::FlightPeriodStruct, [257](#)
- _airportOrderedList
 - AIRINV::FlightDateStruct, [247](#)
 - AIRINV::FlightPeriodStruct, [258](#)
- _areSegmentDefinitionsSpecific
 - AIRINV::FlightDateStruct, [248](#)
 - AIRINV::FlightPeriodStruct, [258](#)
- _au
 - AIRINV::LegCabinStruct, [285](#)
- _avPool
 - AIRINV::LegCabinStruct, [286](#)
- _availability
 - AIRINV::BucketStruct, [185](#)
- _boardingDate
 - AIRINV::LegStruct, [289](#)
 - AIRINV::SegmentStruct, [320](#)
- _boardingDateOffset
 - AIRINV::LegStruct, [289](#)
- _boardingPoint
 - AIRINV::LegStruct, [289](#)
 - AIRINV::SegmentStruct, [320](#)
- _boardingTime
 - AIRINV::LegStruct, [289](#)
 - AIRINV::SegmentStruct, [320](#)
- _bomRoot
 - AIRINV::DCPParserHelper::DCP-RuleParser, [209](#)
 - AIRINV::DCPParserHelper::doEndD-CP, [220](#)
 - AIRINV::InventoryParserHelper::do-EndFlightDate, [224](#)
 - AIRINV::InventoryParserHelper::InventoryParser, [278](#)
 - AIRINV::ScheduleParserHelper::do-EndFlight, [222](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser, [251](#)
- _bucketList
 - AIRINV::LegCabinStruct, [287](#)
- _cabinCode
 - AIRINV::DCPEventStruct, [200](#)
 - AIRINV::LegCabinStruct, [285](#)

- AIRINV::SegmentCabinStruct, 316
- _cabinList
 - AIRINV::LegStruct, 290
 - AIRINV::SegmentStruct, 321
- _changeFees
 - AIRINV::DCPEventStruct, 200
- _channel
 - AIRINV::DCPEventStruct, 200
- _classCode
 - AIRINV::BookingClassStruct, 181
 - AIRINV::DCPEventStruct, 201
- _classCodeList
 - AIRINV::DCPEventStruct, 201
- _classList
 - AIRINV::FareFamilyStruct, 239
- _classes
 - AIRINV::FareFamilyStruct, 239
- _cumulatedProtection
 - AIRINV::BookingClassStruct, 181
- _dateOffset
 - AIRINV::FlightDateStruct, 246
- _dateOffset
 - AIRINV::FlightPeriodStruct, 257
- _dateRange
 - AIRINV::FlightPeriodStruct, 255
- _dateRangeEnd
 - AIRINV::DCPEventStruct, 199
 - AIRINV::FlightPeriodStruct, 256
- _dateRangeStart
 - AIRINV::DCPEventStruct, 199
 - AIRINV::FlightPeriodStruct, 256
- _dcsRegrade
 - AIRINV::LegCabinStruct, 285
- _departureDate
 - AIRINV::Request, 306
 - stdair::BomPropertyTree, 178
- _describeKey
 - InventoryTestSuite, 279
- _destination
 - AIRINV::DCPEventStruct, 199
- _dow
 - AIRINV::FlightPeriodStruct, 255
- _elapsed
 - AIRINV::LegStruct, 290
 - AIRINV::SegmentStruct, 321
- _etb
 - AIRINV::BookingClassStruct, 183
 - AIRINV::LegCabinStruct, 286
- _familyCode
 - AIRINV::FareFamilyStruct, 239
- _fareFamilies
 - AIRINV::SegmentCabinStruct, 317
- _flightDate
 - AIRINV::FlightDateStruct, 245
 - AIRINV::InventoryParserHelper::do-EndFlightDate, 224
 - AIRINV::InventoryParserHelper::InventoryParser, 278
 - AIRINV::InventoryParserHelper::ParserSemanticAction, 298
 - AIRINV::InventoryParserHelper::storeACP, 333
 - AIRINV::InventoryParserHelper::storeAirlineCode, 338
 - AIRINV::InventoryParserHelper::storeAU, 342
 - AIRINV::InventoryParserHelper::storeBoardingDate, 344
 - AIRINV::InventoryParserHelper::storeBoardingTime, 346
 - AIRINV::InventoryParserHelper::storeBookingCounter, 349
 - AIRINV::InventoryParserHelper::storeBucketAvailability, 352
 - AIRINV::InventoryParserHelper::storeClassAvailability, 361
 - AIRINV::InventoryParserHelper::storeClassCode, 363
 - AIRINV::InventoryParserHelper::storeClassETB, 367
 - AIRINV::InventoryParserHelper::storeCumulatedProtection, 369
 - AIRINV::InventoryParserHelper::storeETB, 387
 - AIRINV::InventoryParserHelper::storeFamilyCode, 391
 - AIRINV::InventoryParserHelper::storeFClasses, 394
 - AIRINV::InventoryParserHelper::storeFlightDate, 396
 - AIRINV::InventoryParserHelper::storeFlightNumber, 400
 - AIRINV::InventoryParserHelper::storeFlightTypeCode, 402
 - AIRINV::InventoryParserHelper::storeFlightVisibilityCode, 404
 - AIRINV::InventoryParserHelper::storeGAV, 406
 - AIRINV::InventoryParserHelper-

- ::storeLegBoardingPoint, [410](#)
- AIRINV::InventoryParserHelper-
 - ::storeLegCabinCode, [412](#)
- AIRINV::InventoryParserHelper-
 - ::storeLegOffPoint, [416](#)
- AIRINV::InventoryParserHelper-
 - ::storeNAV, [421](#)
- AIRINV::InventoryParserHelper-
 - ::storeNbOfBkgs, [423](#)
- AIRINV::InventoryParserHelper-
 - ::storeNbOfGroupBkgs, [425](#)
- AIRINV::InventoryParserHelper-
 - ::storeNbOfPendingGroupBkgs, [427](#)
- AIRINV::InventoryParserHelper-
 - ::storeNbOfStaffBkgs, [429](#)
- AIRINV::InventoryParserHelper-
 - ::storeNbOfWLBkgs, [431](#)
- AIRINV::InventoryParserHelper-
 - ::storeNego, [433](#)
- AIRINV::InventoryParserHelper-
 - ::storeNoShow, [437](#)
- AIRINV::InventoryParserHelper-
 - ::storeOffDate, [439](#)
- AIRINV::InventoryParserHelper-
 - ::storeOffTime, [441](#)
- AIRINV::InventoryParserHelper-
 - ::storeOverbooking, [446](#)
- AIRINV::InventoryParserHelper-
 - ::storeParentClassCode, [448](#)
- AIRINV::InventoryParserHelper-
 - ::storeParentSubclassCode, [451](#)
- AIRINV::InventoryParserHelper-
 - ::storeProtection, [454](#)
- AIRINV::InventoryParserHelper-
 - ::storeRevenueAvailability, [456](#)
- AIRINV::InventoryParserHelper-
 - ::storeSaleableCapacity, [458](#)
- AIRINV::InventoryParserHelper-
 - ::storeSeatIndex, [462](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentAvailability, [464](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentBoardingPoint, [468](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentCabinBooking-Counter, [470](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentCabinCode, [472](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentOffPoint, [476](#)
- AIRINV::InventoryParserHelper-
 - ::storeSnapshotDate, [481](#)
- AIRINV::InventoryParserHelper-
 - ::storeSubclassCode, [485](#)
- AIRINV::InventoryParserHelper-
 - ::storeUPR, [487](#)
- AIRINV::InventoryParserHelper-
 - ::storeYieldUpperRange, [489](#)
- _flightDetails
 - AIRINV::Request, [305](#)
- _flightNumber
 - AIRINV::FlightDateStruct, [245](#)
 - AIRINV::FlightPeriodStruct, [255](#)
 - AIRINV::Request, [305](#)
 - stdair::BomPropertyTree, [178](#)
- _flightPeriod
 - AIRINV::ScheduleParserHelper::do-EndFlight, [222](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser, [251](#)
 - AIRINV::ScheduleParserHelper::ParserSemanticAction, [300](#)
 - AIRINV::ScheduleParserHelper::storeAirlineCode, [340](#)
 - AIRINV::ScheduleParserHelper::storeBoardingTime, [348](#)
 - AIRINV::ScheduleParserHelper::storeCapacity, [355](#)
 - AIRINV::ScheduleParserHelper::storeClasses, [366](#)
 - AIRINV::ScheduleParserHelper::storeDateRangeEnd, [371](#)
 - AIRINV::ScheduleParserHelper::storeDateRangeStart, [375](#)
 - AIRINV::ScheduleParserHelper::storeDow, [382](#)
 - AIRINV::ScheduleParserHelper::storeElapsedTime, [384](#)
 - AIRINV::ScheduleParserHelper::storeFamilyCode, [389](#)
 - AIRINV::ScheduleParserHelper::storeFClasses, [393](#)
 - AIRINV::ScheduleParserHelper::storeFlightNumber, [398](#)
 - AIRINV::ScheduleParserHelper::storeLegBoardingPoint, [408](#)

- AIRINV::ScheduleParserHelper-
 - ::storeLegCabinCode, [414](#)
- AIRINV::ScheduleParserHelper-
 - ::storeLegOffPoint, [418](#)
- AIRINV::ScheduleParserHelper-
 - ::storeOffTime, [443](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentBoardingPoint, [466](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentCabinCode, [474](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentOffPoint, [478](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentSpecificity, [480](#)
- _flightTypeCode
 - AIRINV::FlightDateStruct, [245](#)
- _flightVisibilityCode
 - AIRINV::FlightDateStruct, [246](#)
- _gav
 - AIRINV::LegCabinStruct, [286](#)
- _groupNbOfBookings
 - AIRINV::LegCabinStruct, [286](#)
- _itBookingClass
 - AIRINV::FlightDateStruct, [248](#)
- _itBucket
 - AIRINV::FlightDateStruct, [248](#)
- _itCurrentAirlineCode
 - AIRINV::DCPEventStruct, [198](#)
- _itCurrentClassCode
 - AIRINV::DCPEventStruct, [199](#)
- _itDay
 - AIRINV::DCPEventStruct, [198](#)
 - AIRINV::FlightDateStruct, [246](#)
 - AIRINV::FlightPeriodStruct, [257](#)
- _itFareFamily
 - AIRINV::SegmentCabinStruct, [316](#)
- _itHours
 - AIRINV::DCPEventStruct, [198](#)
 - AIRINV::FlightDateStruct, [246](#)
 - AIRINV::FlightPeriodStruct, [257](#)
- _itLeg
 - AIRINV::FlightDateStruct, [247](#)
 - AIRINV::FlightPeriodStruct, [256](#)
- _itLegCabin
 - AIRINV::FlightDateStruct, [247](#)
 - AIRINV::FlightPeriodStruct, [256](#)
- _itMinutes
 - AIRINV::DCPEventStruct, [198](#)
 - AIRINV::FlightDateStruct, [247](#)
- AIRINV::FlightPeriodStruct, [257](#)
- _itMonth
 - AIRINV::DCPEventStruct, [198](#)
 - AIRINV::FlightDateStruct, [246](#)
 - AIRINV::FlightPeriodStruct, [257](#)
- _itSeconds
 - AIRINV::DCPEventStruct, [198](#)
 - AIRINV::FlightDateStruct, [247](#)
 - AIRINV::FlightPeriodStruct, [257](#)
- _itSegment
 - AIRINV::FlightDateStruct, [248](#)
 - AIRINV::FlightPeriodStruct, [258](#)
- _itSegmentCabin
 - AIRINV::FlightDateStruct, [248](#)
 - AIRINV::FlightPeriodStruct, [258](#)
- _itYear
 - AIRINV::DCPEventStruct, [198](#)
 - AIRINV::FlightDateStruct, [246](#)
 - AIRINV::FlightPeriodStruct, [257](#)
- _legAlreadyDefined
 - AIRINV::FlightDateStruct, [247](#)
 - AIRINV::FlightPeriodStruct, [256](#)
- _legList
 - AIRINV::FlightDateStruct, [246](#)
 - AIRINV::FlightPeriodStruct, [256](#)
- _minimumStay
 - AIRINV::DCPEventStruct, [201](#)
- _nav
 - AIRINV::LegCabinStruct, [286](#)
- _nbOfBookings
 - AIRINV::BookingClassStruct, [182](#)
 - AIRINV::LegCabinStruct, [286](#)
 - AIRINV::SegmentCabinStruct, [316](#)
- _nbOfFlights
 - AIRINV::InventoryParserHelper::do-EndFlightDate, [224](#)
 - AIRINV::InventoryParserHelper::InventoryParser, [278](#)
- _nbOfGroupBookings
 - AIRINV::BookingClassStruct, [182](#)
- _nbOfPendingGroupBookings
 - AIRINV::BookingClassStruct, [182](#)
- _nbOfSeats
 - AIRINV::BucketStruct, [185](#)
- _nbOfStaffBookings
 - AIRINV::BookingClassStruct, [183](#)
- _nbOfWLBookings
 - AIRINV::BookingClassStruct, [183](#)
- _nego
 - AIRINV::BookingClassStruct, [182](#)

- `_netClassAvailability`
 - `AIRINV::BookingClassStruct`, 183
- `_netRevenueAvailability`
 - `AIRINV::BookingClassStruct`, 183
- `_noShowPercentage`
 - `AIRINV::BookingClassStruct`, 182
- `_nonRefundable`
 - `AIRINV::DCPEventStruct`, 200
- `_offDate`
 - `AIRINV::LegStruct`, 289
 - `AIRINV::SegmentStruct`, 321
- `_offDateOffset`
 - `AIRINV::LegStruct`, 289
- `_offPoint`
 - `AIRINV::LegStruct`, 289
 - `AIRINV::SegmentStruct`, 320
- `_offTime`
 - `AIRINV::LegStruct`, 289
 - `AIRINV::SegmentStruct`, 321
- `_origin`
 - `AIRINV::DCPEventStruct`, 199
- `_overbookingPercentage`
 - `AIRINV::BookingClassStruct`, 182
- `_parentClassCode`
 - `AIRINV::BookingClassStruct`, 181
- `_parentSubclassCode`
 - `AIRINV::BookingClassStruct`, 181
- `_pool`
 - `AIRINV::FacBomAbstract`, 232
 - `AIRINV::FacServiceAbstract`, 234
- `_pos`
 - `AIRINV::DCPEventStruct`, 200
- `_protection`
 - `AIRINV::BookingClassStruct`, 182
- `_saleableCapacity`
 - `AIRINV::LegCabinStruct`, 285
- `_saturdayStay`
 - `AIRINV::DCPEventStruct`, 200
- `_seatIndex`
 - `AIRINV::BucketStruct`, 186
- `_segmentAvailability`
 - `AIRINV::BookingClassStruct`, 183
- `_segmentList`
 - `AIRINV::FlightDateStruct`, 246
 - `AIRINV::FlightPeriodStruct`, 256
- `_staffNbOfBookings`
 - `AIRINV::LegCabinStruct`, 286
- `_status`
 - `AIRINV::Reply`, 304
- `_subclassCode`
 - `AIRINV::BookingClassStruct`, 181
- `_timeRangeEnd`
 - `AIRINV::DCPEventStruct`, 199
- `_timeRangeStart`
 - `AIRINV::DCPEventStruct`, 199
- `_upr`
 - `AIRINV::LegCabinStruct`, 286
- `_wNbOfBookings`
 - `AIRINV::LegCabinStruct`, 286
- `_yieldRangeUpperValue`
 - `AIRINV::BucketStruct`, 185
- `addAirport`
 - `AIRINV::FlightDateStruct`, 244
 - `AIRINV::FlightPeriodStruct`, 254
- `addFareFamily`
 - `AIRINV::FlightDateStruct`, 244, 245
 - `AIRINV::FlightPeriodStruct`, 255
- `addSegmentCabin`
 - `AIRINV::FlightDateStruct`, 244
 - `AIRINV::FlightPeriodStruct`, 254
- `advancePurchase`
 - `AIRINV::DCPParserHelper::DCP-
RuleParser`, 208
- `airinv-paths.hpp`
 - `BINDIR`, 673
 - `DATADIR`, 673
 - `DATAROOTDIR`, 673
 - `DOCDIR`, 674
 - `EXEC_PREFIX`, 673
 - `HTMLDIR`, 674
 - `INCLUDEDIR`, 673
 - `INFODIR`, 674
 - `LIBDIR`, 673
 - `LIBEXECDIR`, 673
 - `MANDIR`, 674
 - `PACKAGE`, 673
 - `PACKAGE_NAME`, 673
 - `PACKAGE_VERSION`, 673
 - `PDFDIR`, 674
 - `PREFIXDIR`, 673
 - `SBINDIR`, 673
 - `STDAIR_SAMPLE_DIR`, 674
 - `SYSCONFDIR`, 673
- `airinv-paths.hpp.in`
 - `BINDIR`, 675
 - `DATADIR`, 676
 - `DATAROOTDIR`, 676
 - `DOCDIR`, 676
 - `EXEC_PREFIX`, 675

- HTMLDIR, 676
- INCLUDEDIR, 676
- INFODIR, 676
- LIBDIR, 676
- LIBEXECDIR, 676
- MANDIR, 676
- PACKAGE, 675
- PACKAGE_NAME, 675
- PACKAGE_VERSION, 675
- PDFDIR, 676
- PREFIXDIR, 675
- SBINDIR, 676
- STDAIR_SAMPLE_DIR, 676
- SYSCONFDIR, 676
- airinv/ Directory Reference, 130
- airinv/AIRINV_Master_Service.hpp, 498
- airinv/AIRINV_Service.hpp, 500, 501
- airinv/AIRINV_Types.hpp, 502, 503
- airinv/FlightRequestStatus.hpp, 687
- airinv/basic/ Directory Reference, 131
- airinv/basic/BasConst.cpp, 504, 505
- airinv/basic/BasConst_AIRINV_Service.-
hpp, 506
- airinv/basic/BasConst_Curves.hpp, 506,
507
- airinv/basic/BasConst_General.hpp, 507
- airinv/basic/BasParserTypes.hpp, 507,
508
- airinv/basic/FlightRequestStatus.cpp, 510
- airinv/basic/FlightTypeCode.cpp, 511
- airinv/basic/FlightTypeCode.hpp, 513
- airinv/basic/FlightVisibilityCode.cpp, 514
- airinv/basic/FlightVisibilityCode.hpp, 515,
516
- airinv/batches/ Directory Reference, 131
- airinv/batches/airinv_parseInventory.cpp,
516
- airinv/batches/parseInventory.cpp, 521
- airinv/bom/ Directory Reference, 131
- airinv/bom/AirportList.hpp, 525, 526
- airinv/bom/BomAbstract.cpp, 526
- airinv/bom/BomAbstract.hpp, 527
- airinv/bom/BomRootHelper.cpp, 528, 529
- airinv/bom/BomRootHelper.hpp, 529
- airinv/bom/BookingClassHelper.cpp, 530
- airinv/bom/BookingClassHelper.hpp, 530,
531
- airinv/bom/BookingClassStruct.cpp, 531
- airinv/bom/BookingClassStruct.hpp, 532
- airinv/bom/BucketStruct.cpp, 533, 534
- airinv/bom/BucketStruct.hpp, 534, 535
- airinv/bom/DCPEventStruct.cpp, 535
- airinv/bom/DCPEventStruct.hpp, 538
- airinv/bom/FareFamilyStruct.cpp, 540
- airinv/bom/FareFamilyStruct.hpp, 541
- airinv/bom/FlightDateHelper.cpp, 542
- airinv/bom/FlightDateHelper.hpp, 544
- airinv/bom/FlightDateStruct.cpp, 544, 545
- airinv/bom/FlightDateStruct.hpp, 548, 549
- airinv/bom/FlightPeriodStruct.cpp, 550
- airinv/bom/FlightPeriodStruct.hpp, 554
- airinv/bom/GuillotineBlockHelper.cpp, 556
- airinv/bom/GuillotineBlockHelper.hpp,
559, 560
- airinv/bom/InventoryHelper.cpp, 560, 561
- airinv/bom/InventoryHelper.hpp, 566
- airinv/bom/LegCabinHelper.cpp, 567
- airinv/bom/LegCabinHelper.hpp, 567, 568
- airinv/bom/LegCabinStruct.cpp, 568
- airinv/bom/LegCabinStruct.hpp, 569
- airinv/bom/LegStruct.cpp, 570
- airinv/bom/LegStruct.hpp, 571, 572
- airinv/bom/SegmentCabinHelper.cpp, 573
- airinv/bom/SegmentCabinHelper.hpp, 576
- airinv/bom/SegmentCabinStruct.cpp, 577
- airinv/bom/SegmentCabinStruct.hpp, 578
- airinv/bom/SegmentDateHelper.cpp, 579
- airinv/bom/SegmentDateHelper.hpp, 581
- airinv/bom/SegmentStruct.cpp, 582
- airinv/bom/SegmentStruct.hpp, 583
- airinv/command/ Directory Reference, 132
- airinv/command/InventoryBuilder.cpp, 584
- airinv/command/InventoryBuilder.hpp, 589
- airinv/command/InventoryGenerator.cpp,
590, 591
- airinv/command/InventoryGenerator.hpp,
595, 596
- airinv/command/InventoryManager.cpp,
597
- airinv/command/InventoryManager.hpp,
613
- airinv/command/InventoryParser.cpp,
614, 615
- airinv/command/InventoryParser.hpp,
615, 616
- airinv/command/InventoryParserHelper.-
cpp, 616, 617
- airinv/command/InventoryParserHelper.-
hpp, 633, 635

- airinv/command/ScheduleParser.cpp, 639, 640
- airinv/command/ScheduleParser.hpp, 640, 641
- airinv/command/ScheduleParserHelper.cpp, 641, 642
- airinv/command/ScheduleParserHelper.hpp, 651, 652
- airinv/command/vault/ Directory Reference, 134
- airinv/command/vault/DCPEventGenerator.cpp, 655
- airinv/command/vault/DCPEventGenerator.hpp, 656, 657
- airinv/command/vault/DCPParser.cpp, 657, 658
- airinv/command/vault/DCPParser.hpp, 658
- airinv/command/vault/DCPParserHelper.cpp, 659
- airinv/command/vault/DCPParserHelper.hpp, 668, 669
- airinv/config/ Directory Reference, 133
- airinv/config/airinv-paths.hpp, 672, 674
- airinv/config/airinv-paths.hpp.in, 674, 677
- airinv/factory/ Directory Reference, 133
- airinv/factory/FacAirinvMasterServiceContext.cpp, 677
- airinv/factory/FacAirinvMasterServiceContext.hpp, 678
- airinv/factory/FacAirinvServiceContext.cpp, 679
- airinv/factory/FacAirinvServiceContext.hpp, 680
- airinv/factory/FacBomAbstract.cpp, 681
- airinv/factory/FacBomAbstract.hpp, 682
- airinv/factory/FacServiceAbstract.cpp, 683
- airinv/factory/FacServiceAbstract.hpp, 684
- airinv/factory/FacSupervisor.cpp, 684, 685
- airinv/factory/FacSupervisor.hpp, 686
- airinv/server/ Directory Reference, 133
- airinv/server/AirInvClient.cpp, 688
- airinv/server/AirInvClient_ASIO.cpp, 689
- airinv/server/AirInvServer.cpp, 690
- airinv/server/AirInvServer.hpp, 696
- airinv/server/AirInvServer_ASIO.cpp, 697, 698
- airinv/server/BomPropertyTree.cpp, 699
- airinv/server/BomPropertyTree.hpp, 701
- airinv/server/Connection.cpp, 702
- airinv/server/Connection.hpp, 703, 704
- airinv/server/Reply.cpp, 707
- airinv/server/Reply.hpp, 707
- airinv/server/Request.cpp, 708
- airinv/server/Request.hpp, 708, 709
- airinv/server/RequestHandler.cpp, 709, 710
- airinv/server/RequestHandler.hpp, 710, 711
- airinv/server/RequestParser.cpp, 711, 712
- airinv/server/RequestParser.hpp, 715, 716
- airinv/server/header.hpp, 704, 705
- airinv/server/posix_main.cpp, 705
- airinv/server/win_main.cpp, 717
- airinv/service/ Directory Reference, 134
- airinv/service/AIRINV_Master_Service.cpp, 718
- airinv/service/AIRINV_Master_ServiceContext.cpp, 727
- airinv/service/AIRINV_Master_ServiceContext.hpp, 728
- airinv/service/AIRINV_Service.cpp, 729, 730
- airinv/service/AIRINV_ServiceContext.cpp, 739
- airinv/service/AIRINV_ServiceContext.hpp, 740
- airinv/service/ServiceAbstract.cpp, 742
- airinv/service/ServiceAbstract.hpp, 742, 743
- airinv/ui/ Directory Reference, 134
- airinv/ui/cmdline/ Directory Reference, 132
- airinv/ui/cmdline/SReadline.hpp, 767, 768
- airinv/ui/cmdline/airinv.cpp, 744
- airinv/ui/cmdline/readline_autocomp.hpp, 758, 762
- airline_code
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 212
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, 217
- airline_code_p
 - AIRINV::InventoryParserHelper, 146
 - AIRINV::ScheduleParserHelper, 149
- airport_p
 - AIRINV::InventoryParserHelper, 146

- AIRINV::ScheduleParserHelper, 150
- beginAirline
 - AIRINV::DCPEventStruct, 196
- beginClassCode
 - AIRINV::DCPEventStruct, 197
- bounded1_2_p_t
 - AIRINV, 139
- bounded1_3_p_t
 - AIRINV, 140
- bounded1_4_p_t
 - AIRINV, 140
- bounded2_p_t
 - AIRINV, 139
- bounded4_p_t
 - AIRINV, 140
- bucket_details
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 213
- bucket_list
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 213
- buildGuillotineBlock
 - AIRINV::InventoryManager, 275
- buildInventory
 - AIRINV::InventoryFileParser, 270
 - AIRINV::InventoryParser, 277
- buildPseudoBidPriceVector
 - AIRINV::SegmentCabinHelper, 314
- buildSampleBom
 - AIRINV::AIRINV_Master_Service, 155
 - AIRINV::AIRINV_Service, 162
- buildSegments
 - AIRINV::FlightDateStruct, 244
 - AIRINV::FlightPeriodStruct, 254
- buildSimilarSegmentCabinSets
 - AIRINV::InventoryManager, 275
- cabin_code_p
 - AIRINV::InventoryParserHelper, 147
 - AIRINV::ScheduleParserHelper, 150
- cabinCode
 - AIRINV::DCPParserHelper::DCP-RuleParser, 208
- calculateAvailability
 - AIRINV::AIRINV_Master_Service, 155
 - AIRINV::AIRINV_Service, 163
 - AIRINV::InventoryHelper, 272
- cancel
 - AIRINV::AIRINV_Master_Service, 156
 - AIRINV::AIRINV_Service, 163
 - AIRINV::InventoryHelper, 273
- changeFees
 - AIRINV::DCPParserHelper::DCP-RuleParser, 208
- channel
 - AIRINV::DCPParserHelper::DCP-RuleParser, 208
- char_t
 - AIRINV, 138
- check
 - AIRINV::AIRINV_Master_Service, 158
 - AIRINV::AIRINV_Service, 165
- chset_t
 - AIRINV, 139
- class_code_list_p
 - AIRINV::InventoryParserHelper, 147
 - AIRINV::ScheduleParserHelper, 151
- class_code_p
 - AIRINV::InventoryParserHelper, 147
- class_details
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 214
- class_key
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 214
- class_list
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 214
- class_nego
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 214
- class_protection
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 214
- clean
 - AIRINV::FacServiceAbstract, 234
- cleanBomLayer
 - AIRINV::FacSupervisor, 237
- cleanFactory
 - AIRINV::FacSupervisor, 237
- cleanServiceLayer
 - AIRINV::FacSupervisor, 237
- com_cd
 - readline_autocomp.hpp, 760
- com_delete

- readline_autocomp.hpp, 760
- com_help
 - readline_autocomp.hpp, 760
- com_list
 - readline_autocomp.hpp, 759
- com_pwd
 - readline_autocomp.hpp, 760
- com_quit
 - readline_autocomp.hpp, 760
- com_rename
 - readline_autocomp.hpp, 759
- com_stat
 - readline_autocomp.hpp, 760
- com_view
 - readline_autocomp.hpp, 759
- command_generator
 - readline_autocomp.hpp, 761
- commands
 - readline_autocomp.hpp, 762
- comments
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 206
- content
 - AIRINV::Reply, 304
- create
 - AIRINV::FacAirinvMasterService-
Context, 228
 - AIRINV::FacAirinvServiceContext,
230
- createDirectAccesses
 - AIRINV::InventoryManager, 274, 275
- createPickupFRAT5Curve
 - AIRINV::DefaultMap, 210
- csvDisplay
 - AIRINV::AIRINV_Master_Service,
158
 - AIRINV::AIRINV_Service, 165, 166
- date
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 207
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 212
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition,
217
- date_offset
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition,
217
- dateRangeEnd
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 207
- dateRangeStart
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 207
- day_p
 - AIRINV::DCPParserHelper, 144
 - AIRINV::InventoryParserHelper, 146
 - AIRINV::ScheduleParserHelper, 150
- definition
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 211
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition,
216
- describe
 - AIRINV::BookingClassStruct, 181
 - AIRINV::BucketStruct, 185
 - AIRINV::DCPEventStruct, 196
 - AIRINV::FareFamilyStruct, 239
 - AIRINV::FlightDateStruct, 243
 - AIRINV::FlightPeriodStruct, 253
 - AIRINV::FlightRequestStatus, 260
 - AIRINV::FlightTypeCode, 263
 - AIRINV::FlightVisibilityCode, 265
 - AIRINV::LegCabinStruct, 285
 - AIRINV::LegStruct, 288
 - AIRINV::SegmentCabinStruct, 316
 - AIRINV::SegmentStruct, 320
- describeKey
 - AIRINV::BomAbstract, 176
- describeLabels
 - AIRINV::FlightRequestStatus, 260
 - AIRINV::FlightTypeCode, 262
 - AIRINV::FlightVisibilityCode, 264
- describeShortKey
 - AIRINV::BomAbstract, 176
- destination
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 207
- doEndDCP
 - AIRINV::DCPParserHelper::doEndD-
CP, 220
- doEndFlight
 - AIRINV::ScheduleParserHelper::do-
EndFlight, 222
- doEndFlightDate
 - AIRINV::InventoryParserHelper::do-
EndFlightDate, 224

- doc
 - COMMAND, 187
 - doc/local/authors.doc, 774
 - doc/local/codingrules.doc, 774
 - doc/local/copyright.doc, 774
 - doc/local/documentation.doc, 774
 - doc/local/features.doc, 774
 - doc/local/help_wanted.doc, 774
 - doc/local/howto_release.doc, 774
 - doc/local/index.doc, 774
 - doc/local/installation.doc, 774
 - doc/local/linking.doc, 774
 - doc/local/test.doc, 774
 - doc/local/users_guide.doc, 774
 - doc/local/verification.doc, 774
 - doc/tutorial/tutorial.doc, 774
- done
 - readline_autocomp.hpp, 762
- dow
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 217
- dow_p
 - AIRINV::InventoryParserHelper, 146
 - AIRINV::ScheduleParserHelper, 150
- dupstr
 - readline_autocomp.hpp, 761
- enable_shared_from_this, 226
- execute_line
 - readline_autocomp.hpp, 761
- family_cabin_details
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 215
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 218
- family_cabin_list
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 215
- family_code_p
 - AIRINV::InventoryParserHelper, 148
 - AIRINV::ScheduleParserHelper, 151
- fileman_completion
 - readline_autocomp.hpp, 761
- fill
 - AIRINV::BookingClassStruct, 180
 - AIRINV::BucketStruct, 185
 - AIRINV::FareFamilyStruct, 239
 - AIRINV::LegCabinStruct, 285
 - AIRINV::LegStruct, 288
 - AIRINV::SegmentCabinStruct, 316
 - AIRINV::SegmentStruct, 320
- fillFromRouting
 - AIRINV::BomRootHelper, 179
 - AIRINV::FlightDateHelper, 241
 - AIRINV::InventoryHelper, 272
 - AIRINV::SegmentDateHelper, 317
- find_command
 - readline_autocomp.hpp, 760
- flight_date
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 212
- flight_date_end
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 212
- flight_date_list
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 211
- flight_key
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 212
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 217
- flight_number
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 212
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 217
- flight_number_p
 - AIRINV::InventoryParserHelper, 146
 - AIRINV::ScheduleParserHelper, 149
- flight_period
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 216
- flight_period_end
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 217
- flight_period_list
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition, 216
- flight_type_code
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 212

- flight_visibility_code
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [212](#)
- fromStream
 - AIRINV::BomAbstract, [176](#)
 - AIRINV::ServiceAbstract, [322](#)
- full_family_cabin_details
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [218](#)
- full_segment_cabin_details
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [214](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [218](#)
- func
 - COMMAND, [187](#)
- generateDCPRules
 - AIRINV::DCPRuleFileParser, [203](#)
- generateInventories
 - AIRINV::FlightPeriodFileParser, [250](#)
 - AIRINV::ScheduleParser, [313](#)
- generic_segment
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [218](#)
- getAirlineListSize
 - AIRINV::DCPEventStruct, [196](#)
- getClassCodeListSize
 - AIRINV::DCPEventStruct, [196](#)
- getCode
 - AIRINV::FlightRequestStatus, [260](#)
 - AIRINV::FlightTypeCode, [262](#)
 - AIRINV::FlightVisibilityCode, [265](#)
- getCodeLabel
 - AIRINV::FlightRequestStatus, [260](#)
 - AIRINV::FlightTypeCode, [262](#)
 - AIRINV::FlightVisibilityCode, [264](#)
- getCurrentAirlineCode
 - AIRINV::DCPEventStruct, [197](#)
- getCurrentClassCode
 - AIRINV::DCPEventStruct, [197](#)
- getDate
 - AIRINV::DCPEventStruct, [196](#)
 - AIRINV::FlightDateStruct, [243](#)
 - AIRINV::FlightPeriodStruct, [253](#)
- getFirstAirlineCode
 - AIRINV::DCPEventStruct, [196](#)
- getFirstClassCode
 - AIRINV::DCPEventStruct, [197](#)
- getFullSubclassCode
 - AIRINV::BookingClassStruct, [180](#)
- getID
 - AIRINV::FacBomAbstract, [231](#)
- getIDString
 - AIRINV::FacBomAbstract, [232](#)
- getLabel
 - AIRINV::FlightRequestStatus, [260](#)
 - AIRINV::FlightTypeCode, [262](#)
 - AIRINV::FlightVisibilityCode, [264](#)
- getTime
 - AIRINV::DCPEventStruct, [196](#)
 - AIRINV::FlightDateStruct, [243](#)
 - AIRINV::FlightPeriodStruct, [253](#)
- getYieldAndBidPrice
 - AIRINV::InventoryHelper, [272](#)
- getwd
 - readline_autocomp.hpp, [759](#)
- grammar, [265](#), [266](#)
- handleRequest
 - AIRINV::RequestHandler, [307](#)
- hasNotReachedEndAirline
 - AIRINV::DCPEventStruct, [197](#)
- hasNotReachedEndClassCode
 - AIRINV::DCPEventStruct, [197](#)
- hour_p
 - AIRINV::DCPParserHelper, [143](#)
- hours_p
 - AIRINV::InventoryParserHelper, [146](#)
 - AIRINV::ScheduleParserHelper, [150](#)
- initRMEvents
 - AIRINV::AIRINV_Service, [163](#)
- initSnapshotAndRMEvents
 - AIRINV::AIRINV_Master_Service, [155](#)
- initialiseAU
 - AIRINV::SegmentCabinHelper, [315](#)
- initialize_readline
 - readline_autocomp.hpp, [761](#)
- instance
 - AIRINV::FacAirinvMasterServiceContext, [228](#)
 - AIRINV::FacAirinvServiceContext, [229](#)
 - AIRINV::FacSupervisor, [236](#)
- int1_p

- AIRINV::DCPParserHelper, [143](#)
- AIRINV::InventoryParserHelper, [147](#)
- AIRINV::ScheduleParserHelper, [151](#)
- int1_p_t
 - AIRINV, [138](#)
- iterateAirline
 - AIRINV::DCPEventStruct, [197](#)
- iterateClassCode
 - AIRINV::DCPEventStruct, [198](#)
- iterator_t
 - AIRINV, [138](#)
- jsonExport
 - AIRINV::AIRINV_Master_Service, [157](#)
 - AIRINV::AIRINV_Service, [164](#)
- leg
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [212](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [217](#)
- leg_cabin_details
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [213](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [218](#)
- leg_cabin_list
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [213](#)
- leg_details
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [213](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [218](#)
- leg_key
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [213](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [217](#)
- leg_list
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [212](#)
- list
 - AIRINV::AIRINV_Master_Service, [157](#)
 - AIRINV::AIRINV_Service, [165](#)
- list_class
 - AIRINV::DCPParserHelper::DCP-RuleParser, [209](#)
- load
 - stdair::BomPropertyTree, [177](#)
- main
 - AirInvClient.cpp, [688](#)
 - AirInvClient_ASIO.cpp, [689](#)
 - posix_main.cpp, [705](#)
- minimumStay
 - AIRINV::DCPParserHelper::DCP-RuleParser, [208](#)
- minute_p
 - AIRINV::DCPParserHelper, [143](#)
- minutes_p
 - AIRINV::InventoryParserHelper, [146](#)
 - AIRINV::ScheduleParserHelper, [150](#)
- month_p
 - AIRINV::DCPParserHelper, [143](#)
 - AIRINV::InventoryParserHelper, [146](#)
 - AIRINV::ScheduleParserHelper, [150](#)
- name
 - AIRINV::header, [267](#)
 - COMMAND, [187](#)
- nonRefundable
 - AIRINV::DCPParserHelper::DCP-RuleParser, [208](#)
- noncopyable, [293](#)
- not_to_be_parsed
 - AIRINV::InventoryParserHelper::InventoryParser::definition, [211](#)
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, [216](#)
- operator<<
 - BomAbstract.hpp, [527](#)
 - ServiceAbstract.hpp, [743](#)
- operator>>
 - BomAbstract.hpp, [527](#)
 - ServiceAbstract.hpp, [743](#)
- operator()
 - AIRINV::DCPParserHelper::doEndDCP, [220](#)
 - AIRINV::DCPParserHelper::store-AdvancePurchase, [335](#)
 - AIRINV::DCPParserHelper::store-AirlineCode, [336](#)

- AIRINV::DCPParserHelper::store-CabinCode, [353](#)
- AIRINV::DCPParserHelper::store-ChangeFees, [357](#)
- AIRINV::DCPParserHelper::store-Channel, [358](#)
- AIRINV::DCPParserHelper::store-Class, [360](#)
- AIRINV::DCPParserHelper::store-DateRangeEnd, [373](#)
- AIRINV::DCPParserHelper::store-DateRangeStart, [376](#)
- AIRINV::DCPParserHelper::storeD-CP, [377](#)
- AIRINV::DCPParserHelper::storeD-CPIId, [379](#)
- AIRINV::DCPParserHelper::store-Destination, [381](#)
- AIRINV::DCPParserHelper::store-EndRangeTime, [385](#)
- AIRINV::DCPParserHelper::store-MinimumStay, [419](#)
- AIRINV::DCPParserHelper::store-NonRefundable, [435](#)
- AIRINV::DCPParserHelper::store-Origin, [445](#)
- AIRINV::DCPParserHelper::storeP-OS, [452](#)
- AIRINV::DCPParserHelper::store-SaturdayStay, [460](#)
- AIRINV::DCPParserHelper::store-StartRangeTime, [483](#)
- AIRINV::InventoryParserHelper::do-EndFlightDate, [224](#)
- AIRINV::InventoryParserHelper::storeACP, [332](#)
- AIRINV::InventoryParserHelper::storeAirlineCode, [338](#)
- AIRINV::InventoryParserHelper::storeAU, [341](#)
- AIRINV::InventoryParserHelper::storeBoardingDate, [343](#)
- AIRINV::InventoryParserHelper::storeBoardingTime, [345](#)
- AIRINV::InventoryParserHelper::storeBookingCounter, [349](#)
- AIRINV::InventoryParserHelper::storeBucketAvailability, [351](#)
- AIRINV::InventoryParserHelper::storeClassAvailability, [361](#)
- AIRINV::InventoryParserHelper::storeClassCode, [363](#)
- AIRINV::InventoryParserHelper::storeClassETB, [367](#)
- AIRINV::InventoryParserHelper::storeCumulatedProtection, [369](#)
- AIRINV::InventoryParserHelper::storeETB, [387](#)
- AIRINV::InventoryParserHelper::storeFamilyCode, [390](#)
- AIRINV::InventoryParserHelper::storeFCClasses, [394](#)
- AIRINV::InventoryParserHelper::storeFlightDate, [396](#)
- AIRINV::InventoryParserHelper::storeFlightNumber, [400](#)
- AIRINV::InventoryParserHelper::storeFlightTypeCode, [402](#)
- AIRINV::InventoryParserHelper::storeFlightVisibilityCode, [404](#)
- AIRINV::InventoryParserHelper::storeGAV, [406](#)
- AIRINV::InventoryParserHelper::storeLegBoardingPoint, [410](#)
- AIRINV::InventoryParserHelper::storeLegCabinCode, [412](#)
- AIRINV::InventoryParserHelper::storeLegOffPoint, [416](#)
- AIRINV::InventoryParserHelper::storeNAV, [421](#)
- AIRINV::InventoryParserHelper::storeNbOfBkgs, [423](#)
- AIRINV::InventoryParserHelper::storeNbOfGroupBkgs, [425](#)
- AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs, [427](#)
- AIRINV::InventoryParserHelper::storeNbOfStaffBkgs, [429](#)
- AIRINV::InventoryParserHelper::storeNbOfWLBkgs, [431](#)
- AIRINV::InventoryParserHelper::storeNegotio, [433](#)
- AIRINV::InventoryParserHelper::storeNoShow, [437](#)
- AIRINV::InventoryParserHelper::storeOffDate, [439](#)
- AIRINV::InventoryParserHelper::storeOffTime, [441](#)

- AIRINV::InventoryParserHelper-
 - ::storeOverbooking, [446](#)
- AIRINV::InventoryParserHelper-
 - ::storeParentClassCode, [448](#)
- AIRINV::InventoryParserHelper-
 - ::storeParentSubclassCode, [450](#)
- AIRINV::InventoryParserHelper-
 - ::storeProtection, [454](#)
- AIRINV::InventoryParserHelper-
 - ::storeRevenueAvailability, [456](#)
- AIRINV::InventoryParserHelper-
 - ::storeSaleableCapacity, [458](#)
- AIRINV::InventoryParserHelper-
 - ::storeSeatIndex, [462](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentAvailability, [464](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentBoardingPoint, [467](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentCabinBookingCounter, [470](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentCabinCode, [472](#)
- AIRINV::InventoryParserHelper-
 - ::storeSegmentOffPoint, [476](#)
- AIRINV::InventoryParserHelper-
 - ::storeSnapshotDate, [481](#)
- AIRINV::InventoryParserHelper-
 - ::storeSubclassCode, [485](#)
- AIRINV::InventoryParserHelper-
 - ::storeUPR, [487](#)
- AIRINV::InventoryParserHelper-
 - ::storeYieldUpperRange, [489](#)
- AIRINV::ScheduleParserHelper::do-
 - EndFlight, [222](#)
- AIRINV::ScheduleParserHelper-
 - ::storeAirlineCode, [340](#)
- AIRINV::ScheduleParserHelper-
 - ::storeBoardingTime, [348](#)
- AIRINV::ScheduleParserHelper-
 - ::storeCapacity, [355](#)
- AIRINV::ScheduleParserHelper-
 - ::storeClasses, [365](#)
- AIRINV::ScheduleParserHelper-
 - ::storeDateRangeEnd, [371](#)
- AIRINV::ScheduleParserHelper-
 - ::storeDateRangeStart, [374](#)
- AIRINV::ScheduleParserHelper-
 - ::storeDow, [382](#)
- AIRINV::ScheduleParserHelper-
 - ::storeElapsedTime, [384](#)
- AIRINV::ScheduleParserHelper-
 - ::storeFamilyCode, [389](#)
- AIRINV::ScheduleParserHelper-
 - ::storeFClasses, [392](#)
- AIRINV::ScheduleParserHelper-
 - ::storeFlightNumber, [398](#)
- AIRINV::ScheduleParserHelper-
 - ::storeLegBoardingPoint, [408](#)
- AIRINV::ScheduleParserHelper-
 - ::storeLegCabinCode, [414](#)
- AIRINV::ScheduleParserHelper-
 - ::storeLegOffPoint, [418](#)
- AIRINV::ScheduleParserHelper-
 - ::storeOffTime, [443](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentBoardingPoint, [466](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentCabinCode, [474](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentOffPoint, [478](#)
- AIRINV::ScheduleParserHelper-
 - ::storeSegmentSpecificity, [479](#)
- operator=
 - swift::SKeymap, [325](#)
- optimise
 - AIRINV::AIRINV_Master_Service, [157](#)
 - AIRINV::AIRINV_Service, [164](#)
- origin
 - AIRINV::DCPPParserHelper::DCP-
 - RuleParser, [207](#)
- parent_subclass_code
 - AIRINV::InventoryParserHelper::-
 - InventoryParser::definition, [214](#)
- parse
 - AIRINV::RequestParser, [308](#)
- parseAndLoad
 - AIRINV::AIRINV_Master_Service, [154](#), [155](#)
 - AIRINV::AIRINV_Service, [162](#)
- parseFlightDate
 - AIRINV::Request, [305](#)
- passenger_type_p
 - AIRINV::InventoryParserHelper, [147](#)
- position

- AIRINV::DCPParserHelper::DCP-
RuleParser, 208
- posix_main.cpp
 - main, 705
- pt2Func
 - readline_autocomp.hpp, 759
- readline_autocomp.hpp
 - com_cd, 760
 - com_delete, 760
 - com_help, 760
 - com_list, 759
 - com_pwd, 760
 - com_quit, 760
 - com_rename, 759
 - com_stat, 760
 - com_view, 759
 - command_generator, 761
 - commands, 762
 - done, 762
 - dupstr, 761
 - execute_line, 761
 - fileman_completion, 761
 - find_command, 760
 - getwd, 759
 - initialize_readline, 761
 - pt2Func, 759
 - stripwhite, 760
 - syscom, 762
 - too_dangerous, 761
 - valid_argument, 761
 - xmalloc, 759
- registerBomFactory
 - AIRINV::FacSupervisor, 236
- registerServiceFactory
 - AIRINV::FacSupervisor, 236
- repeat_p_t
 - AIRINV, 139
- reset
 - AIRINV::RequestParser, 308
- rule_t
 - AIRINV, 138
- run
 - AIRINV::AirInvServer, 168
- saturdayStay
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 208
- save
 - stdair::BomPropertyTree, 177
- scanner_t
 - AIRINV, 138
- second_p
 - AIRINV::DCPParserHelper, 143
- seconds_p
 - AIRINV::InventoryParserHelper, 147
 - AIRINV::ScheduleParserHelper, 150
- segment
 - AIRINV::DCPParserHelper::DCP-
RuleParser, 209
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 213
- segment_cabin_details
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 214
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition,
218
- segment_cabin_key
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 214
- segment_cabin_list
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 214
- segment_key
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 213
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition,
218
- segment_list
 - AIRINV::InventoryParserHelper::-
InventoryParser::definition, 213
- segment_section
 - AIRINV::ScheduleParserHelper::-
FlightPeriodParser::definition,
218
- sell
 - AIRINV::AIRINV_Master_Service,
156
 - AIRINV::AIRINV_Service, 163
 - AIRINV::InventoryHelper, 272
- setDefaultBidPriceVector
 - AIRINV::InventoryManager, 275, 276
- simpleInventory
 - InventoryTestSuite, 279
- socket
 - AIRINV::Connection, 188
- specific_segment_list

- AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, 218
- start
 - AIRINV::Connection, 188
 - AIRINV::DCPPParserHelper::DCP-RuleParser, 206
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 211
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, 216
- stay_duration_p
 - AIRINV::InventoryParserHelper, 147
- std::allocator, 168
- std::auto_ptr, 169
- std::bad_alloc, 169
- std::bad_cast, 169
- std::bad_exception, 170
- std::bad_typeid, 170
- std::basic_fstream, 170
- std::basic_ifstream, 171
- std::basic_ios, 171
- std::basic_iostream, 171
- std::basic_istream, 172
- std::basic_istream, 172
- std::basic_istream, 172
- std::basic_ostream, 173
- std::basic_ostream, 173
- std::basic_ostream, 173
- std::basic_string, 174
- std::basic_string::const_iterator, 189
- std::basic_string::const_reverse_iterator, 191
- std::basic_string::iterator, 281
- std::basic_string::reverse_iterator, 308
- std::basic_stringstream, 174
- std::bitset, 175
- std::complex, 187
- std::deque, 219
- std::deque::const_iterator, 189
- std::deque::const_reverse_iterator, 192
- std::deque::iterator, 282
- std::deque::reverse_iterator, 309
- std::domain_error, 225
- std::exception, 226
- std::fstream, 265
- std::ifstream, 267
- std::invalid_argument, 268
- std::ios, 279
- std::ios_base, 280
- std::ios_base::failure, 237
- std::istream, 280
- std::istringstream, 281
- std::length_error, 290
- std::list, 290
- std::list::const_iterator, 190
- std::list::const_reverse_iterator, 192
- std::list::iterator, 282
- std::list::reverse_iterator, 309
- std::logic_error, 291
- std::map, 291
- std::map::const_iterator, 190
- std::map::const_reverse_iterator, 192
- std::map::iterator, 282
- std::map::reverse_iterator, 308
- std::multimap, 292
- std::multimap::const_iterator, 190
- std::multimap::const_reverse_iterator, 192
- std::multimap::iterator, 283
- std::multimap::reverse_iterator, 310
- std::multiset, 292
- std::multiset::const_iterator, 190
- std::multiset::const_reverse_iterator, 193
- std::multiset::iterator, 283
- std::multiset::reverse_iterator, 310
- std::ofstream, 294
- std::ostream, 294
- std::ostringstream, 294
- std::out_of_range, 295
- std::overflow_error, 295
- std::priority_queue, 303
- std::queue, 303
- std::range_error, 303
- std::runtime_error, 311
- std::set, 323
- std::set::const_iterator, 190
- std::set::const_reverse_iterator, 192
- std::set::iterator, 283
- std::set::reverse_iterator, 310
- std::stack, 331
- std::string, 490
- std::string::const_iterator, 189
- std::string::const_reverse_iterator, 191
- std::string::iterator, 281
- std::string::reverse_iterator, 308
- std::stringstream, 491
- std::underflow_error, 493
- std::valarray, 493
- std::vector, 493
- std::vector::const_iterator, 191

- std::vector::const_reverse_iterator, 193
- std::vector::iterator, 283
- std::vector::reverse_iterator, 309
- std::wfstream, 494
- std::wifstream, 494
- std::wios, 494
- std::wistream, 495
- std::wistreamstream, 495
- std::wofstream, 496
- std::wostream, 496
- std::wostreamstream, 496
- std::wstring, 497
- std::wstring::const_iterator, 189
- std::wstring::const_reverse_iterator, 191
- std::wstring::iterator, 282
- std::wstring::reverse_iterator, 309
- std::wstringstream, 497
- stdair, 151
- stdair::BomPropertyTree, 177
 - _airlineCode, 178
 - _airportCodeList, 178
 - _departureDate, 178
 - _flightNumber, 178
 - load, 177
 - save, 177
- stop
 - AIRINV::AirInvServer, 168
- storeACP
 - AIRINV::InventoryParserHelper::storeACP, 332
- storeAU
 - AIRINV::InventoryParserHelper::storeAU, 341
- storeAdvancePurchase
 - AIRINV::DCPPParserHelper::storeAdvancePurchase, 334
- storeAirlineCode
 - AIRINV::DCPPParserHelper::storeAirlineCode, 336
 - AIRINV::InventoryParserHelper::storeAirlineCode, 337
 - AIRINV::ScheduleParserHelper::storeAirlineCode, 340
- storeBoardingDate
 - AIRINV::InventoryParserHelper::storeBoardingDate, 343
- storeBoardingTime
 - AIRINV::InventoryParserHelper::storeBoardingTime, 345
- AIRINV::ScheduleParserHelper::storeBoardingTime, 347
- storeBookingCounter
 - AIRINV::InventoryParserHelper::storeBookingCounter, 349
- storeBucketAvailability
 - AIRINV::InventoryParserHelper::storeBucketAvailability, 351
- storeCabinCode
 - AIRINV::DCPPParserHelper::storeCabinCode, 353
- storeCapacity
 - AIRINV::ScheduleParserHelper::storeCapacity, 355
- storeChangeFees
 - AIRINV::DCPPParserHelper::storeChangeFees, 356
- storeChannel
 - AIRINV::DCPPParserHelper::storeChannel, 358
- storeClass
 - AIRINV::DCPPParserHelper::storeClass, 359
- storeClassAvailability
 - AIRINV::InventoryParserHelper::storeClassAvailability, 361
- storeClassCode
 - AIRINV::InventoryParserHelper::storeClassCode, 363
- storeClassETB
 - AIRINV::InventoryParserHelper::storeClassETB, 367
- storeClasses
 - AIRINV::ScheduleParserHelper::storeClasses, 365
- storeCumulatedProtection
 - AIRINV::InventoryParserHelper::storeCumulatedProtection, 369
- storeDCP
 - AIRINV::DCPPParserHelper::storeDCP, 377
- storeDCPId
 - AIRINV::DCPPParserHelper::storeDCPId, 379
- storeDateRangeEnd
 - AIRINV::DCPPParserHelper::storeDateRangeEnd, 373
 - AIRINV::ScheduleParserHelper::storeDateRangeEnd, 371

- storeDateRangeStart
 - AIRINV::DCPParserHelper::storeDateRangeStart, [376](#)
 - AIRINV::ScheduleParserHelper::storeDateRangeStart, [374](#)
- storeDestination
 - AIRINV::DCPParserHelper::storeDestination, [380](#)
- storeDow
 - AIRINV::ScheduleParserHelper::storeDow, [382](#)
- storeETB
 - AIRINV::InventoryParserHelper::storeETB, [387](#)
- storeElapsedTime
 - AIRINV::ScheduleParserHelper::storeElapsedTime, [383](#)
- storeEndRangeTime
 - AIRINV::DCPParserHelper::storeEndRangeTime, [385](#)
- storeFClasses
 - AIRINV::InventoryParserHelper::storeFClasses, [394](#)
 - AIRINV::ScheduleParserHelper::storeFClasses, [392](#)
- storeFamilyCode
 - AIRINV::InventoryParserHelper::storeFamilyCode, [390](#)
 - AIRINV::ScheduleParserHelper::storeFamilyCode, [389](#)
- storeFlightDate
 - AIRINV::InventoryParserHelper::storeFlightDate, [396](#)
- storeFlightNumber
 - AIRINV::InventoryParserHelper::storeFlightNumber, [400](#)
 - AIRINV::ScheduleParserHelper::storeFlightNumber, [398](#)
- storeFlightTypeCode
 - AIRINV::InventoryParserHelper::storeFlightTypeCode, [402](#)
- storeFlightVisibilityCode
 - AIRINV::InventoryParserHelper::storeFlightVisibilityCode, [404](#)
- storeGAV
 - AIRINV::InventoryParserHelper::storeGAV, [406](#)
- storeLegBoardingPoint
 - AIRINV::InventoryParserHelper::storeLegBoardingPoint, [409](#)
 - AIRINV::ScheduleParserHelper::storeLegBoardingPoint, [408](#)
- storeLegCabinCode
 - AIRINV::InventoryParserHelper::storeLegCabinCode, [412](#)
 - AIRINV::ScheduleParserHelper::storeLegCabinCode, [414](#)
- storeLegOffPoint
 - AIRINV::InventoryParserHelper::storeLegOffPoint, [415](#)
 - AIRINV::ScheduleParserHelper::storeLegOffPoint, [417](#)
- storeMinimumStay
 - AIRINV::DCPParserHelper::storeMinimumStay, [419](#)
- storeNAV
 - AIRINV::InventoryParserHelper::storeNAV, [421](#)
- storeNbOfBkgs
 - AIRINV::InventoryParserHelper::storeNbOfBkgs, [423](#)
- storeNbOfGroupBkgs
 - AIRINV::InventoryParserHelper::storeNbOfGroupBkgs, [425](#)
- storeNbOfPendingGroupBkgs
 - AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs, [427](#)
- storeNbOfStaffBkgs
 - AIRINV::InventoryParserHelper::storeNbOfStaffBkgs, [429](#)
- storeNbOfWLBkgs
 - AIRINV::InventoryParserHelper::storeNbOfWLBkgs, [431](#)
- storeNego
 - AIRINV::InventoryParserHelper::storeNego, [433](#)
- storeNoShow
 - AIRINV::InventoryParserHelper::storeNoShow, [437](#)
- storeNonRefundable
 - AIRINV::DCPParserHelper::storeNonRefundable, [435](#)
- storeOffDate
 - AIRINV::InventoryParserHelper::storeOffDate, [439](#)
- storeOffTime
 - AIRINV::InventoryParserHelper::storeOffTime, [441](#)

- AIRINV::ScheduleParserHelper-
::storeOffTime, [443](#)
- storeOrigin
 - AIRINV::DCPPParserHelper::store-
Origin, [444](#)
- storeOverbooking
 - AIRINV::InventoryParserHelper-
::storeOverbooking, [446](#)
- storePOS
 - AIRINV::DCPPParserHelper::storeP-
OS, [452](#)
- storeParentClassCode
 - AIRINV::InventoryParserHelper-
::storeParentClassCode, [448](#)
- storeParentSubclassCode
 - AIRINV::InventoryParserHelper-
::storeParentSubclassCode,
[450](#)
- storeProtection
 - AIRINV::InventoryParserHelper-
::storeProtection, [454](#)
- storeRevenueAvailability
 - AIRINV::InventoryParserHelper-
::storeRevenueAvailability, [456](#)
- storeSaleableCapacity
 - AIRINV::InventoryParserHelper-
::storeSaleableCapacity, [458](#)
- storeSaturdayStay
 - AIRINV::DCPPParserHelper::store-
SaturdayStay, [460](#)
- storeSeatIndex
 - AIRINV::InventoryParserHelper-
::storeSeatIndex, [461](#)
- storeSegmentAvailability
 - AIRINV::InventoryParserHelper-
::storeSegmentAvailability, [463](#)
- storeSegmentBoardingPoint
 - AIRINV::InventoryParserHelper-
::storeSegmentBoardingPoint,
[467](#)
 - AIRINV::ScheduleParserHelper-
::storeSegmentBoardingPoint,
[466](#)
- storeSegmentCabinBookingCounter
 - AIRINV::InventoryParserHelper-
::storeSegmentCabinBooking-
Counter, [469](#)
- storeSegmentCabinCode
 - AIRINV::InventoryParserHelper-
::storeSegmentCabinCode, [472](#)
 - AIRINV::ScheduleParserHelper-
::storeSegmentCabinCode, [474](#)
- storeSegmentOffPoint
 - AIRINV::InventoryParserHelper-
::storeSegmentOffPoint, [475](#)
 - AIRINV::ScheduleParserHelper-
::storeSegmentOffPoint, [477](#)
- storeSegmentSpecificity
 - AIRINV::ScheduleParserHelper-
::storeSegmentSpecificity, [479](#)
- storeSnapshotDate
 - AIRINV::InventoryParserHelper-
::storeSnapshotDate, [481](#)
- storeStartRangeTime
 - AIRINV::DCPPParserHelper::store-
StartRangeTime, [483](#)
- storeSubclassCode
 - AIRINV::InventoryParserHelper-
::storeSubclassCode, [484](#)
- storeUPR
 - AIRINV::InventoryParserHelper-
::storeUPR, [486](#)
- storeYieldUpperRange
 - AIRINV::InventoryParserHelper-
::storeYieldUpperRange, [488](#)
- stripwhite
 - readline_autocomp.hpp, [760](#)
- swift, [152](#)
- swift::SKeymap, [323](#)
 - ~SKeymap, [325](#)
 - Bind, [325](#)
 - SKeymap, [324](#), [325](#)
 - SReadline, [326](#)
 - Unbind, [325](#)
 - operator=, [325](#)
- swift::SReadline, [326](#)
 - ~SReadline, [327](#)
 - ClearHistory, [330](#)
 - GetHistory, [329](#)
 - GetLine, [328](#), [329](#)
 - LoadHistory, [330](#)
 - RegisterCompletions, [331](#)
 - SReadline, [327](#)
 - SaveHistory, [329](#), [330](#)
 - SetKeymap, [331](#)
- syscom
 - readline_autocomp.hpp, [762](#)
- takeSnapshots

- AIRINV::AIRINV_Master_Service, 156
- AIRINV::AIRINV_Service, 164
- AIRINV::GuillotineBlockHelper, 266
- AIRINV::InventoryHelper, 273
- test/ Directory Reference, 134
- test/airinv/ Directory Reference, 130
- test/airinv/InventoryTestSuite.cpp, 775
- test/airinv/InventoryTestSuite.hpp, 779, 780
- time
 - AIRINV::DCPParserHelper::DCP-RuleParser, 207
 - AIRINV::InventoryParserHelper::InventoryParser::definition, 213
 - AIRINV::ScheduleParserHelper::FlightPeriodParser::definition, 217
- timeRangeEnd
 - AIRINV::DCPParserHelper::DCP-RuleParser, 207
- timeRangeStart
 - AIRINV::DCPParserHelper::DCP-RuleParser, 207
- to_buffers
 - AIRINV::Reply, 304
- toStream
 - AIRINV::BomAbstract, 176
 - AIRINV::ServiceAbstract, 322
- toString
 - AIRINV::BomAbstract, 176
- too_dangerous
 - readline_autocomp.hpp, 761
- uint1_2_p
 - AIRINV::InventoryParserHelper, 147
- uint1_2_p_t
 - AIRINV, 139
- uint1_3_p
 - AIRINV::InventoryParserHelper, 148
- uint1_3_p_t
 - AIRINV, 139
- uint1_4_p
 - AIRINV::DCPParserHelper, 143
 - AIRINV::InventoryParserHelper, 148
 - AIRINV::ScheduleParserHelper, 151
- uint1_4_p_t
 - AIRINV, 139
- uint2_p
 - AIRINV::DCPParserHelper, 143
- AIRINV::InventoryParserHelper, 147
- AIRINV::ScheduleParserHelper, 151
- uint2_p_t
 - AIRINV, 138
- uint4_p
 - AIRINV::DCPParserHelper, 143
 - AIRINV::InventoryParserHelper, 148
 - AIRINV::ScheduleParserHelper, 151
- uint4_p_t
 - AIRINV, 139
- updateAUs
 - AIRINV::SegmentCabinHelper, 314
- updateAvailabilities
 - AIRINV::SegmentCabinHelper, 315
- updateAvailabilityPool
 - AIRINV::FlightDateHelper, 241
- updateBookingControls
 - AIRINV::FlightDateHelper, 241
- updateBookingControlsUsingPseudoBid-PriceVector
 - AIRINV::SegmentCabinHelper, 314
- updateDistanceFromElapsedTime
 - AIRINV::SegmentDateHelper, 318
- updateElapsedTimeFromRouting
 - AIRINV::SegmentDateHelper, 317
- updateFromReservation
 - AIRINV::SegmentCabinHelper, 314
- valid_argument
 - readline_autocomp.hpp, 761
- value
 - AIRINV::header, 267
- xmalloc
 - readline_autocomp.hpp, 759
- year_p
 - AIRINV::DCPParserHelper, 143
 - AIRINV::InventoryParserHelper, 146
 - AIRINV::ScheduleParserHelper, 149