



TestCases for the SCA Assembly Model Version 1.1

Committee Specification Draft 04 / Public Review Draft 03

21 June 2011

Specification URIs

This version:

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-csprd03.pdf>

(Authoritative)

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-csprd03.html>

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-csprd03.odt>

Previous version:

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-cd03.pdf>

(Authoritative)

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-cd03.html>

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-cd03.odt>

Latest version:

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases.pdf> (Authoritative)

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases.html>

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases.odt>

Technical Committee:

OASIS Service Component Architecture / Assembly (SCA-Assembly) TC

Chairs:

Martin Chapman (martin.chapman@oracle.com), Oracle

Mike Edwards (mike_edwards@uk.ibm.com), IBM

Editors:

Mike Edwards (mike_edwards@uk.ibm.com), IBM

Eric Wells (eric.wells@hitachisoftware.com), Hitachi, Ltd.

Plamen Pavlov (Plamen.Pavlov@sap.com), SAP AG

Additional artifacts:

This prose specification is one component of a Work Product which also includes:

- Test Suite artifacts ZIP archive: <http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-csprd03/testcases.zip>

Related work:

This specification is related to:

- Service Component Architecture Assembly Model Specification Version 1.1. Latest version.
<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-spec.html>

Declared XML namespaces:

<http://docs.oasis-open.org/ns/opencsa/scatests/200903>

<http://docs.oasis-open.org/ns/opencsa/scatests/2009032>

<http://test.sca.oasisopen.org/>

Abstract:

This document defines the TestCases for the SCA Assembly specification. The TestCases represent a series of tests that an SCA runtime must pass in order to claim conformance to the requirements of the SCA Assembly specification.

Status:

This document was last revised or approved by the OASIS Service Component Architecture / Assembly (SCA-Assembly) TC on the above date. The level of approval is also listed above. Check the "Latest version" location noted above for possible later revisions of this document.

Technical Committee members should send comments on this specification to the Technical Committee's email list. Others should send comments to the Technical Committee by using the "Send A Comment" button on the Technical Committee's web page at <http://www.oasis-open.org/committees/sca-assembly/>.

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the Technical Committee web page (<http://www.oasis-open.org/committees/sca-assembly/ipr.php>).

Citation format:

When referencing this specification the following citation format should be used:

[SCA-AssemblyTestCases]

TestCases for the SCA Assembly Model Version 1.1. 21 June 2011. OASIS Committee Specification Draft 04 / Public Review Draft 03.

<http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-testcases-csprd03.html>.

Notices

Copyright © OASIS Open 2011. All Rights Reserved.

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full [Policy](#) may be found at the OASIS website.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Committee Specification or OASIS Standard, to notify OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification.

OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this specification by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification. OASIS may include such claims on its website, but disclaims any obligation to do so.

OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Committee Specification or OASIS Standard, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.

The name "OASIS" is a trademark of [OASIS](#), the owner and developer of this specification, and should be used only to refer to the organization and its official outputs. OASIS welcomes reference to, and implementation and use of, specifications, while reserving the right to enforce its marks against misleading uses. Please see <http://www.oasis-open.org/who/trademark.php> for above guidance.

Table of Contents

1	Introduction.....	6
1.1	TestCase Structure.....	6
1.2	Namespaces and Java Package Names.....	8
1.3	Terminology.....	9
1.4	Normative References.....	9
1.5	Non_Normative References.....	9
2	TestCases.....	10
2.1	Section 3.....	10
2.2	Section 4.....	13
2.3	Section 5.....	35
2.5	Section 6.....	54
2.6	Section 7.....	63
2.7	Section 8.....	65
2.8	Section 10.....	67
2.9	Section 11.....	74
2.10	Section 12.....	74
3	Catalog of Test Artifacts.....	78
3.1	Composite Files - lower level.....	78
3.2	Java Interfaces.....	84
3.3	Java Implementation Classes.....	85
3.4	WSDL Interface Files.....	86
4	Conformance.....	88
Appendix A.	Test Assertions for the SCA Assembly Model.....	89
A.1.	Example Test Assertion.....	89
A.2.	Test Assertions for SCA Assembly Specification Section 3.....	89
A.3.	Test Assertions for SCA Assembly Specification Section 4.....	93
A.4.	Test Assertions for SCA Assembly Specification Section 5.....	111
A.5.	Test Assertions for SCA Assembly Specification Section 6.....	128
A.6.	Test Assertions for SCA Assembly Specification Section 7.....	135
A.7.	Test Assertions for SCA Assembly Specification Section 8.....	136
A.8.	Test Assertions for SCA Assembly Specification Section 9.....	137
A.9.	Test Assertions for SCA Assembly Specification Section 10.....	138
A.10.	Test Assertions for SCA Assembly Specification Section 11.....	152
A.11.	Test Assertions for SCA Assembly Specification Section 12.....	153
Appendix B.	Cross Mapping of Normative Statements to Test Assertions.....	154
Appendix C.	Cross Mapping of Test Assertions to TestCases.....	160

Appendix D. Acknowledgments	166
Appendix E. Revision History	167

1 Introduction

This document defines the TestCases for the SCA Assembly specification. [ASSEMBLY]

The tests described in this document are derived from the normative statements in SCA Assembly specification via Test Assertions which are described in [Appendix A, "Test Assertions for the SCA Assembly Model"](#).

1.1 TestCase Structure

The SCA Assembly testcases follow a standard structure. They are divided into two main parts:

1. Test Client, which drives the test and checks that the results are as expected
2. Test Application, which forms the bulk of the testcase and which consists of Composites, WSDL files, XSDs and code artifacts such as Java classes, organized into a series of SCA contributions

The basic idea is that the Test Application runs on the SCA runtime that is under test, while the Test Client runs as a standalone application, invoking the Test Application through one or more service interfaces.

Test Client

The test client is designed as a standalone application. The version built here is a Java application which uses the JUnit test framework, although in principle, the client could be built using another implementation technology.

The test client is structured to contain configuration information about the testcase, which consists of:

1. metadata identifying the Test Application in terms of the SCA Contributions that are used and the Composites that must be deployed and run
2. data indicating which service operation(s) must be invoked with input data and expected output data (including exceptions for expected failure cases)

The Java test client consists of a base runtime class, BaseJAXWSTestCase.java. Each actual testcase is implemented by a small class which extends the base runtime class. The bulk of the code required to run a test is held in the base runtime class. The small testcase class contains the configuration for the specific test, which it provides to the code in the base runtime class through a standard interface.

The Java test client base runtime class is structured so that there is a replaceable class called the RuntimeBridge, which is used to communicate with the SCA runtime under test, for the purposes of deploying and running the test application. Each SCA runtime provider can produce a version of this class. The code within the runtime bridge is likely to be highly proprietary and specific to the SCA runtime for which it is written. Which runtime bridge class is used at runtime is controlled by an environment variable or system variable with the name "OASIS_TESTENV_RUNTIME_BRIDGE_CLASS", which is read by the code in BaseJAXWSTestCase.

The Test Client defaults to using Web services to communicate with the test application. The client is structured to permit Web services to be replaced by some other binding (eg JMS) should the SCA runtime under test not support Web services as a binding technology.

38 Test Application

39 Each Test Application consists of one top level SCA Composite file and one or more other SCA Compos-
40 ite files and their associated artifacts (implementations, interface files), plus test client invocation applica-
41 tion described above.

42 A typical test application has a design where the top level composite offers a single service to the client
43 application over a Web services binding. The top level composite contains one component which offers
44 the service that is used by the client application. The top level composite then contains one or more other
45 components which are used by the first component.

46 All of the components in the top level composite are implemented by composites. These second level
47 composites then contain typically one component, implemented using a specific technology such as Java
48 POJO or a BPEL process. In some cases the implementation may be a third level composite.

49 The application is structured so that alternative technologies can be used. For example, replacing the
50 contents of the second-level or third-level composites allows different implementation technologies to be
51 tested – eg BPEL scripts or C++ classes may be used instead of Java classes. Similarly, the binding
52 used to connect from the top level composite to the client application may be changed from Web services
53 to JMS if required, simply by changing the binding on the <service/> of the top level composite.

54 Which implementation language to use for test artifacts is controlled by a system variable or environment
55 variable which is read by the test client application, with the name "OASIS_TESTENV_IMPL_LANG".

56 This variable can have one of the following values:

- 57 • "Java" - for Java implementations
- 58 • "BPEL" - for WS_BPEL process implementations
- 59 • "CPP" - for C++ implementations

60 The testcases are designed so that the range of implementation types can be expanded

61 Test Artifacts Organization

62 Note that the design of these testcases promotes reuse of artifacts between testcases, so that many test-
63 cases share components. For example, components implementing simple invocable services are all im-
64 plemented using a single parameterized implementation artifact.

65 All the test artifacts are contained in a number of Contributions, which are simply filesystem directories
66 which are all peers in the filesystem hierarchy. The names of the directories are the names of the Contri-
67 butions and the names are significant. The names of Contributions containing implementation type spe-
68 cific artifacts (such as Java classes) are also specially structured to allow for replacement of one type of
69 implementation artifact with another.

70 Broadly, Contribution names are as follows:

- 71 • ASM_nnnn - a contribution that is specific for a particular testcase, where "nnnn" is the num-
72 ber of the testcase. Often this is required because a particular testcase involves artifacts that
73 contain errors that are statically checkable - an SCA runtime is permitted to reject such artifacts
74 when they are contributed and deployed and it is important to ensure that contributions containing
75 deliberate errors for one testcase do not interfere with the operation of other testcases.
- 76 • ASM_nnnn_Java - a contribution for a specific testcase where there is a need for language spe-
77 cific artifacts that relate to that testcase alone
- 78 • General - a shared contribution containing implementation type independent artifacts that can be
79 used by many testcases.
- 80 • General_Java - a shared contribution containing implementation type dependent artifacts for
81 Java POJOs. These artifacts can include both Java classes and also SCA composites that dir-
82 ectly use Java classes.

- 83 • General_BPEL - a shared contribution containing implementation type dependent artifacts for
84 BPEL processes. These artifacts can include both BPEL processes and also SCA composites
85 that directly use BPEL processes.
- 86 • Contribution1, Contribution2, etc - contributions that are used by various testcases that are test-
87 ing the handling of SCA contributions

88 Note that the names of Contributions containing implementation specific artifacts ends with a name that is
89 specific to the implementation type - so "_Java" is used for Java implementations, "_BPEL" is used for
90 BPEL implementations, "_CPP" is used for C++ implementations (and so on). Note that the name follow-
91 ing the underscore matches the name used in the "OASIS_TESTENV_IMPL_LANG" variable used to
92 control execution of the test client. The concept is that where there is an implementation type specific
93 contribution, each implementation type must provide its own versions of the same basic artifacts. Typic-
94 ally, this means that each contribution must contain the same set of Composites, but that the implementa-
95 tion type dependent artifacts that these composites use will differ from implementation type to implement-
96 ation type.

97 Basically, the setting of the variable is used to select the suffix used for implementation type dependent
98 contributions. If the variable is set to "Java" then the contribution "General_Java" is selected, whereas if
99 the variable is set to "BPEL", the contribution "General_BPEL" is selected.

100 **Replaceable Values for SCA Artifacts**

101 In general, the SCA artifacts contained in the various contributions cannot be changed - such changes
102 would invalidate the test suite. However, there are a small number of instances where there is a need to
103 adjust some values used in the SCA artifacts to meet the configuration of the SCA Runtime under test.
104 This in particular applies to some service endpoint addresses of some Web services that occur in some of
105 the testcases.

106 To deal with this situation, the adjustable values are expressed in terms of XML Entities, with Entity Refer-
107 ences used within SCA artifacts such as composites. The XML Entities are declared within a DTD file,
108 which is referenced from the SCA artifact files. The Entity values declared in the DTD file can be changed
109 to match the configuration of the SCA Runtime under test - this is the only change permitted to the SCA
110 artifacts when run against a particular SCA runtime.

111 The DTD file has the name *sca_variables.dtd* and it is contained in the **General** contribution.

112 Each Entity value declared in the *sca_variables.dtd* file has an explanation of what the Entity is intended
113 to hold and it is expected that the values will be adjusted to suit the runtime under test before the test
114 suite is executed.

115 **1.2 Namespaces and Java Package Names**

116 The SCA Assembly testcase suite makes use of some XML namespaces and Java package names, as
117 follows:

118 **SCA Artifact Namespaces**

119 These apply to artifacts such as Composites

120 <http://docs.oasis-open.org/ns/opencsa/scatests/200903>

121 <http://docs.oasis-open.org/ns/opencsa/scatests/2009032>

122 **WSDL Namespace**

123 <http://test.sca.oasisopen.org/>

124 **Java Package name**
125 For Java interface classes and for Java implementation classes
126 org.oasisopen.sca.test

127 **1.3 Terminology**

128 The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD
129 NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this specification are to be interpreted as de-
130 scribed in IETF RFC 2119 [RFC 2119]

131 **1.4 Normative References**

132 **[RFC 2119]** S. Bradner. *Key words for use in RFCs to Indicate Requirement Levels*. IETF RFC 2119,
133 March 1997.
134 <http://www.ietf.org/rfc/rfc2119.txt>.

135
136 **[ASSEMBLY]** OASIS Committee Draft 08, SCA Assembly Model Specification Version 1.1, May
137 2011, [http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-spec-](http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-spec-csd08.pdf)
138 [csd08.pdf](http://docs.oasis-open.org/opencsa/sca-assembly/sca-assembly-1.1-spec-csd08.pdf)

139 **[TA-GUIDE]** **OASIS Committee Draft 05, Test Assertions Guidelines Version 1.0, August**
140 **2010** [http://docs.oasis-](http://docs.oasis-open.org/tag/guidelines/v1.0/cd05/testassertionsguidelines-cd-05.pdf)
141 [open.org/tag/guidelines/v1.0/cd05/testassertionsguidelines-cd-05.pdf](http://docs.oasis-open.org/tag/guidelines/v1.0/cd05/testassertionsguidelines-cd-05.pdf)

142 **1.5 Non_Normative References**

143 N/A

144 **2 TestCases**

145 **2.1 Section 3**

146 **ASM_4002_TestCase**

147

Testcase ID	ASM_4002_TestCase
Test Assertion	ASM-TA-4002
Description	Tests that the @name attribute value of a <service/> element of a <componentType/> is not the same as the @name attribute value of any other <service/> of the <componentType/>
Artifacts	ASM_4002_TestCase.java Test_ASM_4002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite16.composite Service1.wsdl
Expected output	Negative test: "exception"

148 **ASM_4003_TestCase**

149

Testcase ID	ASM_4003_TestCase
Test Assertion	ASM-TA-4003
Description	Tests that the @name attribute value of a <reference/> element of a <componentType/> is not the same as the @name attribute value of any other <reference/> of the <componentType/>
Artifacts	ASM_4003_TestCase.java Test_ASM_4003.composite TestInvocation.wsdl TestClient_0002.composite TestComposite19.composite Service1.wsdl
Expected output	Negative test: "exception"

150 **ASM_4004_TestCase**

151

Testcase ID	ASM_4004_TestCase
Test Assertion	ASM-TA-4004
Description	Tests that the @name attribute value of a <property/> element of a <componentType/> is not the same as the @name attribute value of any other <property/> of the <componentType/>
Artifacts	ASM_4004_TestCase.java Test_ASM_4004.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite26.composite
Expected output	Negative test: "exception"

152

153 **ASM_4005_TestCase**

154

Testcase ID	ASM_4005_TestCase
Test Assertion	ASM-TA-4006
Description	Tests that the @type attribute value of a <property/> element of a <componentType/> is the QName of an XML schema type
Artifacts	ASM_4005_TestCase.java Test_ASM_4005.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite43.composite Service1.wsdl
Expected output	Positive test: "ASM_4005 request service1 operation1 invoked service2 operation1 invoked"

155

156 **ASM_4006_TestCase**

157

Testcase ID	ASM_4006_TestCase
Test Assertion	ASM-TA-4007
Description	Tests that the @element attribute value of a <property/> element of a <componentType/> is the QName of an XSD global element
Artifacts	ASM_4006_TestCase.java Test_ASM_4006.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite44.composite Service1.wsdl
Expected output	Positive test: "ASM_4006 request service1 operation1 invoked service2 operation1 invoked"

158

159 **ASM_4007_TestCase**

160

Testcase ID	ASM_4007_TestCase
Test Assertion	ASM-TA-4009 ASM-TA-4010
Description	Tests that a <property/> element of a <componentType/> does not have both @element and @type attributes set at the same time
Artifacts	ASM_4007_TestCase.java Test_ASM_4007.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite45.composite Service1.wsdl
Expected output	Negative test: "exception"

161

162 **ASM_4008_TestCase**

163

Testcase ID	ASM_4008_TestCase
Test Assertion	ASM-TA-4011
Description	Tests that a <property/> element of a <componentType/> which has @mustSupply="true" must have a value specified for that property in the <component/> that uses the <implementation/> with that <componentType/>
Artifacts	ASM_4008_TestCase.java Test_ASM_4008.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite46.composite Service1.wsdl
Expected output	Negative test: "exception"

164

165 2.2 Section 4

166 ASM_5002_TestCase

167

Testcase ID	ASM_5002_TestCase
Test Assertion	ASM-TA-5025 (+ ASM-TA-5031 as it uses simple property values) (+ ASM-TA-4008 as it involves a component property value being used by the runtime implementation instance)
Description	Tests that a component with a single reference of multiplicity 1..1 with @target attribute set to the service of a second component in the same composite, where the service interface is compatible with the reference interface, can successfully invoke the target service.
Artifacts	ASM_5002_TestCase.java Test_ASM_5002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test:

	"ASM_5002 request service1 operation1 invoked"
--	--

168

169 **ASM_5003_TestCase**

170

Testcase ID	ASM_5003_TestCase
Test Assertion	ASM-TA-5026
Description	Tests that a component with a single reference of multiplicity 1..n with @target attribute having 3 entries (the service of three other components in the same composite, where the service interface is compatible with the reference interface), can successfully invoke all the target services.
Artifacts	ASM_5003_TestCase.java Test_ASM_5003.composite TestInvocation.wsdl TestClient_5003.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_5003 request service1 operation1 invokedservice2 operation1 invoked service3 operation1 invoked"

171

172 **ASM_5004_TestCase**

173

Testcase ID	ASM_5004_TestCase
Test Assertion	ASM-TA-5027
Description	Tests that a component with a single reference of multiplicity 1..1 with @target attribute having 3 entries (the service of three other components in the same composite, where the service interface is compatible with the reference interface), has an invalid configuration and cannot run.
Artifacts	ASM_5004_TestCase.java Test_ASM_5004.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

174

175 **ASM_5005_TestCase**

176

Testcase ID	ASM_5005_TestCase
Test Assertion	ASM-TA-5001
Description	Tests that a component with multiple <service/> elements must have unique @name attributes for each service
Artifacts	ASM_5005_TestCase.java Test_ASM_5005.composite TestInvocation.wsdl TestClient_0002.composite TestComposite2.composite Service1.wsdl
Expected output	Negative test: "exception"

177

178 **ASM_5006_TestCase**

179

Testcase ID	ASM_5006_TestCase
Test Assertion	ASM-TA-5002
Description	Tests that the @name attribute of a <service/> element of a <component/> must match the @name attribute of a <service/> element in the componentType of the <implementation/> used by the <component/>
Artifacts	ASM_5006_TestCase.java Test_ASM_5006.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

180

181 **ASM_5007_TestCase**

182

Testcase ID	ASM_5007_TestCase
Test Assertion	ASM-TA-5003
Description	Test that the @name attribute of a <reference/> element of a component is not equal to the @name attribute of any other <reference/> element of the same component
Artifacts	ASM_5007_TestCase.java Test_ASM_5007.composite TestInvocation.wsdlTestClient_0002.composite TestComposite3.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

183

184

185

186 **ASM_5008_TestCase**

187

Testcase ID	ASM_5008_TestCase
Test Assertion	ASM-TA-5004
Description	Tests that the @name attribute of a <reference/> element of a component is equal to the @name attribute of a <reference/> element of the <componentType/> of the <implementation/> of the <component/>
Artifacts	ASM_5008_TestCase.java Test_ASM_5008.composite TestInvocation.wsdl TestClient_0002.composite TestComposite4.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

188

189

190 **ASM_5009_TestCase**

191

Testcase ID	ASM_5009_TestCase
Test Assertion	ASM-TA-5005
Description	Tests that the @name attribute of a <component/> element in a <composite/> is not the same as the @name attribute of a second component in the same <composite/>
Artifacts	ASM_5009_TestCase.java Test_ASM_5009.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: “exception”

192

193 **ASM_5010_TestCase**

194

Testcase ID	ASM_5010_TestCase
Test Assertion	ASM-TA-5006
Description	Tests that the interface specified by the <interface/> child element of a <service/> element is a compatible subset of the interface declared for the <service/> element with the same @name attribute in the <component-Type/> of the <implementation/> of the <component/> parent of the <service/>
Artifacts	ASM_5010_TestCase.java Test_ASM_5010.composite TestInvocation.wsdl TestClient_0002.composite TestComposite5.composite Service1.wsdl
Expected output	Negative test: “exception”

195

196

197 **ASM_5011_TestCase**

198

Testcase ID	ASM_5011_TestCase
Test Assertion	ASM-TA-5010
Description	Tests that the multiplicity of a <reference/> element of a <component/> can be 1..1 where the multiplicity of the equivalent <reference/> element in the <componentType/> of the <implementation/> of the <component/> is 1..n
Artifacts	ASM_5011_TestCase.java Test_ASM_5011.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite6.composite ASM_0002_Client.java Service1.wsdl
Expected output	Positive test: "ASM_5011 request service1 operation1 invoked service2 operation1 invoked"

199

200 **ASM_5012_TestCase**

201

Testcase ID	ASM_0012_TestCase
Test Assertion	ASM-TA-5011
Description	Tests that the multiplicity of a <reference/> element of a <component/> can be any one of 0..1, 1..1, 0..n, 1..n where the multiplicity of the equivalent <reference/> element in the <componentType/> of the <implementation/> of the <component/> is 0..n
Artifacts	ASM_5012_TestCase.java Test_ASM_5012.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite7.composite Service1.wsdl
Expected output	Positive test: "ASM_5012 request service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked service4 operation1 invoked service5"

	operation1 invoked”
--	---------------------

202

203

204 **ASM_5013_TestCase**

205

Testcase ID	ASM_5013_TestCase
Test Assertion	ASM-TA-5012
Description	Tests that the multiplicity of a <reference/> element of a <component/> is 1..1 where the multiplicity of the equivalent <reference/> element in the <componentType/> of the <implementation/> of the <component/> is 1..1
Artifacts	ASM_5013_TestCase.java Test_ASM_5013.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Positive test: “ASM_5013 request service1 operation1 invoked service2 operation1 invoked”

206

207

208 **ASM_5014_TestCase**

209

Testcase ID	ASM_5014_TestCase
Test Assertion	ASM-TA-5012
Description	Tests that the multiplicity of a <reference/> element of a <component/> is 0..n where the multiplicity of the equivalent <reference/> element in the <componentType/> of the <implementation/> of the <component/> is 1..1
Artifacts	ASM_5014_TestCase.java Test_ASM_5014.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite

	ASM_0002_Client.java Service1.wsdl
Expected output	Negative test: "exception"

210

211

212 **ASM_5015_TestCase**

213

Testcase ID	ASM_5015_TestCase
Test Assertion	ASM-TA-5013
Description	Tests that the multiplicity of a <reference/> element of a <component/> is 1..1 where the multiplicity of the equivalent <reference/> element in the <componentType/> of the <implementation/> of the <component/> is 0..1
Artifacts	ASM_5015_TestCase.java Test_ASM_5015.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite8.composite Service1.wsdl
Expected output	Positive test: "ASM_5015 request service1 operation1 invoked service2 operation1 invoked"

214

215

216 **ASM_5016_TestCase**

217

Testcase ID	ASM_5016_TestCase
Test Assertion	ASM-TA-5016
Description	Tests that the interface declared by the <interface/> child element of a <reference/> of a <component/> is a compatible superset of the interface declared on the corresponding <reference/> of the componentType of the <implementation/> of the <component/>
Artifacts	ASM_5016_TestCase.java Test_ASM_5016.composite

	TestInvocation.wsdl TestClient_0002.composite TestComposite4.composite TestComposite9.composite Service1.wsdl Service1Superset.wsdl
Expected output	Positive test: “ASM_5016 request service1 operation1 invoked service2 operation1 invoked”

218

219

220 **ASM_5017_TestCase**

221

Testcase ID	ASM_5017_TestCase
Test Assertion	ASM-TA-5017
Description	Tests that where a <reference/> of a <component/> has no <binding/> child element, but the corresponding <reference/> element in the componentType does have a binding child element, the <binding/> from the componentType is used for the reference
Artifacts	ASM_5017_TestCase.java Test_ASM_5017.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite10.composite ASM_0002_Client.java Service1.wsdl
Expected output	Positive test: “ASM_5017 request service1 operation1 invoked service2 operation1 invoked”

222

223 **ASM_5018_TestCase**

224

Testcase ID	ASM_5018_TestCase
Test Assertion	ASM-TA-5018

	ASM-TA-5024
Description	Tests that where a <reference/> of a <component/> has a <binding/> child element and the corresponding <reference/> element in the component-Type has a binding child element, the <binding/> from the <reference/> is used for the reference
Artifacts	ASM_5018_TestCase.java Test_ASM_5018.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite10.composite Service1.wsdl
Expected output	Positive test: "ASM_5018 request service1 operation1 invoked service3 operation1 invoked"

225

226 **ASM_5019_TestCase**

227

Testcase ID	ASM_5019_TestCase
Test Assertion	ASM-TA-5021
Description	Tests that where a <reference/> of a <component/> has @autowire="true" and also has @target identifying a single target service that the reference is wired only to the single service identified by the @target attribute
Artifacts	ASM_5019_TestCase.java Test_ASM_5019.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite7.composite Service1.wsdl
Expected output	Positive test: "ASM_5019 request service1 operation1 invoked service3 operation1 invoked"

228

229 **ASM_5020_TestCase**

230

Testcase ID	ASM_5020_TestCase
Test Assertion	ASM-TA-5022
Description	Tests that where a <reference/> of a <component/> has @autowire=true and where there is also a single <wire/> element which as that <reference/> as its source that the reference is wired only to the single service identified by the <wire/> element
Artifacts	ASM_5020_TestCase.java Test_ASM_5020.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite7.composite Service1.wsdl
Expected output	Positive test: "ASM_5020 request service1 operation1 invoked service3 operation1 invoked"

231

232

233

234 **ASM_5021_TestCase**

235

Testcase ID	ASM_5021_TestCase
Test Assertion	ASM-TA-5023
Description	Tests that where a <reference/> of a <component/> has @autowire=true and where the <reference/> has a <binding/> child element which declares a single target service, the reference is wired only to the single service identified by the <wire/> element
Artifacts	ASM_5021_TestCase.java Test_ASM_5021.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite7.composite Service1.wsdl
Expected output	Positive test: "ASM_5021 request service1 operation1 invoked service3 operation1 invoked"

236

237

238 **ASM_5022_TestCase**

239

Testcase ID	ASM_5022_TestCase
Test Assertion	ASM-TA-5028
Description	Tests that where a <component/> <reference/> with multiplicity=0..1 is un-wired (by any means) that the component executes correctly
Artifacts	ASM_5022_TestCase.java Test_ASM_5022.composite TestInvocation.wsdl TestClient_0002.composite TestComposite8.composite Service1.wsdl
Expected output	Positive test: "ASM_5022 request service1 operation1 invoked"

240

241

242 **ASM_5023_TestCase**

243

Testcase ID	ASM_5023_TestCase
Test Assertion	ASM-TA-5029
Description	Tests that where a <component/> <reference/> with multiplicity=1..1 is wired to a component service in the same composite and is also promoted by a <composite/> <reference/> which is wired to a target service by a component using the <composite/> as its implementation, that this is an error
Artifacts	ASM_5023_TestCase.java Test_ASM_5023.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite11.composite Service1.wsdl
Expected output	Negative test:

	"exception"
--	-------------

244

245

246 **ASM_5024_TestCase**

247

Testcase ID	ASM_0024_TestCase
Test Assertion	ASM-TA-5030
Description	Tests that where a <component/> <reference/> has @target set to some service, that the reference can have no child <binding/> elements
Artifacts	ASM_5024_TestCase.java Test_ASM_5024.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Negative test: "exception"

248

249

250 **ASM_5025_TestCase**

251

Testcase ID	ASM_5025_TestCase
Test Assertion	ASM-TA-5032 ASM-TA-5046
Description	Tests that where a <component/> <property/> has its value set by means of a child <value/> element, that the type of the <value/> element matches the type declared for the <property/> element
Artifacts	ASM_5025_TestCase.java Test_ASM_5025.composite TestInvocation.wsdl TestClient_0002.composite TestComposite12.composite ASM_0002_Client.java

	Service1.wsdl
Expected output	Positive test: “ASM_5025 request service1 operation1 invokedcomplex1complex2”

252

253

254 **ASM_5026_TestCase**

255

Testcase ID	ASM_5026_TestCase
Test Assertion	ASM-TA-5033
Description	Tests that where a <component/> <property/> has its value set by means of a child element that is NOT a <value/> element, that a) the type of the <property/> element is declared as an XML Schema global element by its @element attribute and that the child element is an instance of that global element
Artifacts	ASM_5026_TestCase.java Test_ASM_5026.composite TestInvocation.wsdl TestClient_0002.composite TestComposite13.composite Service1.wsdl
Expected output	Positive test: “ASM_5026 request service1 operation1 invokedcomplex1complex2”

256

257 **ASM_5027_TestCase**

258

Testcase ID	ASM_5027_TestCase
Test Assertion	ASM-TA-5034
Description	Tests that where a <component/> has 2 or more <property/> child elements that each <property/> element has a unique @name attribute value
Artifacts	ASM_5027_TestCase.java Test_ASM_5027.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl

Expected output	Negative test: "exception"
-----------------	-------------------------------

259

260

261 **ASM_5029_TestCase**

262

Testcase ID	ASM_5029_TestCase
Test Assertion	ASM-TA-5036
Description	Tests that where a <component/> <property/> has @many=false that there is only one <value/> child element of the <property/>
Artifacts	ASM_5029_TestCase.java Test_ASM_5029.composite TestInvocation.wsdl TestClient_0002.composite TestComposite12.composite Service1.wsdl Test_Types.xsd
Expected output	Negative test: "exception"

263

264

265 **ASM_5030_TestCase**

266

Testcase ID	ASM_5030_TestCase
Test Assertion	ASM-TA-5037
Description	Tests that a <component/> <property/> with a @value attribute set does not have any <value/> child elements
Artifacts	ASM_5030_TestCase.java Test_ASM_5030.composite TestInvocation.wsdl TestClient_0002.composite TestComposite14.composite Service1.wsdl

Expected output	Negative test: "exception"
-----------------	-------------------------------

267

268 **ASM_5031_TestCase**

269

Testcase ID	ASM_5031_TestCase
Test Assertion	ASM-TA-5038
Description	Tests that where a <component/> <reference/> has its @target attribute set to a valid service and the <composite/> also contains a <wire/> element with @source set to the <component/> <reference/> and @target set to a second valid service and has @replace=true, the <reference/> is wired to the second service only
Artifacts	ASM_5031_TestCase.java Test_ASM_5031.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Positive test: "ASM_0031 request service1 operation1 invoked service3 operation1 invoked"

270

271 **ASM_5032_TestCase**

272

Testcase ID	ASM_5032_TestCase
Test Assertion	ASM-TA-5007
Description	Tests that where a <component/> <service/> has no <binding/> subelements and the corresponding <service/> element of the <componentType/> of the <component/> <implementation/> has one or more <binding/> subelements, the <component/> <service/> is made available with all the bindings declared on the <service/> element of the <componentType/>
Artifacts	ASM_5032_TestCase.java Test_ASM_5032.composite TestInvocation.wsdl TestClient_0002.composite

	TestComposite6.composite TestComposite15.composite Service1.wsdl sca-variables.dtd
Expected output	Positive test: "ASM_5032 request service1 operation1 invokedservice2 operation1 invokedservice2 operation1 invoked"

273

274

275

276 **ASM_5033_TestCase**

277

Testcase ID	ASM_5033_TestCase
Test Assertion	ASM-TA-5008
Description	Tests that where a <component/> <service/> has no <binding/> subelements and the corresponding <service/> element of the <componentType/> of the <component/> <implementation/> has no <binding/> subelements, the <component/> <service/> is made available with binding.sca
Artifacts	ASM_5033_TestCase.java Test_ASM_5033.composite TestInvocation.wsdl TestClient_0002.composite TestComposite6.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_5033 request service1 operation1 invokedservice2 operation1 invokedservice2 operation1 invoked"

278

279

280

281 **ASM_5034_TestCase**

282

Testcase ID	ASM_5034_TestCase
Test Assertion	ASM-TA-5009

Description	Tests that where a <component/> <service/> has 1 or more <binding/> subelements the <component/> <service/> is made available with all the bindings declared on the <service/> element
Artifacts	ASM_5034_TestCase.java Test_ASM_5034.composite TestInvocation.wsdl TestClient_0002.composite TestComposite6.composite TestComposite1.composite Service1.wsdl sca-variables.dtd
Expected output	Positive test: "ASM_5034 request service1 operation1 invokedservice2 operation1 invokedservice2 operation1 invoked"

283

284 **ASM_5035_TestCase**

285

Testcase ID	ASM_5035_TestCase
Test Assertion	ASM-TA-5039 ASM-TA-5040
Description	Tests that where a <component/> <property/> element has a @type attribute declared it does not also have a @element attribute declared
Artifacts	ASM_5035_TestCase.java Test_ASM_5035.composite TestInvocation.wsdl TestClient_0002.composite TestComposite12.composite Service1.wsdl
Expected output	Negative test: "exception"

286

287 **ASM_5036_TestCase**

288

Testcase ID	ASM_5036_TestCase
-------------	-------------------

Test Assertion	ASM-TA-5041 ASM-TA-5046
Description	Tests that where a <component/> <property/> has a type declared, the declared type is the same type as the declared type for the corresponding <property/> element in the componentType of the <implementation/> subelement of the <component/>
Artifacts	ASM_5036_TestCase.java Test_ASM_5036.composite TestInvocation.wsdl TestClient_0002.composite TestComposite12.composite Service1.wsdl
Expected output	Negative test: "exception"

289

290 **ASM_5037_TestCase**

291

Testcase ID	ASM_5037_TestCase
Test Assertion	ASM-TA-5042
Description	Tests that a <component/> <property/> has an @name attribute value that matches the @name attribute value of one of the <property/> elements in the componentType of the <implementation/> subelement of the <component/>
Artifacts	ASM_5037_TestCase.java Test_ASM_5037.composite TestInvocation.wsdl TestClient_0002.composite TestComposite12.composite Service1.wsdl
Expected output	Negative test: "exception"

292

293 **ASM_5038_TestCase**

294

Testcase ID	ASM_5038_TestCase
Test Assertion	ASM-TA-5031
Description	Tests that where a <component/> <property/> element has an XML schema simple type and has a @value attribute declared, that the @value attribute value contains a single value with a type matching the type of the <property/> element
Artifacts	ASM_5038_TestCase.java Test_ASM_5038.composite TestInvocation.wsdl TestClient_0002.composite TestComposite73.composite Service1.wsdl
Expected output	Negative test: "exception"

295

296 **ASM_5039_TestCase**

297

Testcase ID	ASM_5039_TestCase
Test Assertion	ASM-TA-5045
Description	Tests that where a property element of a component declares a type and has a @source attribute that gets the value of the property from a composite <property/> element, that the type of the component property is compatible with the type of the composite property
Artifacts	ASM_5039_TestCase.java Test_ASM_5039.composite TestInvocation.wsdl TestClient_0002.composite TestComposite12.composite TestComposite71.composite Service1.wsdl
Expected output	Negative test: "exception"

298

299 **ASM_5040_TestCase**

300

Testcase ID	ASM_5040_TestCase
Test Assertion	ASM-TA-5047
Description	Tests that where a component <reference/> of multiplicity 1..1 has @nonOverridable="true", that the reference is not promoted by a composite reference
Artifacts	ASM_5040_TestCase.java Test_ASM_5040.composite TestInvocation.wsdl TestClient_0002.composite TestComposite74.composite Service1.wsdl
Expected output	Negative test: "exception"

301

302 **ASM_5041_TestCase**

303

Testcase ID	ASM_5041_TestCase
Test Assertion	ASM-TA-5048
Description	Tests that where a component <reference/> has no @autowire attribute, no @target attribute, no <binding/> subelement and is not promoted by a composite reference, and where the component declares @autowire="true" and where the composite containing the component contains one target service that is compatible with the reference, that the reference is wired to that target service and can invoke the service
Artifacts	ASM_5041_TestCase.java Test_ASM_5041.composite TestInvocation.wsdl TestClient_0002.composite TestComposite8.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_5041 request service1 operation1 invoked second operation1 invoked"

304

305 **ASM_5042_TestCase**

306

Testcase ID	ASM_5042_TestCase
Test Assertion	ASM-TA-5049
Description	Tests that where a component <reference/> has no @autowire attribute, no @target attribute, no <binding/> subelement and is not promoted by a composite reference, and where the component does not declare an @autowire attribute but the composite containing the component declares @autowire="true" and where the composite containing the component contains one target service that is compatible with the reference, that the reference is wired to that target service and can invoke the service
Artifacts	ASM_5042_TestCase.java Test_ASM_5042.composite TestInvocation.wsdl TestClient_0002.composite TestComposite8.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_5042 request service1 operation1 invoked second operation1 invoked"

307

308 **ASM_5043_TestCase**

309

Testcase ID	ASM_5043_TestCase
Test Assertion	ASM-TA-5051 ASM-TA-5052
Description	Tests that where a component <property/> element which is single valued and with a simple XML type has a @file attribute which references a file that has one <sca:values/> element containing one <sca:value/> element containing a string value, that the value from the file does set the property value used by the component
Artifacts	ASM_5043_TestCase.java Test_ASM_5043.composite TestInvocation.wsdl TestClient_0002.composite TestComposite71.composite simpleProperty.xml (in contribution "General")
Expected output	Positive test:

	"ASM_5043 request service1 operation1 invoked 2.71828 2.71828"
--	--

310

311 **ASM_5044_TestCase**

312

Testcase ID	ASM_5044_TestCase
Test Assertion	ASM-TA-5051 ASM-TA-5053
Description	Tests that where a component <property/> element which is multi valued and with a complex XML type has a @file attribute which references a file tat has one <sca:values/> element containing two global elements of the type of the property, that the values from the global elements do set the property values used by the component
Artifacts	ASM_5044_TestCase.java Test_ASM_5044.composite TestInvocation.wsdl TestClient_0002.composite TestComposite76.composite TestComposite71.composite
Expected output	Positive test: "ASM_5044 request service1 operation1 invoked Sample first data Altern- ate second data"

313

314 **2.3 Section 5**

315 **ASM_6001_TestCase**

316

Testcase ID	ASM_6001_TestCase
Test Assertion	ASM-TA-6004
Description	Tests that where an SCA contribution contains two <composite/> elements with the same name and same targetNamespace that an SCA application using that composite does not run and that the SCA runtime reports an error
Artifacts	ASM_6001_TestCase.java Test_ASM_6001.composite TestInvocation.wsdl TestClient_0002.composite

	TestDuplicate1.composite TestDuplicate2.composite ASM_0002_Client.java Service1.wsdl
Expected output	Negative test: "exception"

317

318

319 **ASM_6002_TestCase**

320

Testcase ID	ASM_6002_TestCase
Test Assertion	ASM-TA-6006
Description	Tests that where a <composite/> has multiple <service/> subelements that the @name attributes are unique across those subelements
Artifacts	ASM_6002_TestCase.java Test_ASM_6002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite16.composite
Expected output	Negative test: "exception"

321

322

323 **ASM_6003_TestCase**

324

Testcase ID	ASM_6003_TestCase
Test Assertion	ASM-TA-6007
Description	Tests that where a <composite/> has a <service/> subelement that the @promote attribute identifies a <service/> of a <component/> in the <composite/>
Artifacts	ASM_6003_TestCase.java Test_ASM_6003.composite TestInvocation.wsdl TestClient_0002.composite

	TestComposite17.composite Service1.wsdl
Expected output	Negative test: "exception"

325

326 **ASM_6004_TestCase**

327

Testcase ID	ASM_6004_TestCase
Test Assertion	ASM-TA-6008
Description	Tests that the <interface/> declared on a <service/> subelement of a <composite/> is a compatible subset of the <interface/> declared on the <component/> <service/> reference by the @promote attribute
Artifacts	ASM_6004_TestCase.java Test_ASM_6004.composite TestInvocation.wsdl TestClient_0002.composite TestComposite18.composite
Expected output	Positive test: "ASM_6004 request service1 operation1 invoked"

328

329 **ASM_6005_TestCase**

330

Testcase ID	ASM_6005_TestCase
Test Assertion	ASM-TA-6009
Description	Tests that the @name attribute of a <composite/> <reference/> element is unique amongst the @name attributes of all the <reference/> elements of that <composite/>
Artifacts	ASM_6005_TestCase.java Test_ASM_6005.composite TestInvocation.wsdl TestClient_0002.composite TestComposite19.composite
Expected output	Negative test: "exception"

331

332 **ASM_6006_TestCase**

333

Testcase ID	ASM_6006_TestCase
Test Assertion	ASM-TA-6010
Description	Tests that the @promote attribute of a <composite/> <reference/> contains one or more URIs that each point to a <reference/> of a <component/> in the <composite/>
Artifacts	ASM_6006_TestCase.java Test_ASM_6006.composite TestInvocation.wsdl TestClient_0002.composite TestComposite20.composite TestComposite1.composite
Expected output	Negative test: "exception"

334

335

336 **ASM_6007_TestCase**

337

Testcase ID	ASM_6007_TestCase
Test Assertion	ASM-TA-6011
Description	Tests that a <composite/> <reference/> can declare an <interface/> that is a compatible superset of the <interface/> declared by each <component/> <reference/> promoted by the composite reference
Artifacts	ASM_6007_TestCase.java Test_ASM_6007.composite TestInvocation.wsdl TestClient_0002.composite TestComposite21.composite TestComposite9.composite
Expected output	Positive test: "ASM_6007 request service1 operation1 invoked service2 operation1 invoked"

338

339 **ASM_6008_TestCase**

340

Testcase ID	ASM_6008_TestCase
Test Assertion	ASM-TA-6012
Description	Tests that where a <composite/> <reference/> has no <interface/> subelement, and that <reference/> promotes 2 or more <component/> <reference/>s, that the <interface/> declared on each of the <component/> <reference/>s are the same
Artifacts	ASM_6008_TestCase.java Test_ASM_6008.composite TestInvocation.wsdl TestClient_0002.composite TestComposite22.composite TestComposite1.composite
Expected output	Negative test: "exception"

341

342 **ASM_6009_TestCase**

343

Testcase ID	ASM_6009_TestCase
Test Assertion	ASM-TA-6015
Description	Tests that a <component/> <reference/> with @multiplicity=0..1 can be promoted by a <composite/> <reference/> with @multiplicity=1..1
Artifacts	ASM_6009_TestCase.java Test_ASM_6009.composite TestInvocation.wsdl TestClient_0002.composite TestComposite23.composite TestComposite1.composite
Expected output	Positive test: "ASM_6009 request service1 operation1 invokedservice2 operation1 invoked"

344

345 **ASM_6010_TestCase**

346

Testcase ID	ASM_6010_TestCase
Test Assertion	ASM-TA-6017
Description	Tests that a <component/> <reference/> with @multiplicity=0..n can be promoted by a <composite/> <reference/> with @multiplicity=0..1
Artifacts	ASM_6010_TestCase.java Test_ASM_6010.composite TestInvocation.wsdl TestClient_0002.composite TestComposite24.composite TestComposite1.composite
Expected output	Positive test: "ASM_6010 request service1 operation1 invoked service2 operation1 invoked"

347

348

349 **ASM_6011_TestCase**

350

Testcase ID	ASM_6011_TestCase
Test Assertion	ASM-TA-6018
Description	Tests that a <component/> <reference/> with @multiplicity=1..n can be promoted by a <composite/> <reference/> with @multiplicity=1..1
Artifacts	ASM_6011_TestCase.java Test_ASM_6011.composite TestInvocation.wsdl TestClient_0002.composite TestComposite25.composite TestComposite1.composite
Expected output	Positive test: "ASM_6011 request service1 operation1 invoked service2 operation1 invoked"

351

352

353 **ASM_6012_TestCase**

354

Testcase ID	ASM_6012_TestCase
-------------	-------------------

Test Assertion	ASM-TA-6019
Description	Tests that the @name attribute of a <property/> element of a <composite/> is unique amongst the @name attribute values of all the <property/> elements of that <composite/>
Artifacts	ASM_6012_TestCase.java Test_ASM_6012.composite TestInvocation.wsdl TestClient_0002.composite TestComposite26.composite TestComposite1.composite
Expected output	Negative test: "exception"

355

356

357 **ASM_6013_TestCase**

358

Testcase ID	ASM_6013_TestCase
Test Assertion	ASM-TA-6020
Description	Tests that a <component/> <reference/> with @autowire=true is wired to a compatible <component/> <service/> in the same <composite/>
Artifacts	ASM_6013_TestCase.java Test_ASM_6013.composite TestInvocation.wsdl TestClient_0002.composite TestComposite27.composite
Expected output	Positive test: "ASM_6013 request service1 operation1 invoked third operation1 invoked"

359

360

361 **ASM_6014_TestCase**

362

Testcase ID	ASM_6014_TestCase
Test Assertion	ASM-TA-6021

Description	Tests that a <component/> <reference/> with @autowire=true is wired to a <component/> <service/> with an interface which is a compatible superset of the interface on the <reference/> in the same <composite/>
Artifacts	ASM_6014_TestCase.java Test_ASM_6014.composite TestInvocation.wsdl TestClient_0002.composite TestComposite28.composite
Expected output	Positive test: "ASM_6014 request service1 operation1 invoked third operation1 invoked"

363

364

365

366 **ASM_6016_TestCase**

367

Testcase ID	ASM_6016_TestCase
Test Assertion	ASM-TA-6023
Description	Tests that a <component/> <reference/> with @autowire=true and with some intents attached using its @requires attribute is not wired to a compatible <component/> <service/> in the same <composite/>, where that <service/> has different intents attached using its @requires attribute
Artifacts	ASM_6016_TestCase.java Test_ASM_6016.composite TestInvocation.wsdl TestClient_0002.composite TestComposite30.composite
Expected output	Negative test: "exception"

368

369

370 **ASM_6017_TestCase**

371

Testcase ID	ASM_6017_TestCase
Test Assertion	ASM-TA-6024
Description	Tests that a <component/> <reference/> with @autowire=true and @multi-

	plicity="0..1" is wired to one compatible <component/> <service/> in the same <composite/>
Artifacts	ASM_6017_TestCase.java Test_ASM_6017.composite TestInvocation.wsdl TestClient_0002.composite TestComposite8.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test with 2 alternative outputs: "ASM_6017 request service1 operation1 invoked second operation1 invoked" "ASM_6017 request service1 operation1 invoked third operation1 invoked"

372

373

374 **ASM_6018_TestCase**

375

Testcase ID	ASM_6018_TestCase
Test Assertion	ASM-TA-6025
Description	Tests that a <component/> <reference/> with @autowire=true and @multiplicity="0..n" is wired to all compatible <component/> <service/>s in the same <composite/>
Artifacts	ASM_6018_TestCase.java Test_ASM_6018.composite TestInvocation.wsdl TestClient_0002.composite TestComposite7.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_6018 request service1 operation1 invoked second operation1 invoked third operation1 invoked fourth operation1 invoked"

376

377 **ASM_6019_TestCase**

378

Testcase ID	ASM_6019_TestCase
Test Assertion	ASM-TA-6026
Description	Tests that a <component/> <reference/> with @autowire=true and @multiplicity="0..n" runs successfully when there are no compatible <component/> <service/>s in the same <composite/>
Artifacts	ASM_6019_TestCase.java Test_ASM_6019.composite TestInvocation.wsdl TestClient_0002.composite TestComposite7.composite Service1.wsdl
Expected output	Positive test: "ASM_6019 request service1 operation1 invoked"

379

380 **ASM_6020_TestCase**

381

Testcase ID	ASM_6020_TestCase
Test Assertion	ASM-TA-6027
Description	Tests that a <component/> <reference/> with @autowire=true and @multiplicity="1..n" fails and causes an error to be raised when there are no compatible <component/> <service/>s in the same <composite/>
Artifacts	ASM_6020_TestCase.java Test_ASM_6020.composite TestInvocation.wsdl TestClient_0002.composite TestComposite6.composite Service1.wsdl
Expected output	Negative test: "exception"

382

383 **ASM_6021_TestCase**

384

Testcase ID	ASM_6021_TestCase
Test Assertion	ASM-TA-6028
Description	Tests that a <composite/> <service/> @promote attribute contains the URI

	of a <component/> <service/> in the <composite/>
Artifacts	ASM_6021_TestCase.java Test_ASM_6021.composite TestInvocation.wsdl TestClient_0002.composite TestComposite31.composite
Expected output	Negative test: "exception"

385

386

387 **ASM_6022_TestCase**

388

Testcase ID	ASM_6022_TestCase
Test Assertion	ASM-TA-6029
Description	Tests that a <component/> <reference/> with multiplicity ="1..n" is wired to a <service/> in the same <composite/> or is promoted by a <composite> <reference/>, when the containing <composite/> is used as an <implementation/>
Artifacts	ASM_6022_TestCase.java Test_ASM_6022.composite TestInvocation.wsdl TestClient_0002.composite TestComposite32.composite
Expected output	Negative test: "exception"

389

390 **ASM_6023_TestCase**

391

Testcase ID	ASM_6023_TestCase
Test Assertion	ASM-TA-6030
Description	Tests that a <component/> <property/> which is marked with @mustSupply="true" in the componentType of the <component/> <implementation/> is given a value
Artifacts	ASM_6023_TestCase.java Test_ASM_6023.composite

	TestInvocation.wsdl TestClient_0002.composite TestComposite33.composite
Expected output	Negative test: "exception"

392

393 **ASM_6024_TestCase**

394

Testcase ID	ASM_6024_TestCase
Test Assertion	ASM-TA-6031
Description	Tests that the @name attribute of an <implementation.composite/> element is the QName of a <composite/> in the SCA Domain
Artifacts	ASM_6024_TestCase.java Test_ASM_6024.composite TestInvocation.wsdl TestClient_0002.composite
Expected output	Negative test: "exception"

395

396 **ASM_6025_TestCase**

397

Testcase ID	ASM_6025_TestCase
Test Assertion	ASM-TA-6032
Description	Tests that when an <include/> element is processed and results in an invalid <composite/> configuration, then the SCA runtime raises an error and does not run the resulting composite
Artifacts	ASM_6025_TestCase.java Test_ASM_6025.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite34.composite
Expected output	Negative test: "exception"

398

399 **ASM_6026_TestCase**

400

Testcase ID	ASM_6026_TestCase
Test Assertion	ASM-TA-6035 ASM-TA-6036
Description	Tests that when a @promote attribute of a <composite/> <reference/> has a URI for a <component/> <reference/> that is present in a <composite> which is referenced through an <include/> element in the first <composite/> and also when a @promote attribute of a <composite/> <service/> has a URI for a <component/> <service/> present in the same included <composite/> then the promotions succeed and the <component/> <service/> can be invoked and the <component/> is able to invoke the reference
Artifacts	ASM_6026_TestCase.java Test_ASM_6026.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite TestComposite35.composite TestComposite36.composite Service1.wsdl
Expected output	Positive test: "ASM_6026 request service1 operation1 invoked service2 operation1 invoked"

401

402 **ASM_6027_TestCase**

403

Testcase ID	ASM_6027_TestCase
Test Assertion	ASM-TA-6037
Description	Tests that when a first <composite/> contains a <wire/> element which has a @source attribute referencing a <component/> <reference/> in a second <composite/> and a @target attribute referencing a <component/> <service/> element also in that second <composite>, where the second composite is referenced by an <include/> element in the first <composite/>, then the wire successfully connects the <reference/> to the <service/> and the client component can invoke operations on the service.
Artifacts	ASM_6027_TestCase.java

	Test_ASM_6027.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite TestComposite37.composite
Expected output	Positive test: "ASM_6027 request service1 operation1 invoked service2 operation1 invoked"

404

405 **ASM_6028_TestCase**

406

Testcase ID	ASM_6028_TestCase
Test Assertion	ASM-TA-6038 ASM-TA-6039
Description	Tests that when a <composite/> <property/> element has a @type attribute declared it does not also have a @element attribute declared
Artifacts	ASM_6028_TestCase.java Test_ASM_6028.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite
Expected output	Negative test: "exception"

407

408 **ASM_6029_TestCase**

409

Testcase ID	ASM_6029_TestCase
Test Assertion	ASM-TA-6040
Description	Tests that when a <composite/> has an <include/> which references a second <composite/> which has @local="true", then the first composite also has @local="true"
Artifacts	ASM_6029_TestCase.java Test_ASM_6029.composite

	TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite4.composite TestComposite38.composite
Expected output	Negative test: "exception"

410

411 **ASM_6030_TestCase**

412

Testcase ID	ASM_6030_TestCase
Test Assertion	ASM-TA-6041
Description	Tests that when a <composite/> has an <include/> element, the @name of the <include/> references the QName of a composite in the Domain
Artifacts	ASM_6030_TestCase.java Test_ASM_6030.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite
Expected output	Negative test: "exception"

413

414 **ASM_6031_TestCase**

415

Testcase ID	ASM_6031_TestCase
Test Assertion	ASM-TA-6013
Description	Tests that when a <composite/> <reference/> has @requires with intents declared and the <component/> <reference/> promoted by the composite reference has @requires with intents declared, the two sets of intents do not contain a mutually exclusive pair of intents
Artifacts	ASM_6031_TestCase.java Test_ASM_6031.composite TestInvocation.wsdl TestClient_0002.composite

	TestComposite1.composite TestComposite39.composite
Expected output	Negative test: "exception"

416

417 **ASM_6032_TestCase**

418

Testcase ID	ASM_6032_TestCase
Test Assertion	ASM-TA-6014
Description	Tests that when a <composite/> <reference/> has @requires with 2 or more intents in the declared set, that the set does not contain 2 mutually exclusive intents
Artifacts	ASM_6032_TestCase.java Test_ASM_6032.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite40.composite
Expected output	Negative test: "exception"

419

420 **ASM_6033_TestCase**

421

Testcase ID	ASM_6033_TestCase
Test Assertion	ASM-TA-6016
Description	Tests that when a <composite/> <reference/> element promotes a <component/> <reference/> element with @multiplicity="1..1", the @multiplicity of the <composite/> <reference/> is also "1..1"
Artifacts	ASM_6033_TestCase.java Test_ASM_6033.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestComposite41.composite
Expected output	Negative test:

	"exception"
--	-------------

422

423 **ASM_6034_TestCase**

424

Testcase ID	ASM_6034_TestCase
Test Assertion	ASM-TA-6042
Description	Tests that when a <wire/> element connects a component <reference/> to a component <service/>, that the interface of the service is a compatible superset of the interface of the reference
Artifacts	ASM_6034_TestCase.java Test_ASM_6034.composite TestInvocation.wsdl TestClient_0002.composite TestComposite9.composite TestComposite4.composite
Expected output	Positive test: "ASM_6034 request service1 operation1 invoked service2 operation1 invoked"

425

426 **ASM_6035_TestCase**

427

Testcase ID	ASM_6035_TestCase
Test Assertion	ASM-TA-6044
Description	Tests that when a component<reference/> element has a @target attribute containing a single target in the form "component-name/service-name" and the component with the name "component-name" has multiple services, each of which are compatible with the reference, and one of which has the name "service-name", that the reference is wired to the service with the name "service-name" and is able to invoke it.
Artifacts	ASM_6035_TestCase.java Test_ASM_6035.composite TestInvocation.wsdl TestClient_0002.composite TestComposite75.composite TestComposite1.composite

Expected output	Positive test: "ASM_6035 request serviceA operation1 invoked"
-----------------	--

428

429 **ASM_6036_TestCase**

430

Testcase ID	ASM_6036_TestCase
Test Assertion	ASM-TA-6045
Description	Tests that when a component<reference/> element has a @target attribute containing a single target in the form "component-name/service-name" and the component with the name "component-name" has multiple services, each of which are compatible with the reference, but none of them has the name "service-name", that the reference is not wired to any service and the SCA runtime raises an error
Artifacts	ASM_6036_TestCase.java Test_ASM_6036.composite TestInvocation.wsdl TestClient_0002.composite TestComposite75.composite TestComposite1.composite
Expected output	Negative test: "exception"

431

432 **ASM_6037_TestCase**

433

Testcase ID	ASM_6037_TestCase
Test Assertion	ASM-TA-6046
Description	Tests that when a component<reference/> element has a @target attribute containing a single target in the form "component-name" and the component with the name "component-name" has a single service with the name "service-name", which is compatible with the reference, that the reference is wired to the service and is able to invoke it
Artifacts	ASM_6037_TestCase.java Test_ASM_6037.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite
Expected output	Positive test:

	"ASM_6037 request service1 operation1 invoked"
--	--

434

435 **ASM_6038_TestCase**

436

Testcase ID	ASM_6038_TestCase
Test Assertion	ASM-TA-6047
Description	Tests that when a component<reference/> element has a @target attribute containing a single target in the form "component-name/service-name/binding-name" and the component with the name "component-name" has a service with the name "service-name" with a binding with the name "binding-name", which is compatible with the reference, that the reference is wired to the service and is able to invoke it
Artifacts	ASM_6038_TestCase.java Test_ASM_6038.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite
Expected output	Positive test: "ASM_6038 request service1 operation1 invoked"

437

438 **ASM_6039_TestCase**

439

Testcase ID	ASM_6039_TestCase
Test Assertion	ASM-TA-6048
Description	Tests that when a component<reference/> element has a @target attribute containing a single target in the form "component-name/service-name/binding-name" and the component with the name "component-name" has a service with the name "service-name" which is compatible with the reference, but which does not have a binding with the name "binding-name", that the reference is not wired to the service and the SCA runtime raises an exception
Artifacts	ASM_6039_TestCase.java Test_ASM_6039.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite
Expected output	Negative test:

	"exception"
--	-------------

440

441 **ASM_6040_TestCase**

442

Testcase ID	ASM_6040_TestCase
Test Assertion	ASM-TA-6049
Description	Tests that when a component<reference/> element has a @target attribute containing a single target in the form "component-name/service-name" and the reference has a policy requirement attached, and the component with the name "component-name" has a service with the name "service-name" with multiple bindings one of which has the same policy requirement as the reference, that the reference is wired to the service using that binding and is able to invoke it
Artifacts	ASM_6040_TestCase.java Test_ASM_6040.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite
Expected output	Positive test: "ASM_6040 request service1 operation1 invoked"

443

444 **2.4**

445 **2.5 Section 6**

446 **ASM_8002_TestCase**

447

Testcase ID	ASM_8002_TestCase
Test Assertion	ASM-TA-8002
Description	Tests that when an <interface/> element references an interface document which is marked remotable, that the value of an input parameter of an operation in the interface in the client component implementation is the same after the operation completes as immediately before invoking the operation
Artifacts	ASM_8002_TestCase.java Test_ASM_8002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite52.composite

	TestComposite53.composite Service1.wsdl Service4.wsdl
Expected output	Positive test: "ASM_8002 request service1 operation1 invoked"

448

449 **ASM_8003_TestCase**

450

Testcase ID	ASM_8003_TestCase
Test Assertion	ASM-TA-8004 ASM-TA-8007
Description	Tests that when an <interface/> element of a <component/> <reference/> has an interface that is marked bidirectional, that the invoked <service/> <implementation/> can invoke an operation of the callback interface on the <implementation/> which has the <reference/>
Artifacts	ASM_8003_TestCase.java Test_ASM_8003.composite TestInvocation.wsdl TestClient_0002.composite TestComposite54.composite TestComposite55.composite Service1.wsdl Service5.wsdl Service5Callback.wsdl
Expected output	Positive test: "ASM_8003 request service1 operation1 invoked service2 operation1 invoked service1 callback1 invoked"

451

452 **ASM_8006_TestCase**

453

Testcase ID	ASM_8006_TestCase
Test Assertion	ASM-TA-8008
Description	Tests that when an <interface/> element of a <component/> <reference/> explicitly declares both a forward interface and a callback interface and the forward interface document also declares a callback interface, that the two callback interfaces are compatible

Artifacts	ASM_8006_TestCase.java Test_ASM_8006.composite TestInvocation.wsdl TestClient_0002.composite TestComposite60.composite TestComposite61.composite Service1.wsdl Service9.wsdl Service8Callback.wsdl
Expected output	Negative test: "exception"

454

455 **ASM_8007_TestCase**

456

Testcase ID	ASM_8007_TestCase
Test Assertion	ASM-TA-8009
Description	Tests that when an <interface/> element of a <component/> <service/> explicitly declares both a forward interface and a callback interface that the callback interface is compatible with the callback interface of the <componentType/> <service/> element of the <implementation/> used by the <component/>
Artifacts	ASM_8007_TestCase.java Test_ASM_8007.composite TestInvocation.wsdl TestClient_0002.composite TestComposite54.composite TestComposite55.composite Service1.wsdl Service5.wsdl Service5Callback.wsdl Service8Callback.wsdl
Expected output	Negative test: "exception"

457

458 **ASM_8008_TestCase**

459

Testcase ID	ASM_8008_TestCase
Test Assertion	ASM-TA-8010
Description	Tests that when an <interface/> element of a <component/> <reference/> explicitly declares both a forward interface and a callback interface that the callback interface is compatible with the callback interface of the <componentType/> <reference/> element of the <implementation/> used by the <component/>
Artifacts	ASM_8008_TestCase.java Test_ASM_8008.composite TestInvocation.wsdl TestClient_0002.composite TestComposite54.composite TestComposite55.composite Service1.wsdl Service5.wsdl Service5Callback.wsdl Service8Callback.wsdl
Expected output	Negative test: "exception"

460

461 **ASM_8009_TestCase**

462

Testcase ID	ASM_8009_TestCase
Test Assertion	ASM-TA-8011
Description	Tests that when an <interface/> element of an <implementation/> <componentType/> <reference/> or <service/> does not declare a callback interface that the <component/> <reference/> or <service/> element of the <component/> using the <implementation/> also does not declare a callback interface Tests that where the <interface/> element of a reference in the componentType of an implementation does not declare a callback interface, then the corresponding reference element of the component using the implementation also does not declare a callback interface in its <interface/> subelement
Artifacts	ASM_8009_TestCase.java Test_ASM_8009.composite TestInvocation.wsdl

	TestClient_0002.composite TestComposite54.composite TestComposite55.composite Service1.wsdl Service5Callback.java
Expected output	Negative test: "exception"

463

464 **ASM_8010_TestCase**

465

Testcase ID	ASM_8010_TestCase
Test Assertion	ASM-TA-8012
Description	Tests that when an <interface/> element of a <component/> <service/> declares a callback interface that the <composite/> <service/> element which promotes the component service declares a compatible callback interface
Artifacts	ASM_8010_TestCase.java Test_ASM_8010.composite TestInvocation.wsdlTestClient_0002.composite TestComposite54.composite TestComposite63.composite Service1.wsdl Service5.wsdl Service5Callback.wsdl Service8Callback.wsdl
Expected output	Negative test: "exception"

466

467 **ASM_8011_TestCase**

468

Testcase ID	ASM_8011_TestCase
Test Assertion	ASM-TA-8013
Description	Tests that when an <interface/> element of a <component/> <reference/> declares a callback interface that the <composite/> <reference/> element which promotes the component service declares a compatible callback in-

	terface
Artifacts	ASM_8011_TestCase.java Test_ASM_8011.composite TestInvocation.wsdl TestClient_0002.composite TestComposite62.composite TestComposite55.composite Service5.wsdl Service5Callback.wsdl
Expected output	Negative test: "exception"

469

470 **ASM_8012_TestCase**

471

Testcase ID	ASM_8012_TestCase
Test Assertion	ASM-TA-8014
Description	Tests that when an <interface/> element of a <component/> <reference/> does not declare a callback interface that the <composite/> <reference/> element which promotes the <component/> <reference/> also does not declare a callback interface
Artifacts	ASM_8012_TestCase.java Test_ASM_8012.composite TestInvocation.wsdl TestClient_0002.composite TestComposite64.composite Service1.wsdl
Expected output	Negative test: "exception"

472

473 **ASM_8013_TestCase**

474

Testcase ID	ASM_8013_TestCase
Test Assertion	ASM-TA-8015
Description	Tests that where the <implementation/> of a component with a <service/> with an <interface/> with a callback, the implementation can invoke opera-

	tions of the callback interface an arbitrary number of times
Artifacts	ASM_8013_TestCase.java Test_ASM_8013.composite TestInvocation.wsdl TestClient_0002.composite TestComposite54.composite TestComposite65.composite Service1.wsdl Service5.wsdl Service5Callback.wsdl
Expected output	Positive test: "ASM_8013 request service1 operation1 invoked service2 operation1 invoked service1 callback1 invoked service1 callback1 invoked service1 callback1 invoked"

475

476 **ASM_8014_TestCase**

477

Testcase ID	ASM_8014_TestCase
Test Assertion	ASM-TA-8018
Description	Tests that when an <interface/> element of a <service/> or <reference/> has one or more intents attached to it, those intents apply to the <service/> or <reference/>
Artifacts	ASM_8014_TestCase.java Test_ASM_8014.composite TestInvocation.wsdl TestClient_0002.composite TestComposite4.composite TestComposite66.composite Service1.wsdl Service1_Intent.wsdl
Expected output	Positive test: "ASM_8018 request service1 operation1 invoked service2 operation1 invoked"

478

479 **ASM_8015_TestCase**

480

Testcase ID	ASM_8015_TestCase
Test Assertion	ASM-TA-8020
Description	Tests that when an <interface.wsdl/> element is used to declare an interface, that the @interface attribute of the element references a WSDL 1.1 portType
Artifacts	ASM_8015_TestCase.java Test_ASM_8015.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite TestInvocation.wsdl Service1.wsdl
Expected output	Positive test: "ASM_8015 request service1 operation1 invoked"

481

482 **ASM_8016_TestCase**

483

Testcase ID	ASM_8016_TestCase
Test Assertion	ASM-TA-8021
Description	Tests that when an <interface.wsdl/> element is used to declare a callback interface, that the @callbackInterface attribute of the element references a WSDL 1.1 portType
Artifacts	ASM_8016_TestCase.java Test_ASM_8016.composite TestInvocation.wsdl TestClient_0002.composite TestComposite54.composite TestComposite55.composite ASM_0002_Client.java Service1.wsdl Service5.wsdl Service5Callback.wsdl
Expected output	Positive test:

	"ASM_8016 request service1 operation1 invoked service2 operation1 invoked service1 callback1 invoked"
--	---

484

485 **ASM_8017_TestCase**

486

Testcase ID	ASM_8017_TestCase
Test Assertion	ASM-TA-8014
Description	Tests that when an <interface/> element of a <component/> <service/> does not declare a callback interface that the <composite/> <service/> element which promotes the <component/> <service/> also does not declare a callback interface
Artifacts	ASM_8017_TestCase.java Test_ASM_8017.composite TestInvocation.wsdl TestClient_0002.composite TestComposite64.composite Service1.wsdl
Expected output	Negative test: "exception"

487

488 **ASM_8018_TestCase**

489

Testcase ID	ASM_8018_TestCase
Test Assertion	ASM-TA-8011
Description	Tests that where the <interface/> element of a service in the component-Type of an implementation does not declare a callback interface, then the corresponding service element of the component using the implementation also does not declare a callback interface in its <interface/> subelement
Artifacts	ASM_8018_TestCase.java Test_ASM_8018.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl Service5Callback.wsdl
Expected output	Negative test:

	"exception"
--	-------------

490

491 **ASM_8019_TestCase**

492

Testcase ID	ASM_8019_TestCase
Test Assertion	ASM-TA-8022
Description	Tests that an <interface.wSDL/> element does not contain @remotable="false"
Artifacts	ASM_8019_TestCase.java Test_ASM_8019.composite TestInvocation.wSDL TestClient_0002.composite TestComposite1.composite Service1.wSDL
Expected output	Negative test: "exception"

493

494 **2.6 Section 7**

495 **ASM_9001_TestCase**

496

Testcase ID	ASM_9001_TestCase
Test Assertion	ASM-TA-9002
Description	Tests that if a <binding/> element of a <reference/> element has a @uri attribute set, that it points to a service endpoint.
Artifacts	ASM_9001_TestCase.java Test_ASM_9001.composite TestInvocation.wSDL TestClient_0002.composite TestComposite1.composite Service1.wSDL
Expected output	Positive test: "ASM_9001 request service1 operation1 invoked"

497

498 **ASM_9002_TestCase**

499

Testcase ID	ASM_9002_TestCase
Test Assertion	ASM-TA-9003
Description	Tests that if a <service/> element has multiple <binding/> subelements, that the @name attribute of each <binding/> element must be unique amongst the binding elements of that <service/>
Artifacts	ASM_9002_TestCase.java Test_ASM_9002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

500

501 **ASM_9003_TestCase**

502

Testcase ID	ASM_9003_TestCase
Test Assertion	ASM-TA-9004
Description	Tests that if a <binding/> element of a <reference/> element does not identify a target service using binding specific mechanisms, that it has a @uri attribute which resolves to a valid service endpoint
Artifacts	ASM_9003_TestCase.java Test_ASM_9003.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_9003 request service1 operation1 invoked"

503

504 **ASM_9004_TestCase**

505

Testcase ID	ASM_9004_TestCase
-------------	-------------------

Test Assertion	ASM-TA-9005
Description	Tests that if a <binding/> element of a <reference/> element is wired to a <service/> element which has multiple <binding/> subelements, each with a @name attribute set, that the @target attribute of the <reference/> uses the form "componentName/serviceName/bindingName" to select one specific binding for the wire
Artifacts	ASM_9004_TestCase.java Test_ASM_9004.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Positive test: "ASM_9004 request service1 operation1 invoked"

506

507 **ASM_9005_TestCase**

508

Testcase ID	ASM_9005_TestCase
Test Assertion	ASM-TA-9006
Description	Tests that if a component service has a <binding.sca/> subelement, that the binding.sca element does not declare a @uri attribute
Artifacts	ASM_9005_TestCase.java Test_ASM_9005.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

509

510 **2.7 Section 8**

511 **ASM_10001_TestCase**

512

Testcase ID	ASM_10001_TestCase
Test Assertion	ASM-TA-10001

Description	Tests that the QName of an <intent/> <policySet/> <bindingType/> or <implementationType/> subelement of a <definitions/> element is unique in the Domain
Artifacts	ASM_10001_TestCase.java Test_ASM_5002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl ASM_10001/definitions.xml
Expected output	Negative test: "exception"

513

514 **ASM_10002_TestCase**

515

Testcase ID	ASM_10002_TestCase
Test Assertion	ASM-TA-10002
Description	Tests that when a <definitions/> file contains an <intent/> subelement, that the intent is available for use by any element in the SCA Domain
Artifacts	ASM_10002_TestCase.java Test_ASM_10002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl General/META-INF/definitions.xml
Expected output	Positive test: "ASM_10002 request service1 operation1 invoked"

516

517 **ASM_10003_TestCase**

518

Testcase ID	ASM_10003_TestCase
Test Assertion	ASM-TA-10003

	ASM-TA-13003
Description	Tests that when a <definitions/> file has content that does not conform to the sca-definitions.xsd, it is rejected by the SCA runtime
Artifacts	ASM_10003_TestCase.java Test_ASM_10003.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl ASM_10003/META-INF/definitions.xml
Expected output	Negative test: "exception"

519

520 2.8 Section 10

521

522 ASM_12002_TestCase

523

Testcase ID	ASM_12002_TestCase
Test Assertion	ASM-TA-12005 ASM-TA-12002
Description	Tests that where a WSDL document references its schema using @s-schemaLocation attribute (schema artifact specific artifact resolution mechanism), that this is used to resolve the schema rather than SCA mechanisms.
Artifacts	ASM_12002_TestCase.java Test_ASM_12002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1a.wsdl Service1a.xsd (at location http://www.oasis-open.org/committees/download.php/32378/Service1a.xsd)
Expected output	Positive test: "ASM_12002 request service1 operation1 invoked"

524

525 **ASM_12003_TestCase**

526

Testcase ID	ASM_12003_TestCase
Test Assertion	ASM-TA-12006 ASM-TA-12012
Description	Tests that where a WSDL document references its schema using @s- chemaLocation attribute (schema artifact specific artifact resolution mech- anism), and that this mechanism fails, then the SCA runtime reports an er- ror
Artifacts	ASM_12003_TestCase.java Test_ASM_12003.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1b.wsdl
Expected output	Negative test: "exception"

527

528 **ASM_12004_TestCase**

529

Testcase ID	ASM_12004_TestCase
Test Assertion	ASM-TA-12007
Description	Tests that the SCA runtime accepts and runs a contribution in ZIP format
Artifacts	ASM_12004_TestCase.java Test_ASM_12004.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl ASM_12004.zip
Expected output	Positive test: "ASM_12004 request service1 operation1 invoked"

530

531 **ASM_12005_TestCase**

532

Testcase ID	ASM_12005_TestCase
Test Assertion	ASM-TA-12010
Description	<p>Tests that where multiple indirect dependent contributions export conflicting artifacts, the conflict is resolved by explicit import statements in the root contribution</p> <p>The concept of the test is that two composite files with the same name in 2 different contributions have different contents - and that only 1 of them will work with the root composite file</p>
Artifacts	ASM_12005_TestCase.java Test_ASM_12005.composite TestInvocation.wsdl TestClient_0002.composite TestComposite5.composite (version 1 - contribution = General) TestComposite5.composite (version 2 - contribution = Contribution1) Service1.wsdl
Expected output	Positive test: "ASM_12005 request servicex operation1 invoked"

533

534 **ASM_12006_TestCase**

535

Testcase ID	ASM_12006_TestCase
Test Assertion	ASM-TA-12013
Description	Tests that where a <component/> <reference/> is not wired by any explicit means, where the component is at the SCA Domain level that the reference remains unwired and cannot be invoked by the <component/> <implementation/>
Artifacts	ASM_12006_TestCase.java Test_ASM_12006.composite TestClient_0004.composite TestComposite1.composite ASM_0002_Client.java Service1.wsdl
Expected output	Positive test: "ASM_12006 request no invocation"

536

537 **ASM_12007_TestCase**

538

Testcase ID	ASM_12007_TestCase
Test Assertion	ASM-TA-12027
Description	Tests that where a contribution contains multiple <import/> declarations which refer to the namespace of a referenced artifact, that the artifact is found by searching target locations in the order in which the <import/> statements occur in the <contribution/> document
Artifacts	ASM_12007_TestCase.java Test_ASM_12007.composite TestInvocation.wsdl TestClient_0002.composite TestComposite5.composite (version 1 - contribution = General) TestComposite5.composite (version 2 - contribution = Contribution1) Service1.wsdl ASM_12007/META-INF/sca-contribution.xml
Expected output	Negative test: "exception"

539

540 **ASM_12008_TestCase**

541

Testcase ID	ASM_12008_TestCase
Test Assertion	ASM-TA-12028
Description	Tests that where a contribution contains an <import/> declaration which refers to the namespace of a referenced artifact and where the artifact is present in a second contribution which exports the namespace, that the artifact is resolved in the second contribution even though a copy of the artifact exists in the original contribution
Artifacts	ASM_12008_TestCase.java Test_ASM_12008.composite TestInvocation.wsdl TestClient_0002.composite TestComposite5a.composite (version 1 - contribution = General) TestComposite5.composite (version 2 - contribution = ASM_12008) Service1.wsdl ASM_12008/META-INF/sca-contribution.xml
Expected output	Negative test:

	"exception"
--	-------------

542

543 **ASM_12009_TestCase**

544

Testcase ID	ASM_12009_TestCase
Test Assertion	ASM-TA-12029
Description	Tests that where a contribution contains an <import/> declaration with a specified target contribution which refers to the namespace of a referenced artifact and where the artifact is NOT present in the target contribution which exports the namespace, that the artifact is resolved in the first contribution when a copy of the artifact exists in the original contribution
Artifacts	ASM_12009_TestCase.java Test_ASM_12009.composite TestInvocation.wsdl TestClient_0002.composite TestComposite66.composite Service1.wsdl Contribution1 ASM_12009/META-IF/sca-contribution.xml
Expected output	Positive test: "ASM_12009 request servicex operation1 invoked"

545

546 **ASM_12010_TestCase**

547

Testcase ID	ASM_12010_TestCase
Test Assertion	ASM-TA-12030
Description	Tests that where a first contribution resolves an artifact reference to an artifact in a second contribution, where the resolved artifact has a further artifact reference, that this reference is resolved through the import statements of the second contribution even if the first contribution has import statements (to different locations) for the same namespace
Artifacts	ASM_12010_TestCase.java Test_ASM_12010.composite TestInvocation.wsdl TestClient_0002.composite

	TestComposite67.composite (Contribution2) TestComposite5.composite (version 1 - contribution = General) TestComposite5.composite (version 2 - contribution = Contribution1) Service1.wsdl ASM_12010/META-IF/sca-contribution.xml Contribution2/META-INF/sca-contribution.xml
Expected output	Positive test: "ASM_12010 request servicex operation1 invoked"

548

549 **ASM_12011_TestCase**

550

Testcase ID	ASM_12011_TestCase
Test Assertion	ASM-TA-12031
Description	Tests that where a contribution contains an <import/> declaration with a specific target contribution which refers to the namespace of a referenced artifact and the artifact is neither present in the target contribution nor the original contribution, that the resolution fails and the SCA runtime reports an error even where that artifact is available in other contributions
Artifacts	ASM_12011_TestCase.java Test_ASM_12011.composite TestInvocation.wsdl TestClient_0002.composite TestComposite68.composite Service1.wsdl ASM_12010/META-IF/sca-contribution.xml
Expected output	Negative test: "exception"

551

552 **ASM_12012_TestCase**

553

Testcase ID	ASM_12012_TestCase
Test Assertion	ASM-TA-12032 ASM-TA-13002
Description	Tests that where a contribution contains an sca-contribution.xml file that violates the schema sca-contribution.xsd, that the SCA runtime rejects the

	file and raises an error
Artifacts	ASM_12012_TestCase.java Test_ASM_12012.composite TestInvocation.wsdl TestClient_0002.composite TestComposite5.composite (version 1 - contribution = General) Service1.wsdl ASM_12012/META-IF/sca-contribution.xml
Expected output	Negative test: "exception"

554

555 **ASM_12013_TestCase**

556

Testcase ID	ASM_12013_TestCase
Test Assertion	ASM-TA-12035
Description	Tests that where a contribution has an artifact with an artifact dependency which is resolved via an <import/> declaration to an artifact in a second contribution and the resolved artifact has a further dependency on an artifact that is present in both the original contribution and in the second contribution that the dependency of the resolved artifact is resolved to the artifact in the second contribution
Artifacts	ASM_12013_TestCase.java Test_ASM_12013.composite TestInvocation.wsdl TestClient_0002.composite TestComposite69.composite TestComposite1.composite (version 1 - contribution = General) TestComposite1.composite (version 2 - contribution = ASM_12013) Service1.wsdl Service1.java service1Impl.java ASM_12013/META-IF/sca-contribution.xml
Expected output	Positive test: "ASM_12013 request service1 operation1 invoked"

557

558 **2.9 Section 11**

559 **No testcases**

560 **2.10 Section 12**

561 **ASM_13001_TestCase**

562

Testcase ID	ASM_13001_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13001_TestCase.java Test_ASM_13001.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

563

564 **ASM_13002_TestCase**

565

Testcase ID	ASM_13002_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13002_TestCase.java Test_ASM_13002.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

566

567 **ASM_13003_TestCase**

568

Testcase ID	ASM_13003_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13003_TestCase.java Test_ASM_13003.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

569

570 **ASM_13004_TestCase**

571

Testcase ID	ASM_13004_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13004_TestCase.java Test_ASM_13004.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

572

573 **ASM_13005_TestCase**

574

Testcase ID	ASM_13005_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13005_TestCase.java Test_ASM_13005.composite TestInvocation.wsdl TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

575

576 **ASM_13006_TestCase**

577

Testcase ID	ASM_13006_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13006_TestCase.java Test_ASM_13006.composite TestClient_0002.composite TestComposite1.composite Service1.wsdl ** test.TestInvocation.java **
Expected output	Negative test: "exception"

578

579 **ASM_13007_TestCase**

580

Testcase ID	ASM_13007_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-imple-

	mentation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13007_TestCase.java Test_ASM_13007.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl
Expected output	Negative test: "exception"

581

582 **ASM_13008_TestCase**

583

Testcase ID	ASM_13008_TestCase
Test Assertion	ASM-TA-13001
Description	Tests that the SCA runtime rejects an invalid composite file which violates one of the SCA schemas (sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd).
Artifacts	ASM_13008_TestCase.java Test_ASM_13008.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl
Expected output	Negative test: "exception"

584

585

3 Catalog of Test Artifacts

586

3.1 Composite Files - lower level

587

Name	Valid	Description
Marked "Impl Specific" if it is implementation type specific		<i>Services and References use interface Service1 unless described otherwise</i>
TestComposite1.composite <i>"Impl Specific"</i>	Y	1 service service1Impl
TestComposite2.composite	N	2 services - with same name 0 references service1Impl Contribution: ASM_5005
TestComposite3.composite	N	1 service, 2 references - with same name service1Impl2 Contribution: ASM_5007
TestComposite4.composite <i>"Impl Specific"</i>	Y	1 service, 1 reference (1..1) service1Impl2
TestComposite5.composite <i>"Impl Specific"</i>	Y	1 service - interface = Service2 0 references service2Impl
TestComposite6.composite <i>"Impl Specific"</i>	Y	1 service, 1 reference (1..n) service1Impl3
TestComposite7.composite <i>"Impl Specific"</i>	Y	1 service, 1 reference (0..n) service1Impl4
TestComposite8.composite <i>"Impl Specific"</i>	Y	1 service, 1 reference (0..1) service1Impl6
TestComposite9.composite	Y	1 service - superset interface = Service1Superset

<i>"Impl Specific"</i>		0 references service1SupersetImpl
TestComposite10.composite	Y	1 service 1 reference (1..1) with binding and target
TestComposite11.composite	N	1 service, 1 reference 1 component with 1..1 reference that is wired and promoted Contribution: ASM_5023
TestComposite12.composite	Y	1 service 0 references 1 property of complex type typed with @type uses TestComposite71
TestComposite13.composite	Y	1 service 0 references 1 property of complex type typed with @element uses TestComposite71
TestComposite14.composite	Y	1 service 0 references 1 property of simple type (string)
TestComposite15.composite	Y	1 service - with multiple bindings declared 0 references
TestComposite16.composite	N	3 services - 2 with same name Contributions: ASM_4002, ASM_6002
TestComposite17.composite	N	2 services - 1 with invalid @promote value Contribution: ASM_6003
TestComposite18.composite	Y	1 service - service interface is compatible subset of interface of promoted component service
TestComposite19.composite	N	1 service, 2 references - with same name Contributions: ASM_4003, ASM_6005
TestComposite20.composite	N	1 service, 1 reference with invalid @promote value Contribution: ASM_6006
TestComposite21.composite	Y	1 service,

		1 reference (1..1) with interface that is compatible superset of interface of promoted component reference
TestComposite22.composite	Y	1 service, 1 reference (1..1) promotes 2 component references with different interfaces declared (Service1, Service1Superset) uses TestComposite70
TestComposite23.composite	Y	1 service, 1 reference (1..1) that promotes component reference with (0..1) multiplicity uses TestComposite8
TestComposite24.composite	Y	1 service, 1 reference (0..1) that promotes component reference with (0..n) multiplicity
TestComposite25.composite	Y	1 service, 1 reference (1..1) that promotes component reference with (1..n) multiplicity
TestComposite26.composite	N	1 service, 1 reference, 3 properties - all with same name Contributions: ASM_4004, ASM_6012
TestComposite27.composite	Y	1 service, 2 components, one with @autowire="true" reference , one with service with compatible interface
TestComposite28.composite	Y	1 service, 2 components, one with @autowire="true" reference , one with service with superset interface
TestComposite30.composite	N	1 service, 2 components, one with @autowire="true" reference + set of intents, one with service with compatible interface but different set of intents Contribution: ASM_6016
TestComposite31.composite	N	1 service, composite service has a @promote URI that does not point to a component service within the composite 0 references Contribution: ASM_6021
TestComposite32.composite	N	1 service, contains a component with a 1..n reference that is neither promoted nor wired internally in the composite

		Contribution: ASM_6022
TestComposite33.composite	Y	1 service, 2 properties, plus a component with multiple properties which are sourced from the composite properties
TestComposite34.composite	Y	Composite designed for including within another composite - contains 1 component only
TestComposite35.composite	Y	1 service and 1 reference, where the component that implements the service & reference is included from a second composite (TestComposite36)
TestComposite36.composite	Y	Composite designed for inclusion within another composite - contains 1 component that implements 1 service and 1 reference
TestComposite37.composite	Y	Composite designed for inclusion within another composite - contains 2 components, #1 has 1 service and 1 reference, #2 has 1 service
TestComposite38.composite	Y	Has @local=true, containing 2 components, #1 has 1 service and 1 reference, #2 has 1 service - reference of #1 is wired to service of #2
TestComposite39.composite	N	1 service, 1 reference where the reference has an intent that is mutually exclusive with an intent on the component reference which it promotes Contribution: ASM_6031
TestComposite40.composite	N	1 service, 1 reference where the reference has @requires containing 2 mutually exclusive intents Contribution: ASM_6032
TestComposite41.composite	N	1 service, 1 reference, where the reference multiplicity is 0..1 but the component reference which it promotes has multiplicity 1..1 Contribution: ASM_6033
TestComposite42.composite	Y	1 service, composite has @constrainingType set to a constrainingType to which the composite does conform
TestComposite43.composite	Y	1 service, 1 reference, 2 properties. 1 property declares its type using the @type attribute (complex type sca:Callback)
TestComposite44.composite	Y	1 service, 1 reference, 2 properties. 1 property declares its type using the @element attribute (complex type sca:callback)
TestComposite45.composite	N	1 service, 1 reference,

		2 properties. 1 property declares its type using both an @element attribute and a @type attribute (complex type sca:Callback) Contribution: ASM_4007
TestComposite46.composite	Y	1 service, 1 reference, 2 properties. 1 property declares @mustSupply=true
TestComposite48.composite	Y	2 services
TestComposite49.composite	Y	1 services 2 references, 1 of (0..1), 1 of (0..n)
TestComposite50.composite	Y	1 service, 2 properties with @mustSupply="false"
TestComposite52.composite <i>"Impl Specific"</i>	Y	1 service with Service4 interface service4Impl
TestComposite53.composite <i>"Impl Specific"</i>	Y	1 service 1 reference with Service4 interface contains a component which checks whether an input parameter is modified during invocation of an operation on the Service4 interface service1Impl7
TestComposite54.composite <i>"Impl Specific"</i>	Y	1 service 1 reference with a callback - Service5 & Service5Callback service1Callback5Impl
TestComposite55.composite <i>"Impl Specific"</i>	Y	1 service with callback - Service5 & Service5Callback service5Impl
TestComposite60.composite <i>"Impl Specific"</i>	Y	(ASM_8006) 1 service 1 reference with callback - Service9 & Service9Callback service1Callback9Impl
TestComposite61.composite <i>"Impl Specific"</i>	Y	(ASM_8006) 1 service with callback - Service9 & Service9Callback service9Impl
TestComposite62.composite	N	(ASM_8003) 1 service, 1 reference with callback Callback interface of composite reference is not compatible with callback interface of promoted component reference

		Contribution: ASM_8011
TestComposite63.composite	N	(ASM_8003) 1 service with callback - where the callback interface is not compatible with the callback interface on the promoted component service - Service5 & Service8Callback Contribution: ASM_8010
TestComposite64.composite	N	(ASM_8012) 1 service 1 reference (0..1) with callback - Service1 & Service5Callback - where the promoted component reference has no callback declared Contribution: ASM_8012
TestComposite65.composite "Impl Specific"	Y	(ASM_8003) 1 service with a callback - Service5 & Service5Callback - where the implementing component invokes the callback operation multiple times for a single invocation of the forward interface service5Impl2
TestComposite66.composite "Impl Specific"	Y	1 service, remotable, service has Confidentiality applied 0 references service1Impl
TestComposite67.composite	Y	* copy of TestComposite5 but in namespace http://oasis/tests2
TestComposite68.	Y	Wrapper of TestComposite5 but in namespace http://oasis/tests2
TestComposite69.composite	Y	1 service * wrapper of TestComposite1 in namespace http://oasis/tests2
TestComposite70.composite "Impl Specific"	Y	1 service, 1 reference (1..1) - interface Service1Superset service1Impl8
TestComposite71.composite "Impl Specific"	Y	1 service 0 references 2 properties of type string service1Impl5
TestComposite72.composite	N	1 service 1 service with callback - Service1 & Service5Callback - where the promoted component service has no callback declared 0 references

		Contribution: ASM_8017
TestComposite73.composite <i>"Impl Specific"</i>	Y	1 service 0 references 1 property of type float
TestComposite74.composite	N	1 service 1 reference "Reference1" - reference promotes a component reference with multiplicity 1..1 and @nonOverridable="true" Contribution ASM_5040
TestComposite75.composite	Y	3 services all with interface = Service1 0 references 0 properties Contribution: General
TestComposite76.composite	Y	1 service 0 references 1 property multi-valued of complex type typed with @type uses TestComposite71

588

589 3.2 Java Interfaces

590

Name	Description
test.Service1.java	1 operation with 1 input, 1 output parameter
test.Service2.java	Remotable service interface that is not compatible with Service1 interface
test.Service1Superset.java	Remotable service interface which is a superset of Service1 interface 2 operations with 1 input,1 output parameter
test.Service4.java	Remotable service interface 1 operation with 1 input, 1 output parameter - input parameter is a Java mutable type = List of Strings
test.Service5.java	Remotable service interface with a Callback interface (Service5Callback) 1 operation with 1 input, 1 output parameter
test.Service5Callback.java	Remotable callback interface for Service5,

	1 operation with 1 input, 1 output parameter
test.Service1_Intent	Service1 interface + Confidentiality intent 1 operation with 1 input, 1 output parameter
test.Service8Callback	Remotable callback interface incompatible with Service5Callback interface

591

3.3 Java Implementation Classes

592

Name	Description
	Services and references use interface Service1 unless otherwise described
test.Service1Impl.java	1 service 0 references
test..Service1Impl2.java	1 service 1 reference (1..1)
test.Service1Impl3.java	1 service 1 reference (1..n)
test.Service1Impl4.java	1 service 1 reference (0..n)
test.Service1Impl5.java	1 service 0 references 3 properties
test.Service1Impl6.java	1 service 1 reference (0..1)
test.Service1impl7.java	1 service 1 reference (1..1) with interface Service4 - operation1 method calls reference operation and checks for modification of the input parameter
test.Service1Impl8.java	1 service 1 reference (1..1) - interface Service1Superset
test.Service1Impl9	1 service 0 references 1 property of type float
test.Service2Impl.java	1 service with interface Service2

test.Service1SupersetImpl.java	1 service with interface Service1Superset
test.Service4impl.java	1 service with interface Service4 - service operation modifies input parameter
TestException.java	Exception returned if test application receives an exception during execution
TestInvocation.java	Client testcase invocation interface
ASM_0001_Client.java	Client invocation component 1 service 0 references
ASM_0002_Client.java	"Standard" client invocation component 1 service 1 reference (0..1)
ASM_0003_Client.java	Client invocation component 1 service 1 reference (1..n)

593 3.4 WSDL Interface Files

594

Name	Description
Service1.wsdl	portType = Service1 1 operation with 1 input, 1 output parameter
Service1Superset.wsdl	portType = Service1Superset - superset of Service1 2 operations - 1 input, 1 output parameter
Service1_Intent.wsdl	portType = Service1_Intent equivalent to Service1, but with @requires="sca:confidentiality" applied to the portType element 1 operation with 1 input, 1 output parameter
Service1a.wsdl	Version of Service1.wsdl containing no XML type declarations, but instead containing a @schemaLocation attribute, but one which points to a valid XSD file
Service1b.wsdl	Version of Service1.wsdl containing no XML type declarations, but instead containing a @schemaLocation attribute, but one which points to an in-

	valid file
Service2.wsdl	1 service - incompatible with Service1 1 operation with 1 input, 1 output parameter
Service4.wsdl	portType = Service4 1 operation with 1 input, 1 output parameter - input parameter is list of Strings
Service5.wsdl	Remotable service interface with a single operation with 1 input and 1 output parameter and a Callback interface
Service9.wsdl	Remotable service interface, with @callback attribute applied to the portType element 1 operation with 1 input and 1 output parameter
Service5Callback.wsdl	Remotable callback interface for Service5, with a single operation with 1 input and 1 output parameter
Service8Callback.wsdl	Callback interface which is not compatible with other Callback interfaces (uses a different operation name) 1 operation with 1 input and 1 output parameter
Service9Callback.wsdl	Callback interface for Service9 1 operation with 1 input and 1 output parameter

596 4 Conformance

597 The artifacts contained in the sca-assembly-1.1-testcases.zip file are considered to be authoritative and
598 take precedence over the artifacts described in this document.

599 An implementation that claims to conform to this specification MUST be able to run all test cases in Sec-
600 tion 2 TestCases, producing the 'Expected Output'.

601 Appendix A. Test Assertions for the SCA Assembly 602 Model

603 This document defines the Test Assertions for the SCA Assembly Specification Version 1.1. following the
604 format defined in the OASIS Test Assertion Guidelines specification [TA-GUIDE].

605 A.1. Example Test Assertion

606 Test assertions are presented in a tabular format with rows corresponding to the entry types defined in
607 [TA-GUIDE].

608

Assertion ID	ASM-TA-xxxx
Source	[ASMx00yy]
Target	<kitchenSink/> element of composite file
Prerequisites	The <kitchenSink/> element has a @drain attribute
Predicate	The @drain attribute value of the <kitchenSink/> element is a URI that identifies a portal into the drainage system of the Domain.
Prescription Level	Mandatory
Tags	kitchenSink drain Domain

609

610 **Assertion ID:** Is a unique ID for the test assertion. Its format starts with a 3 letter string that identifies the
611 specification to which it relates - "ASM" is for the SCA Assembly specification. This is followed by "-TA-"
612 to indicate that this identifier is for a test assertion. This is then followed by a unique 4 digit number.

613 **Source:** Is the identifier(s) of the normative statement(s) in the specification to which this assertion
614 relates.

615 **Target:** Identifies the target which is addressed by this assertion. This is typically some SCA document
616 element, or other SCA artifact but possibly could identify an SCA runtime and its behaviour.

617 **Prerequisites:** Defines any prerequisites for this test assertion. The prerequisites may be defined in terms
618 of one or more other test assertions that must be true.

619 **Predicate:** The meat of the assertion - something that should evaluate to true or false for the given target.

620 **Prescription Level:** Mandatory (for MUST requirements) or Preferred (for SHOULD requirements) or
621 Permitted (for MAY requirements).

622 **Tags:** Zero or more labels that may be attached to this test assertion - these tags can be used to group
623 sets of assertions.

624

625 A.2. Test Assertions for SCA Assembly Specification Section 3

626

Assertion ID	ASM-TA-4002
Source	[ASM40003]
Target	<service/> element of a <componentType/> element
Prerequisites	The <componentType/> element has >1 <service/> elements
Predicate	The @name attribute of the <service/> element is not equal to the @name attribute of any other <service/> element of the <componentType/>
Prescription Level	Mandatory
Tags	"componentType" "service" "name"

627

628

Assertion ID	ASM-TA-4003
Source	[ASM40004]
Target	<reference/> element of a <componentType/> element
Prerequisites	The <componentType/> element has >1 <reference/> elements
Predicate	The @name attribute of the <reference/> element is not equal to the @name attribute of any other <reference/> element of the <componentType/>
Prescription Level	Mandatory
Tags	"componentType" "reference" "name"

629

630

Assertion ID	ASM-TA-4004
Source	[ASM40005]
Target	<property/> element of a <componentType/> element
Prerequisites	The <componentType/> element has >1 <property/> elements
Predicate	The @name attribute of the <property/> element is not equal to the @name attribute of any other <property/> element of the <componentType/>
Prescription Level	Mandatory
Tags	"componentType" "property" "name"

631

632

Assertion ID	ASM-TA-4005
Source	[ASM40006]

Target	<reference/> element of a <component/> where the <reference/> has the @target attribute set to valid target <component/> <service/>
Prerequisites	<reference/> element of the <componentType/> of the <implementation/> used by the <component/> has @wiredByImpl set to "true"
Predicate	<reference/> @target is ignored and the reference is not wired to the identified <component/> <service/>
Prescription Level	Mandatory
Tags	"componentType" "reference" "wiredByImpl"

633

634

Assertion ID	ASM-TA-4006
Source	[ASM40007]
Target	@type attribute of a <property/> element of a <componentType/> element
Prerequisites	
Predicate	@type attribute value of the <property/> element is the QName of an XML schema type
Prescription Level	Mandatory
Tags	"componentType" "property" "type"

635

636

Assertion ID	ASM-TA-4007
Source	[ASM40008]
Target	@element attribute of a <property/> element of a <componentType/> element
Prerequisites	
Predicate	@element attribute value of the <property/> element is the QName of an XSD global element.
Prescription Level	Mandatory
Tags	"componentType" "property" "element"

637

638

Assertion ID	ASM-TA-4008
Source	[ASM40009]
Target	Implementation property value of an <implementation/> of a <component/>

Prerequisites	a) The <property/> element of the <componentType/> element of the implementation has a default value for the property b) <component/> has a corresponding <property/> element that sets a value for the property
Predicate	The runtime value of the implementation property is the value declared by the <component/> <property/> element
Prescription Level	Mandatory
Tags	"component type" "property" "default"

639

640

Assertion ID	ASM-TA-4009
Source	[ASM40010]
Target	<property/> element of <componentType/>
Prerequisites	a) The <property/> element has a @type attribute declared
Predicate	<property/> element does not have an @element attribute declared
Prescription Level	Mandatory
Tags	"component type" "property" "type" "element"

641

642

Assertion ID	ASM-TA-4010
Source	[ASM40010]
Target	<property/> element of <componentType/>
Prerequisites	a) The <property/> element has a @element attribute declared
Predicate	<property/> element does not have an @type attribute declared
Prescription Level	Mandatory
Tags	"component type" "property" "type" "element"

643

644

Assertion ID	ASM-TA-4011
Source	[ASM40011]
Target	<property/> element of a <component/>
Prerequisites	a) <component/> has an <implementation/> which has a componentType with a <property/> element, corresponding to the <component/> <property/> element, which has @mustSupply="true"

Predicate	<property/> element declares a property value which sets the property value of the implementation
Prescription Level	Mandatory
Tags	"component type" "property" "mustSupply" "value"

645

646

Assertion ID	ASM-TA-4012
Source	[ASM40012]
Target	@file attribute of a <property/> element of a <componentType/>
Prerequisites	
Predicate	@file attribute contains a dereferenceable URI to a file which contains the value for the property
Prescription Level	Mandatory
Tags	"component type" "property" "file" "dereferenceable URI"

647

648 **A.3. Test Assertions for SCA Assembly Specification Section 4**

649

Assertion ID	ASM-TA-5001
Source	[ASM50002]
Target	<service/> element of a <component/> element
Prerequisites	The <component/> element has >1 <service/> elements
Predicate	The @name attribute of [the <service/> element] not equal to the @name attribute of any other <service/> element of the <component/>
Prescription Level	Mandatory
Tags	"component services"

650

651

Assertion ID	ASM-TA-5002
Source	[ASM50003]
Target	<service/> element of a <component/> element
Prerequisites	The <component/> element has an <implementation/> child element
Predicate	The @name attribute of [the <service/> element] is equal to the @name at-

	tribute of one <service/> element of the <componentType/> of the <implementation/> subelement of the <component/>
Prescription Level	Mandatory
Tags	"component services"

652

653

Assertion ID	ASM-TA-5003
Source	[ASM50007]
Target	<reference/> element of a <component/> element
Prerequisites	The <component/> element has >1 <reference/> elements
Predicate	The @name attribute of [the <reference/> element] not equal to the @name attribute of any other <reference/> element of the <component/>
Prescription Level	Mandatory
Tags	"component references"

654

655

Assertion ID	ASM-TA-5004
Source	[ASM50008]
Target	<reference/> element of a <component/> element
Prerequisites	The <component/> element has an <implementation/> child element
Predicate	The @name attribute of [the <reference/> element] is equal to the @name attribute of one <reference/> element of the <componentType/> of the <implementation/> subelement of the <component/>
Prescription Level	Mandatory
Tags	"component references"

656

657

658

Assertion ID	ASM-TA-5005
Source	[ASM50001]
Target	<component/> element in a <composite/> element
Prerequisites	The <composite/> element has >1 <component/> elements
Predicate	The @name attribute of [the <component/> element] not equal to the @name attribute of any other <component/> element in the <composite/>

Prescription Level	Mandatory
Tags	"component names"

659

660

Assertion ID	ASM-TA-5006
Source	[ASM50004]
Target	<service/> element of a <component/> element
Prerequisites	The <service/> element has an <interface/> child element
Predicate	The interface specified by the <interface/> child element of [the <service/> element] is a compatible subset of the interface declared for the <service/> with the same @name attribute in the <componentType/> of the <implementation/> child of the <component/>
Prescription Level	Mandatory
Tags	"compatible interfaces"

661

662

Assertion ID	ASM-TA-5007
Source	[ASM50005]
Target	<service/> element of a <component/> element
Prerequisites	The <service/> element has no <binding/> elements AND <service/> element (with same @name attribute value) of the <componentType/> of the <implementation/> element of the <component/> has 1 or more <binding/> elements
Predicate	The <service/> is made available using all the bindings declared on the <componentType/> <service/> element
Prescription Level	Mandatory
Tags	"service bindings"

663

664

Assertion ID	ASM-TA-5008
Source	[ASM50005]
Target	<service/> element of a <component/> element
Prerequisites	The <service/> element has no <binding/> elements AND <service/> element (with same @name attribute value) of the <componentType/> of the <implementation/> element of the <component/> has

	no <binding/> elements
Predicate	The <service/> is made available using binding.sca
Prescription Level	Mandatory
Tags	"service bindings"

665

666

Assertion ID	ASM-TA-5009
Source	[ASM50005]
Target	<service/> element of a <component/> element
Prerequisites	The <service/> element has 1 or more <binding/> elements
Predicate	The <service/> is made available using all of the bindings declared on its <binding/> elements
Prescription Level	Mandatory
Tags	"service bindings"

667

668

Assertion ID	ASM-TA-5010
Source	[ASM50009]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element (with same @name attribute value) of the <componentType/> of the <implementation/> has multiplicity 1..n
Predicate	<reference/> element @multiplicity attribute is 1..n or 1..1
Prescription Level	Mandatory
Tags	"component references" "reference multiplicity"

669

670

Assertion ID	ASM-TA-5011
Source	[ASM50009]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element (with same @name attribute value) of the <componentType/> of the <implementation/> has multiplicity 0..n
Predicate	<reference/> element @multiplicity attribute is 0..n or 1..n or 0..1 or 1..1
Prescription	Mandatory

Level	
Tags	"component references" "reference multiplicity"

671

Assertion ID	ASM-TA-5012
Source	[ASM50009]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element (with same @name attribute value) of the <componentType/> of the <implementation/> has multiplicity 1..1
Predicate	<reference/> element @multiplicity attribute is 1..1
Prescription Level	Mandatory
Tags	"component references" "reference multiplicity"

672

673

Assertion ID	ASM-TA-5013
Source	[ASM50009]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element (with same @name attribute value) of the <componentType/> of the <implementation/> has multiplicity 0..1
Predicate	<reference/> element @multiplicity attribute is 0..1 or 1..1
Prescription Level	Mandatory
Tags	"component references" "reference multiplicity"

674

675

Assertion ID	ASM-TA-5014
Source	[ASM50010] [ASM50013]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element has @wiredByImpl="true"
Predicate	<reference/> element has no @target attribute set
Prescription Level	Mandatory
Tags	"component references" "wiredByImpl"

676

677

Assertion ID	ASM-TA-5015
Source	[ASM50010]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element has @wiredByImpl="true"
Predicate	<reference/> element has no <binding/> child elements
Prescription Level	Mandatory
Tags	"component references" "wiredByImpl"

678

679

Assertion ID	ASM-TA-5016
Source	[ASM50011]
Target	<interface/> element of a <reference/> element of a <component/> element
Prerequisites	
Predicate	The interface declared by the <interface/> element of <reference/> element is a compatible superset of interface declared by the <interface/> child element of <reference/> element (with same @name attribute value) of the <componentType/> of the <implementation/> child element of the <component/> element
Prescription Level	Mandatory
Tags	"component references" "interface compatibility"

680

681

Assertion ID	ASM-TA-5017
Source	[ASM50012]
Target	<reference/> element of a <component/> element
Prerequisites	a) <reference/> has no <binding/> child elements b) <reference/> (with the same @name attribute) of the <componentType/> of the <implementation/> element of the <component/> has a <binding/> child element
Predicate	Binding declared by the <reference/> element (with the same @name attribute) of the <componentType/> is used for the reference
Prescription Level	Mandatory
Tags	"component references" "reference bindings"

682

683

Assertion ID	ASM-TA-5018
Source	[ASM50012]
Target	<reference/> element of a <component/> element
Prerequisites	a) <reference/> has one <binding/> child element which identifies a target service b) <reference/> (with the same @name attribute) of the <componentType/> of the <implementation/> element of the <component/> has a <binding/> child element
Predicate	Binding (and target service) identified by the <binding/> element of the <reference/> is used to wire the reference.
Prescription Level	Mandatory
Tags	"component references" "reference bindings"

684

685

Assertion ID	ASM-TA-5019
Source	[ASM50013]
Target	<reference/> element of a <component/> element
Prerequisites	<reference/> element has @wiredByImpl="true"
Predicate	<reference/> element has no <binding/> child elements
Prescription Level	Mandatory
Tags	"component references" "wiredByImpl"

686

687

Assertion ID	ASM-TA-5020
Source	[ASM50013]
Target	
Prerequisites	<reference/> element has @wiredByImpl="true"
Predicate	No <wire/> elements have the <reference/> element declared as the @source for the wire
Prescription Level	Mandatory
Tags	"component references" "wiredByImpl"

688

689

Assertion ID	ASM-TA-5021
Source	[ASM50014]
Target	<reference/> element of a <component/> element
Prerequisites	a) <reference/> element has @autowire="true" b) There are multiple valid target services for the reference which satisfy the autowire process. c) <reference/> element has @target identifying a single target service
Predicate	The <reference/> element is wired only to the single target service identified by the @target attribute
Prescription Level	Mandatory
Tags	"component references" "autowire"

690

691

Assertion ID	ASM-TA-5022
Source	[ASM50014]
Target	<reference/> element of a <component/> element
Prerequisites	a) <reference/> element has @autowire="true" b) There are multiple valid target services for the reference which satisfy the autowire process. c) There is a <wire/> element which has the <reference/> element declared in its @source attribute
Predicate	The <reference/> element is wired only to the single target service identified by the <wire/> element
Prescription Level	Mandatory
Tags	"component references" "autowire"

692

693

Assertion ID	ASM-TA-5023
Source	[ASM50014]
Target	<reference/> element of a <component/> element
Prerequisites	a) <reference/> element has @autowire="true" b) There are multiple valid target services for the reference which satisfy the autowire process. c) <reference/> element has a <binding/> child element which declares a single target service

Predicate	The <reference/> element is wired only to the single target service identified by the <binding/> element
Prescription Level	Mandatory
Tags	"component references" "autowire"

694

695

Assertion ID	ASM-TA-5024
Source	[ASM50015]
Target	<binding/> element of a <reference/> element of a <component/> element
Prerequisites	<binding/> element has its @uri attribute specifying a target service
Predicate	The <reference/> is wired to the target service specified by the @uri attribute
Prescription Level	Mandatory
Tags	"component references" "uri"

696

697

Assertion ID	ASM-TA-5025
Source	[ASM50040]
Target	<reference/> element of a <component/> element
Prerequisites	a) @multiplicity is 1..1 b) @target attribute contains a single target service which is a service on a second component in the same <composite/> as the first components c) target service is compatible with the source reference
Predicate	The wire from the <reference/> to the target service is valid and the client component can invoke operations on the target service
Prescription Level	Mandatory
Tags	"component references" "valid wire"

698

699

Assertion ID	ASM-TA-5026
Source	[ASM50041]
Target	<reference/> element of a <component/> element
Prerequisites	a) @multiplicity is 1..n

	<p>b) multiple target services exist in the <composite/> containing the <component/> which are compatible with the reference</p> <p>c) @target attribute contains 2 or more compatible target services</p>
Predicate	The <reference/> is wired to all of the target services identified by its @target attribute and can invoke operations on each target service.
Prescription Level	Mandatory
Tags	"component references" "valid wire"

700

701

Assertion ID	ASM-TA-5027
Source	[ASM50040] [ASM50022]
Target	<reference/> element of a <component/> element
Prerequisites	<p>a) @multiplicity is 1..1</p> <p>b) multiple target services exist in the <composite/> containing the <component/> which are compatible with the <reference/></p> <p>c) @target attribute contains 2 or more compatible target services</p>
Predicate	The wires from the <reference/> to the target service are invalid and the client component cannot run
Prescription Level	Mandatory
Tags	"component references" "valid wire"

702

703

Assertion ID	ASM-TA-5028
Source	[ASM50039]
Target	<reference/> element with @multiplicity=0..1 of a <component/> element
Prerequisites	<reference/> element is not wired, either by the @target attribute of the <reference/> or by any <binding/> child elements of the <reference/>
Predicate	The configuration of the <component/> is valid and the component executes
Prescription Level	Mandatory
Tags	"component references" "valid wire"

704

705

Assertion ID	ASM-TA-5029
Source	[ASM50025]
Target	<reference/> element with @multiplicity=1..1 of a <component/> element within a <composite/>
Prerequisites	a) <reference/> element is wired to a compatible service of a second component within the same composite b) a <reference/> element of the <composite/> promotes the <reference/> element of the component c) the <composite/> is used as the implementation of a high level component and the composite <reference/> is wired to a valid target
Predicate	The wires from the <reference/> to the target service are invalid and the client component cannot run
Prescription Level	Mandatory
Tags	"component references" "valid wire"

706

707

Assertion ID	ASM-TA-5030
Source	[ASM50026]
Target	<reference/> element with @target attribute set to one or more target services, of a <component/> element within a <composite/>
Prerequisites	
Predicate	<reference/> element has no <binding/> child elements
Prescription Level	Mandatory
Tags	"component" "reference" "target" "binding"

708

709

Assertion ID	ASM-TA-5031
Source	[ASM50027]
Target	<property/> element of a <component/> element within a <composite/>, with an @value attribute declared
Prerequisites	type of the <property/> element is an XML Schema simple type
Predicate	@value attribute of the <property/> element contains a single value with a type matching that of the <property/> element
Prescription Level	Mandatory
Tags	"component" "property" "value"

710

711

Assertion ID	ASM-TA-5032
Source	[ASM50028]
Target	<value/> child element of a <property/> element of a <component/> element within a <composite/>
Prerequisites	Type of the <property/> element is an XML Schema simple type or an XML Schema complex type
Predicate	The type of the <value/> element is the same as the type declared for the parent <property/> element
Prescription Level	Mandatory
Tags	"component" "property" "type"

712

713

Assertion ID	ASM-TA-5033
Source	[ASM50029]
Target	child element of a <property/> element of a <component/> element within a <composite/>
Prerequisites	Child element is not an <sca:value/> element
Predicate	The type of the <property/> element is an XML Schema global element and the child element is an instance of that global element
Prescription Level	Mandatory
Tags	"component" "property" "value" "type"

714

715

Assertion ID	ASM-TA-5034
Source	[ASM50031]
Target	<property/> element of a <component/> element within a <composite/>
Prerequisites	<component/> element contains 1 or more additional <property/> elements
Predicate	The @name attribute of the <property/> element is not the same as the @name attribute of any of the other <property/> child elements of the same <component/>
Prescription Level	Mandatory
Tags	"component" "property" "name"

716

717

718

Assertion ID	ASM-TA-5036
Source	[ASM50032]
Target	<property/> element of a <component/> element within a <composite/>, with values specified by <value/> child elements
Prerequisites	<property/> element with @many=false, or where componentType of the implementation has the matching <property/> with @many=false
Predicate	<property/> has a single <value/> child element
Prescription Level	Mandatory
Tags	"component" "property" "value" "many"

719

720

Assertion ID	ASM-TA-5037
Source	[ASM50033]
Target	<property/> element of a <component/> element within a <composite/>, with a value specified by a @value attribute
Prerequisites	
Predicate	<property/> has no <value/> child elements
Prescription Level	Mandatory
Tags	"component" "property" "value"

721

722

Assertion ID	ASM-TA-5038
Source	[ASM50034]
Target	<reference/> element of a <component/> element within a <composite/>
Prerequisites	<p>a) <composite/> contains at least 2 distinct valid target services for the <reference/></p> <p>b) <composite/> contains a <wire/> element with @source set to the <reference/> of the <component/> and @target set to one valid target service for the <reference/> ("serviceA")</p> <p>c) <wire/> element has @replace=true</p> <p>d) <reference/> has @target attribute containing a single entry declaring a different target service ("serviceB")</p>
Predicate	<reference/> is wired to serviceA and is not wired to serviceB

Prescription Level	Mandatory
Tags	"component" "reference" "wire" "replace" "target"

723

724

Assertion ID	ASM-TA-5039
Source	[ASM50035]
Target	<property/> element of <component/>
Prerequisites	a) The <property/> element has a @type attribute declared
Predicate	<property/> element does not have an @element attribute declared
Prescription Level	Mandatory
Tags	"component" "property" "type" "element"

725

726

Assertion ID	ASM-TA-5040
Source	[ASM50035]
Target	<property/> element of <component/>
Prerequisites	a) The <property/> element has a @element attribute declared
Predicate	<property/> element does not have an @type attribute declared
Prescription Level	Mandatory
Tags	"component" "property" "type" "element"

727

728

Assertion ID	ASM-TA-5041
Source	[ASM50036] [ASM50038]
Target	<property/> element of <component/>
Prerequisites	<property/> element declares a type
Predicate	The type declared for the <property/> element is the same as the type declared for the corresponding <property/> in the <componentType/> of the <implementation/>
Prescription Level	Mandatory
Tags	"component" "property" "type" "component type"

729

730

Assertion ID	ASM-TA-5042
Source	[ASM50037]
Target	@name attribute of a <property/> element of <component/>
Prerequisites	<component/> has an <implementation/>
Predicate	@name attribute matches the @name attribute of one of the <property/> elements of the <componentType/> of the <implementation/>
Prescription Level	Mandatory
Tags	"component" "property" "name" "componentType"

731

732

Assertion ID	ASM-TA-5043
Source	[ASM50006]
Target	<callback/> subelement of a <service/> subelement of a <component/>
Prerequisites	<callback/> element has set of one or more <binding/> subelements
Predicate	For a given callback target, one of the set of <binding/> subelements is used for the callback operations.
Prescription Level	Mandatory
Tags	"component" "service" "callback" "binding"

733

734

Assertion ID	ASM-TA-5045
Source	[ASM50038]
Target	<property/> element of a <component/>
Prerequisites	a) property element declares a type b) property element has a @source attribute which gets the value for the property from a <composite/> <property/> element c) @source attribute value does not involve a subelement of the composite property
Predicate	The type of the <property/> element is compatible with the type of the composite property element
Prescription Level	Mandatory
Tags	"component" "property" "type" "source" "compatible"

735

736

Assertion ID	ASM-TA-5046
Source	[ASM50038]
Target	<property/> element of a composite used as an implementation by a component
Prerequisites	a) property element declares a type b) component using the composite as an implementation has a <property/> element which also declares a type
Predicate	The type of the composite <property/> element is compatible with the type of the component property element
Prescription Level	Mandatory
Tags	"composite" "implementation" "property" "type" "compatible"

737

738

Assertion ID	ASM-TA-5047
Source	[ASM50042]
Target	<reference/> of a component
Prerequisites	a) multiplicity either 0..1 or 1..1 b) reference/@nonOverridable="true"
Predicate	<reference/> is not promoted by a composite reference
Prescription Level	Mandatory
Tags	"component" "reference" "nonOverridable" "promote"

739

740

Assertion ID	ASM-TA-5048
Source	[ASM50043]
Target	<reference/> of a component
Prerequisites	a) reference does not declare @autowire attribute b) component containing the reference declares an @autowire="true" attribute c) reference is not wired by its @target attribute, is not wired by a binding element and is not promoted by any composite reference d) composite containing the component contains one target service compatible with the reference

Predicate	<reference/> is wired to the target service and can invoke the service
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "inherit"

741

742

Assertion ID	ASM-TA-5049
Source	[ASM50043]
Target	<reference/> of a component
Prerequisites	<p>a) reference does not declare @autowire attribute</p> <p>b) component containing the reference does not declare an @autowire attribute</p> <p>c) composite containing the component does declare an @autowire="true" attribute</p> <p>d) reference is not wired by its @target attribute, is not wired by a binding element and is not promoted by any composite reference</p> <p>e) composite containing the component contains one target service compatible with the reference</p>
Predicate	<reference/> is wired to the target service and can invoke the service
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "inherit" "composite"

743

744

Assertion ID	ASM-TA-5050
Source	[ASM50044]
Target	<property/> element of a component
Prerequisites	<p>a) property has @many="true"</p> <p>b) property has multiple values set</p>
Predicate	<property/> element contains all the multiple values set for that property
Prescription Level	Mandatory
Tags	"component" "property" "many" "multiple" "values"

745

746

Assertion ID	ASM-TA-5051
--------------	-------------

Source	[ASM50045]
Target	@file attribute of a <property/> element of a <component/>
Prerequisites	
Predicate	@file attribute contains a dereferenceable URI to a file which contains the value for the property
Prescription Level	Mandatory
Tags	"component" "property" "file" "dereferenceable URI"

747

748

Assertion ID	ASM-TA-5052
Source	[ASM50046]
Target	file which is referenced by the @file attribute of a component <property/> element
Prerequisites	property has a type that is a simple XML type property is single valued
Predicate	file contains an <sca:values/> element with one <sca:value/> subelement containing a string with the value for the property
Prescription Level	Mandatory
Tags	"component" "property" "file" "value" "values" "simple"

749

750

Assertion ID	ASM-TA-5053
Source	[ASM50046]
Target	file which is referenced by the @file attribute of a component <property/> element
Prerequisites	property has a type that is a complex XML type property is multi valued
Predicate	file contains an <sca:values/> element with one or more <sca:value/> subelements OR one or more global elements where the type of the <value/> elements OR the global elements matches the type of the <property/> element
Prescription Level	Mandatory
Tags	"component" "property" "file" "value" "values" "complex"

751

752 **A.4. Test Assertions for SCA Assembly Specification Section 5**

753

Assertion ID	ASM-TA-6001
Source	"Compatible Interfaces" section of specification
Target	2 interfaces defined by <interface.xxx/> elements (in any location in SCDL files) – called InterfaceA and InterfaceB
Prerequisites	<ol style="list-style-type: none"> 1) (InterfaceA is remotable AND InterfaceB is remotable) OR (InterfaceA is local AND InterfaceB is local) 2) The number of operations and each of their names is the same in InterfaceA and InterfaceB 3) Each operation in InterfaceA has the same parameter types, same parameter order, same return value type and same set of fault/exception types as the operation with the same name in InterfaceB 4) Other specified SCA attributes of InterfaceA match the specified SCA attributes of InterfaceB
Predicate	InterfaceA is compatible with InterfaceB
Prescription Level	Mandatory
Tags	"interface" "compatible"

754

755

756

Assertion ID	ASM-TA-6002
Source	"Compatible Superset" section of specification
Target	2 interfaces defined by <interface.xxx/> elements (in any location in SCDL files) – called InterfaceA and InterfaceB
Prerequisites	<ol style="list-style-type: none"> 1) (InterfaceA is remotable AND InterfaceB is remotable) OR (InterfaceA is local AND InterfaceB is local) 2) All of the operations in Interface A are present in InterfaceB 3) Each operation in InterfaceA has the same parameter types, same parameter order, same return value type and same set of fault/exception types as the operation with the same name in InterfaceB 4) Other specified SCA attributes of InterfaceA match the specified SCA attributes of InterfaceB
Predicate	InterfaceB is compatible superset of InterfaceA
Prescription Level	Mandatory
Tags	"interface" "compatible"

--	--

757

758

Assertion ID	ASM-TA-6003
Source	"Compatible Subset" section of specification
Target	2 interfaces defined by <interface.xxx/> elements (in any location in SCDL files) – called InterfaceA and InterfaceB
Prerequisites	<p>1) (InterfaceA is remotable AND InterfaceB is remotable) OR (InterfaceA is local AND InterfaceB is local)</p> <p>2) All of the operations in InterfaceB are present in InterfaceA</p> <p>3) Each operation in InterfaceB has the same parameter types, same parameter order, same return value type and same set of fault/exception types as the operation with the same name in InterfaceA</p> <p>4) Other specified SCA attributes of InterfaceA match the specified SCA attributes of InterfaceB</p>
Predicate	InterfaceB is compatible subset of InterfaceA
Prescription Level	Mandatory
Tags	"interface" "compatible"

759

760

Assertion ID	ASM-TA-6004
Source	[ASM60001]
Target	@name attribute of a <composite/> element
Prerequisites	Multiple <composite/> elements exist in the same namespace
Predicate	@name attribute is not the same as the @name attribute of any other <composite/> element in the same namespace
Prescription Level	Mandatory
Tags	"composite" "name"

761

762

Assertion ID	ASM-TA-6005
Source	[ASM60002]
Target	<component/> child elements of a <composite/> element with @local="true"

Prerequisites	<composite/> element has multiple <component/> child elements that can run in separate operating system processes
Predicate	All the components run in the same operating system process
Prescription Level	Mandatory
Tags	"composite" "component" "local"

763

764

765

Assertion ID	ASM-TA-6006
Source	[ASM60003]
Target	@name attribute of a <service/> element of a <composite/> element
Prerequisites	<composite/> has multiple <service/> child elements
Predicate	@name attribute of <service/> element is unique across all the <service/> child elements of the <composite/>
Prescription Level	Mandatory
Tags	"composite" "service" "name"

766

767

Assertion ID	ASM-TA-6007
Source	[ASM60004]
Target	@promote attribute of <service/> element of a <composite/> element
Prerequisites	<composite/> contains a child <component/> offering a <service/>
Predicate	@promote attribute has a value which identifies a service of one of the <component/> elements in the <composite/>
Prescription Level	Mandatory
Tags	"composite" "service" "promote"

768

769

Assertion ID	ASM-TA-6008
Source	[ASM60005]
Target	<interface/> child element of a <service/> element of a <composite/>
Prerequisites	<service/> element promotes a service of a <component/> in the <composite/>

Predicate	<interface/> declares an interface which is a compatible subset of the interface declared by the promoted <component/> <service/>, as defined in ASM-TA-6003
Prescription Level	Mandatory
Tags	"composite" "service" "promote""interface"

770

771

772

Assertion ID	ASM-TA-6009
Source	[ASM60006]
Target	@name attribute of a <reference/> element of a <composite/> element
Prerequisites	<composite/> has multiple <reference/> child elements
Predicate	@name attribute of <reference/> element is unique across all the <reference/> child elements of the <composite/>
Prescription Level	Mandatory
Tags	"composite" "reference" "name"

773

774

Assertion ID	ASM-TA-6010
Source	[ASM60007]
Target	@promote attribute of <reference/> element of a <composite/> element
Prerequisites	<composite/> contains one or more child <component/> elements with a <reference/>
Predicate	@promote attribute has a value which contains one or more URIs each of which identifies a reference of one of the <component/> elements in the <composite/>
Prescription Level	Mandatory
Tags	"composite" "reference" "promote"

775

776

Assertion ID	ASM-TA-6011
Source	[ASM60008] [ASM60012]
Target	<interface/> child element of a <reference/> element of a <composite/>

Prerequisites	<composite/> contains one or more child <component/> offering a <reference/>
Predicate	<interface/> element declares an interface which is a compatible superset of the interface declared by each of the promoted <component/> <reference/>, as defined in ASM-TA-6002
Prescription Level	Mandatory
Tags	"composite" "reference" "promote" "interface"

777

Assertion ID	ASM-TA-6012
Source	[ASM60008] [ASM60013]
Target	<reference/> element of a <composite/>
Prerequisites	1) <composite contains multiple <component/> child elements which have one or more <reference/> child element 2) <reference/> promotes multiple <component/> <reference/> elements 3) <reference/> element has no <interface/> child element
Predicate	The interfaces declared by each promoted <component/> <reference/> are the same interface
Prescription Level	Mandatory
Tags	"composite" "reference" "promote" "interface"

778

779

Assertion ID	ASM-TA-6013
Source	[ASM60009]
Target	<reference/> element of a <composite/>
Prerequisites	1) <reference/> has @intent attribute declaring one or more intents 2) <reference/> promotes a <component/> <reference/> element which has one or more intents declared on it
Predicate	Intents declared on the <reference/> are not mutually exclusive with the intents declared on the promoted <component/> <reference/>
Prescription Level	Mandatory
Tags	"composite" "reference" "intents" "mutually exclusive"

780

781

Assertion ID	ASM-TA-6014
--------------	-------------

Source	[ASM60010]
Target	@requires attribute of <reference/> element of a <composite/>
Prerequisites	1) @requires declares two or more intents
Predicate	The set of intents declared by the @requires attribute do not contain a pair that are mutually exclusive.
Prescription Level	Mandatory
Tags	"composite" "reference" "intents" "mutually exclusive"

782

783

Assertion ID	ASM-TA-6015
Source	[ASM60011]
Target	@multiplicity attribute of <reference/> element of a <composite/>
Prerequisites	<reference/> promotes a <component/> <reference/> with multiplicity 0..1
Predicate	@multiplicity has a value of 0..1 or a value of 1..1
Prescription Level	Mandatory
Tags	"composite" "reference" "multiplicity"

784

785

Assertion ID	ASM-TA-6016
Source	[ASM60011]
Target	@multiplicity attribute of <reference/> element of a <composite/>
Prerequisites	<reference/> promotes a <component/> <reference/> with multiplicity 1..1
Predicate	@multiplicity has a value of 1..1
Prescription Level	Mandatory
Tags	"composite" "reference" "multiplicity"

786

787

Assertion ID	ASM-TA-6017
Source	[ASM60011]
Target	@multiplicity attribute of <reference/> element of a <composite/>
Prerequisites	<reference/> promotes a <component/> <reference/> with multiplicity 0..n

Predicate	@multiplicity has a value of 0..1 or a value of 1..1 or a value of 0..n or a value of 1..n
Prescription Level	Mandatory
Tags	"composite" "reference" "multiplicity"

788

789

Assertion ID	ASM-TA-6018
Source	[ASM60011]
Target	@multiplicity attribute of <reference/> element of a <composite/>
Prerequisites	<reference/> promotes a <component/> <reference/> with multiplicity 1..n
Predicate	@multiplicity has a value of 1..1 or a value of 1..n
Prescription Level	Mandatory
Tags	"composite" "reference" "multiplicity"

790

791

Assertion ID	ASM-TA-6019
Source	[ASM60014]
Target	@name attribute of <property/> element of a <composite/>
Prerequisites	<composite/> contains multiple <property/> elements
Predicate	@name attribute value is unique amongst the @name attributes of the <property/> elements of the <composite/>
Prescription Level	Mandatory
Tags	"composite" "property" "name"

792

793

Assertion ID	ASM-TA-6020
Source	[ASM60022]
Target	<reference/> with @autowire=true of a <component> within a <composite/>
Prerequisites	<composite/> contains 1 <component/> <service/> that has an interface that is the same as the interface of the <reference/>
Predicate	<reference/> is wired to the <component/> <service/> and can invoke operations on it
Prescription	Mandatory

Level	
Tags	“component” “reference” “autowire”

794

795

796

Assertion ID	ASM-TA-6021
Source	[ASM60022]
Target	<reference/> with @autowire=true of a <component> within a <composite/>
Prerequisites	<composite/> contains 1 <component/> <service/> that has an interface that is a compatible superset of the interface on the <reference/>
Predicate	<reference/> is wired to the component <service/> and can invoke operations on it
Prescription Level	Mandatory
Tags	“component” “reference” “autowire” “compatible interface”

797

798

Assertion ID	ASM-TA-6022
Source	[ASM60024]
Target	<reference/> with @autowire=true and with intents attached using @required, of a <component> within a <composite/>
Prerequisites	<composite/> contains 1 <component/> <service/> that is the same as the interface of the <reference/> and which has the same intents attached to it as are attached to the <reference/>
Predicate	<reference/> is wired to the <component/> <service/> and can invoke operations on it
Prescription Level	Mandatory
Tags	“component” “reference” “autowire” “intents”

799

800

Assertion ID	ASM-TA-6023
Source	[ASM60024]
Target	<reference/> with @autowire=true and with intents attached using @required, of a <component> within a <composite/>
Prerequisites	<composite/> contains 1 <component/> <service/> that is the same as the interface of the <reference/> and which does not have the same intents at-

	tached to it as are attached to the <reference/>
Predicate	<reference/> is not wired to the <component/> <service/> and cannot invoke operations on it
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "intents"

801

802

Assertion ID	ASM-TA-6024
Source	[ASM60025]
Target	<reference/> with @autowire=true and @multiplicity 0..1 of a <component> within a <composite/>
Prerequisites	<composite/> contains 2 or more <component/> <service/> that are compatible with the <reference/>
Predicate	<reference/> is wired to one <component/> <service/> and can invoke operations on it
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "intents"

803

804

Assertion ID	ASM-TA-6025
Source	[ASM60026]
Target	<reference/> with @autowire=true and @multiplicity=0..n of a <component> within a <composite/>
Prerequisites	<composite/> contains 2 or more <component/> <service/> that are compatible with the <reference/>
Predicate	<reference/> is wired to all of the compatible <component> <service/> and can invoke operations on each of them
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "intents"

805

806

807

Assertion ID	ASM-TA-6026
Source	[ASM60027]
Target	<reference/> with @autowire=true and @multiplicity=0..n or 0..1 of a

	<component> within a <composite/>
Prerequisites	<composite/> contains 0 <component/> <service/> that are compatible with the <reference/>
Predicate	<reference/> is not wired but the <component/> runs and can have services invoked on it
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "unwired"

808

809

Assertion ID	ASM-TA-6027
Source	[ASM60028]
Target	<reference/> with @autowire=true and @multiplicity=1..1 or 1..n of a <component> within a <composite/>
Prerequisites	<composite/> contains 0 <component/> <service/> that are compatible with the <reference/>
Predicate	<reference/> is in error (unwired) and an error is reported by the runtime if an attempt is made to invoke service operations on the <component/>
Prescription Level	Mandatory
Tags	"component" "reference" "autowire" "unwired"

810

811

Assertion ID	ASM-TA-6028
Source	[ASM60032]
Target	@promote attribute of <service/> of a <composite/> which is used as the <implementation/> of a higher level <component/>
Prerequisites	<composite/> contains contains at least 1 <component/> offering a <service> with an interface compatible with the interface of the <composite/> <service/>
Predicate	@promote attribute contains the URI of the <component/> <service/>
Prescription Level	Mandatory
Tags	"composite" "service" "promote" "implementation"

812

813

Assertion ID	ASM-TA-6029
Source	[ASM60033]

Target	<reference/> with @multiplicity=1..1 or 1..n of a <component> of a <composite/> which is used as the <implementation/> of a higher level <component/>
Prerequisites	
Predicate	<reference/> is wired to a service within the <composite/> or is promoted by a <composite/> <reference/>
Prescription Level	Mandatory
Tags	"component" "reference" "wire" "promote" "implementation"

814

815

Assertion ID	ASM-TA-6030
Source	[ASM60034]
Target	<property/> of a <component/> in a <composite/> used as the <implementation/> of a higher level <component/>
Prerequisites	<property/> is marked as @mustSupply=true in the componentType of the implementation of the lower level <component/>
Predicate	<property/> is given a value either through the @source attribute (from a <composite/> <property/>) or through a value in the <property/> configuration
Prescription Level	Mandatory
Tags	"component" "property" "value" "source"

816

817

Assertion ID	ASM-TA-6031
Source	[ASM60030]
Target	@name attribute of <implementation.composite/> element
Prerequisites	
Predicate	@name attribute contains the QName of a <composite/> in the Domain
Prescription Level	Mandatory
Tags	"implementation.composite" "name" "composite"

818

819

Assertion ID	ASM-TA-6032
Source	[ASM60031]
Target	SCA runtime

Prerequisites	a) <composite/> contains an <include/> element referencing a second <composite> b) including the second composite into the first one creates an invalid <composite/> configuration (eg two <component/> elements have the same @name value)
Predicate	SCA runtime reports an error
Prescription Level	Mandatory
Tags	"component" "property" "value" "source"

820

821

Assertion ID	ASM-TA-6033
Source	[ASM60035]
Target	<reference/> of <composite>
Prerequisites	a) <reference/> promotes 2 or more <component> <reference>s b) one promoted <component/> <reference/> has @wiredByImpl set
Predicate	all the <component/> <reference/> elements promoted by the <reference/> have the same value for their @wiredByImpl attribute
Prescription Level	Mandatory
Tags	"composite" "reference" "promote" "wiredByImpl"

822

Assertion ID	ASM-TA-6034
Source	[ASM60036]
Target	@wiredByImpl attribute of <reference/> of <composite/>
Prerequisites	a) <reference/> promotes one or more <component/> <reference/>
Predicate	@wiredByImpl attribute value is the same as the @wiredByImpl value of the promoted <component/> <reference/>s
Prescription Level	Mandatory
Tags	"component" "reference" "promote" "wiredByImpl"

823

Assertion ID	ASM-TA-6035
Source	[ASM60037]
Target	@promote attribute of a <reference/> of <composite/>
Prerequisites	a) <composite/> contains an <include/> element referencing a second

	<p><composite/></p> <p>b) @promote attribute contains a URI pointing to a <component/> <reference/> which is contained in the second <composite/></p>
Predicate	The <reference/> promotes the <component/> <reference/> contained in the second <composite/>
Prescription Level	Mandatory
Tags	"component" "reference" "promote" "include"

824

Assertion ID	ASM-TA-6036
Source	[ASM60038]
Target	@promote attribute of a <service/> of <composite/>
Prerequisites	<p>a) <composite/> contains an <include/> element referencing a second <composite/></p> <p>b) @promote attribute contains a URI pointing to a <component/> <service/> which is contained in the second <composite/></p>
Predicate	The <service/> promotes the <component/> <service/> contained in the second <composite/>
Prescription Level	Mandatory
Tags	"component" "service" "promote" "include"

825

Assertion ID	ASM-TA-6037
Source	[ASM60039]
Target	<wire/> element of <composite/>
Prerequisites	<p>a) <composite/> contains an <include/> element referencing a second <composite/></p> <p>b) @source attribute of <wire/> contains a URI pointing to a <component/> <reference/> which is contained in the second <composite/></p> <p>c) @target attribute of <wire/> contains a URI pointing to a <component/> <service/> which is contained in the second <composite/></p>
Predicate	The <wire/> successfully wires the <component> <reference/> to the <component/> <service/> and the reference is able to invoke an operation of the service.
Prescription Level	Mandatory
Tags	"composite" "wire" "include"

826

827

Assertion ID	ASM-TA-6038
Source	[ASM60040]
Target	<property/> element of <composite/>
Prerequisites	a) The <property/> element has a @type attribute declared
Predicate	<property/> element does not have an @element attribute declared
Prescription Level	Mandatory
Tags	"composite" "property" "type" "element"

828

829

Assertion ID	ASM-TA-6039
Source	[ASM60040]
Target	<property/> element of <composite/>
Prerequisites	a) The <property/> element has a @element attribute declared
Predicate	<property/> element does not have an @type attribute declared
Prescription Level	Mandatory
Tags	"composite" "property" "type" "element"

830

831

Assertion ID	ASM-TA-6040
Source	[ASM60041]
Target	<composite/> containing an <include/> element which references a second <composite/>
Prerequisites	second <composite/> has @local="true"
Predicate	<composite/> has @local="true"
Prescription Level	Mandatory
Tags	"composite" "local" "include"

832

Assertion ID	ASM-TA-6041
Source	[ASM60042]
Target	@name attribute of <include/> element of <composite/>
Prerequisites	
Predicate	@name attribute value is the QName of a second <composite/> in the SCA

	Domain
Prescription Level	Mandatory
Tags	"composite" "include" "name"

833

834

Assertion ID	ASM-TA-6042
Source	[ASM60043]
Target	interface of a service which is the target of a <wire/> element within a composite
Prerequisites	a) wire @source attribute declares a component reference in the composite b) wire @target attribute declares a component service in the composite c) both the component service and the component reference exist
Predicate	the interface of the service is a compatible superset of the interface of the reference
Prescription Level	Mandatory
Tags	"wire" "target" "source" "interface" "compatible superset"

835

836

Assertion ID	ASM-TA-6043
Source	[ASM60045]
Target	composite used as the implementation of a component
Prerequisites	
Predicate	componentType of the composite is determined according to the rules in the SCA Assembly specification section "Component Type of a Composite used as a Component Implementation"
Prescription Level	Mandatory
Tags	"composite" "implementation" "componentType"

837

838

Assertion ID	ASM-TA-6044
Source	[ASM60046]
Target	Wire declared by the @target attribute of a <reference/> of a component
Prerequisites	a) @target attribute declares a single target using the form "compon-

	ent-name/service-name" b) the component named in the @target attribute offers multiple services, each of which is compatible with the reference c) One of the services of the component named in the @target attribute has the name "service-name"
Predicate	The wire target is the service with the name "service-name" of the component with the name "component-name" and the reference is able to invoke this service.
Prescription Level	Mandatory
Tags	"wire" "target" "service-name" "component-name"

839

840

Assertion ID	ASM-TA-6045
Source	[ASM60047]
Target	Wire declared by the @target attribute of a <reference/> of a component
Prerequisites	a) @target attribute declares a single target using the form "component-name/service-name" b) the component named in the @target attribute does not have a service with the name "service-name" c) the component named in the @target attribute has at least one service which is compatible with the reference
Predicate	The wire is not valid and the SCA runtime raises an error.
Prescription Level	Mandatory
Tags	"wire" "target" "service-name" "component-name" "error"

841

842

Assertion ID	ASM-TA-6046
Source	[ASM60048]
Target	Wire declared by the @target attribute of a <reference/> of a component
Prerequisites	a) @target attribute declares a single target using the form "component-name"
Predicate	component identified by the @target attribute has a single service and this service is compatible with the reference and the reference can invoke this service
Prescription Level	Mandatory
Tags	"wire" "target" "component-name" "single"

843

844

Assertion ID	ASM-TA-6047
Source	[ASM60049]
Target	Wire declared by the @target attribute of a <reference/> of a component
Prerequisites	a) @target attribute declares a single target using the form "component-name/service-name/binding-name" b) the component named in the @target attribute offers a service with the name "service-name" c) the service named "service-name" has multiple bindings, one of which has the name "binding-name"
Predicate	The wire target is the service with the name "service-name" of the component with the name "component-name", and the wire uses the binding with the name "binding-name" and the reference is able to invoke the service.
Prescription Level	Mandatory
Tags	"wire" "target" "component-name" "service-name" "binding-name"

845

846

Assertion ID	ASM-TA-6048
Source	[ASM60050]
Target	Wire declared by the @target attribute of a <reference/> of a component
Prerequisites	a) @target attribute declares a single target using the form "component-name/service-name/binding-name" b) the component named in the @target attribute offers a service with the name "service-name" c) the service named "service-name" does not have a binding with the name "binding-name"
Predicate	The wire is not valid and the SCA runtime raises an error.
Prescription Level	Mandatory
Tags	"wire" "target" "component-name" "service-name" "binding-name"

847

848

Assertion ID	ASM-TA-6049
Source	[ASM60051]
Target	Wire declared by the @target attribute of a <reference/> of a component
Prerequisites	a) @target attribute declares a single target using the form "compon-

	ent-name/service-name" b) the reference has some policy requirements c) the component named in the @target attribute offers a service with the name "service-name" d) the service named "service-name" has multiple <binding/> subelements, one of which is compatible with the policy requirements of the reference
Predicate	The wire is valid and uses the binding which is compatible with the policy requirements of the reference
Prescription Level	Mandatory
Tags	"wire" "target" "component-name" "service-name" "bindings"

849

850 **A.5. Test Assertions for SCA Assembly Specification Section 6**

851

Assertion ID	ASM-TA-8001
Source	[ASM80002]
Target	<interface.xxx/> element
Prerequisites	a) The interface referred to by the <interface.xxx/> element is marked remotable using the language appropriate mechanism. b) The interface referred to by the <interface.xxx/> element has >1 operation.
Predicate	The name of an operation of the interface is not equal to the name of any other operation of the interface.
Prescription Level	Mandatory
Tags	"remotable" "interface.xxx" "Language dependent"

852

853

Assertion ID	ASM-TA-8002
Source	[ASM80003]
Target	<interface.xxx/> element
Prerequisites	a) The interface referred to by the <interface.xxx/> element is marked remotable using the language appropriate mechanism. b) The interface referred to by the <interface/> element has an operation with input parameters.
Predicate	The value of the input parameters of the operation of the interface referred to by the <interface/> element are the same after the operation completes

	as they were before the operation invocation as observable by the client invoking the operation.
Prescription Level	Mandatory
Tags	"remotable" "interface.xxx"

854

855

Assertion ID	ASM-TA-8003
Source	[ASM80003]
Target	<interface.xxx/> element
Prerequisites	a) The interface referred to by the <interface,xxx/> element is marked remotable using the language appropriate mechanism. b) The interface referred to by the <interface/> element has an operation with output parameters.
Predicate	The value of the output parameters of the operation of the interface referred to by the <interface/> element remain constant after the operation invocation has completed, as observable by the service implementation.
Prescription Level	Mandatory
Tags	"remotable"

856

857

Assertion ID	ASM-TA-8004
Source	[ASM80004]
Target	<interface.xxx/> element of a <reference/> element
Prerequisites	The interface referred to by the <interface.xxx/> element is marked bidirectional using the language appropriate mechanism.
Predicate	The invoked service provider can invoke an operation of the callback interface on the client component.
Prescription Level	Mandatory
Tags	"bidirectional" "component reference"

858

859

Assertion ID	ASM-TA-8005
Source	[ASM80005]
Target	<interface.xxx/> element
Prerequisites	a) The interface referred to by the <interface.xxx/> element is marked bid-

	irectional using the language appropriate mechanism. b) The forward interface referred to by the <interface.xxx/> element is marked remotable using the language appropriate mechanism.
Predicate	The callback interface referred to by the <interface.xxx/> element is marked remotable using the language appropriate mechanism.
Prescription Level	Mandatory
Tags	"bidirectional" "remotable" "Language dependent"

860

861

Assertion ID	ASM-TA-8006
Source	[ASM80005]
Target	<interface.xxx/> element
Prerequisites	a) The interface referred to by the <interface.xxx/> element is marked bidirectional using the language appropriate mechanism. b) The forward interface referred to by the <interface.xxx/> element is marked local using the language appropriate mechanism.
Predicate	The callback interface referred to by the <interface.xxx/> element is marked local using the language appropriate mechanism.
Prescription Level	Mandatory
Tags	"bidirectional" "local" "Language dependent"

862

863

Assertion ID	ASM-TA-8007
Source	[ASM80010]
Target	<interface.xxx/> element
Prerequisites	The interface document referred to by the <interface.xxx/> element defines a callback interface using the language appropriate mechanism.
Predicate	The invoked service provider can invoke an operation of the callback interface on the client component.
Prescription Level	Mandatory
Tags	"bidirectional" "component reference"

864

865

Assertion ID	ASM-TA-8008
Source	[ASM80011]

Target	<interface.xxx/> element
Prerequisites	a) The interface document referred to by the <interface.xxx/> element defines a callback interface using the language appropriate mechanism. b) The <interface.xxx/> elements declares a callback interface directly.
Predicate	The callback interface in the interface document is compatible with the callback interface in the <interface.xxx/> element, as defined by ASM-TA-6001
Prescription Level	Mandatory
Tags	"bidirectional"

866

867

Assertion ID	ASM-TA-8009
Source	[ASM50004]
Target	<interface.xxx/> element of a <service/> element of a <component/> element
Prerequisites	The interface of the corresponding <service/> element of the <componentType/> for the <implementation/> of the <component/> declares a callback interface.
Predicate	The <interface.xxx/> element declares a callback interface compatible with the callback interface declared on the corresponding <service/> in the componentType, as asserted by ASM-TA-6001
Prescription Level	Mandatory
Tags	"bidirectional" "component services"

868

869

Assertion ID	ASM-TA-8010
Source	[ASM50011]
Target	<interface.xxx/> element of a <reference/> element of a <component/> element
Prerequisites	The interface of the corresponding <reference/> element of the <componentType/> for the <implementation/> of the <component/> declares a callback interface.
Predicate	The <interface.xxx/> element declares a callback interface compatible with the callback interface declared on the corresponding <reference/> in the componentType, as asserted by ASM-TA-6001
Prescription Level	Mandatory
Tags	"bidirectional" "component references"

870

871

Assertion ID	ASM-TA-8011
Source	[ASM50004] [ASM50011]
Target	<interface.xxx/>element of a <service/> or <reference/> element of a <component/> element
Prerequisites	The interface of the corresponding <service/> or <reference/> element of the <componentType/> element for the <implementation.xxx/> element of the <component/> element does not define a callback interface using the language appropriate mechanism.
Predicate	The <interface.xxx/> element of the <service/> or <reference/> element of the <component/> element does not defines a callback interface.
Prescription Level	Mandatory
Tags	"bidirectional" "component services" component references"

872

873

Assertion ID	ASM-TA-8012
Source	[ASM60005]
Target	<interface.xxx/> element of a <service/> element of a <composite/> element
Prerequisites	The interface of the promoted component <service/> element defines a callback interface.
Predicate	The <interface.xxx/> element declares a callback interface compatible with the callback interface declared on the promoted component <service/> element, as asserted by ASM-TA-6001
Prescription Level	Mandatory
Tags	"bidirectional" "composite services" "promote"

874

875

Assertion ID	ASM-TA-8013
Source	[ASM60012]
Target	<interface.xxx/> element of a <reference/> element of a <composite/> element
Prerequisites	The interface of the promoted component <reference/> element defines a callback interface.
Predicate	The <interface.xxx/> element declares a callback interface compatible with the callback interface declared on the promoted component <reference/>

	element, as asserted by ASM-TA-6001
Prescription Level	Mandatory
Tags	"bidirectional" "composite references" "promote"

876

877

Assertion ID	ASM-TA-8014
Source	[ASM60005] [ASM60012]
Target	<interface.xxx/> element of a <service/> or <reference/> element of a <composite/> element
Prerequisites	The corresponding promoted component <service/> or <reference/> does not define a callback interface.
Predicate	The <interface.xxx/> element does not defines a callback interface.
Prescription Level	Mandatory
Tags	"bidirectional" "composite services" "composite references" "promote"

878

879

Assertion ID	ASM-TA-8015
Source	[ASM80009]
Target	<implementation/> of a <component/> which has a <service/> with an <interface/> which has a callback interface
Prerequisites	One forward operation invocation has been made from a service client component to the service
Predicate	The implementation can invoke an arbitrary number of operations of the callback interface on the client component an arbitrary number (including zero) of times.
Prescription Level	Mandatory
Tags	"bidirectional"

880

881

Assertion ID	ASM-TA-8018
Source	[ASM80008]
Target	<service/> or <reference/> element
Prerequisites	The interface of a <service/> or <reference/> element has required intents.

Predicate	The required intents of the interface apply to the <service/> or <reference/> element using the interface.
Prescription Level	Mandatory
Tags	"intents" "component services" "component references" "composite services" "composite references"

882

883

Assertion ID	ASM-TA-8020
Source	[ASM80001]
Target	@interface attribute of a <interface.wsdl> element
Prerequisites	
Predicate	The @interface attribute references a WSDL 1.1 <portType/>
Prescription Level	Mandatory
Tags	"interface.wsdl" "portType"

884

885

Assertion ID	ASM-TA-8021
Source	[ASM80016]
Target	@callbackInterface of a <interface.wsdl> element
Prerequisites	
Predicate	The @callbackInterface attribute references a WSDL 1.1 <portType/> element
Prescription Level	Mandatory
Tags	"interface.wsdl" "portType"

886

887

Assertion ID	ASM-TA-8022
Source	[ASM80017]
Target	<interface.wsdl/> element
Prerequisites	
Predicate	<interface.wsdl/> element does not contain @remotable="false"
Prescription Level	Mandatory

Tags	"interface.wsdll"portType"
------	----------------------------

888

889 A.6. Test Assertions for SCA Assembly Specification Section 7

890

Assertion ID	ASM-TA-9002
Source	[ASM90001]
Target	The @uri attribute of a <binding /> element of a <reference/> element
Prerequisites	The @uri attribute has a non-default value
Predicate	1) The @uri attribute is the componentName/serviceName of a wire to an endpoint within the SCA Domain. OR 2) The @uri attribute is the address of an endpoint to an accessible service inside or outside the SCA Domain, using the addressing scheme determined by the binding type
Prescription Level	Mandatory
Tags	"binding" "reference" "uri"

891

892

Assertion ID	ASM-TA-9003
Source	[ASM90002]
Target	@name attribute of a <binding /> element in a <service/> or <reference/> element
Prerequisites	The <service/> or <reference/> element has more than one <binding /> element
Predicate	The value of the @name attribute for a <binding /> element must be unique within all the <binding /> elements for each <service/> or <reference/> element
Prescription Level	Mandatory
Tags	"binding" "service" "reference" "name"

893

894

Assertion ID	ASM-TA-9004
Source	[ASM90003]
Target	<binding /> element of a <reference/> element
Prerequisites	<binding/> element does not specify an endpoint using binding specific

	mechanisms
Predicate	<reference/> element has a @uri attribute which resolves to a valid service endpoint
Prescription Level	Mandatory
Tags	"binding" reference" "uri"

895

896

Assertion ID	ASM-TA-9005
Source	[ASM90004]
Target	<reference/> element of a <component/>
Prerequisites	<reference/> element is wired to a target <component/> <service/> in the SCA domain target <service/> has multiple <binding/> subelements, each with an @name attribute declared wire between reference and service uses a specific binding
Predicate	<reference/> element has a @target attribute which has the form "componentName/serviceName/bindingName"
Prescription Level	Mandatory
Tags	"binding" reference" "target"

897

898

Assertion ID	ASM-TA-9006
Source	[ASM90005]
Target	<binding.sca/> subelement of the service of a component
Prerequisites	
Predicate	The <binding.sca/> element has no @uri attribute declared
Prescription Level	Mandatory
Tags	"binding.sca" "@uri"

899

900 **A.7. Test Assertions for SCA Assembly Specification Section 8**

901

Assertion ID	ASM-TA-10001
Source	[ASM10001]

Target	QName of <intent/>, <policySet/>, <binding/>, <bindingType/> or <implementationType/> subelement of a <definitions/> element
Prerequisites	
Predicate	QName is unique amongst all subelements of all <definitions/> elements in the SCA Domain
Prescription Level	Mandatory
Tags	"QName" "Domain" "definitions"

902

903

Assertion ID	ASM-TA-10002
Source	[ASM100002]
Target	<intent/>, <policySet/>, <binding/>, <bindingType/> or <implementationType/> subelement of a <definitions/> element in the SCA Domain
Prerequisites	
Predicate	Element is accessible for reference by any artifact in the SCA Domain
Prescription Level	Mandatory
Tags	"Domain" "SCA" "definitions"

904

905

Assertion ID	ASM-TA-10003
Source	[ASM100003]
Target	definitions.xml file
Prerequisites	Contents of definitions.xml file do not conform to the sca-definitional.xsd schema
Predicate	The SCA runtime rejects the definitions.xml file and raises an error
Prescription Level	Mandatory
Tags	"Domain" "SCA" "definitions.xml" "sca-definitional.xsd" "schema"

906

907 **A.8. Test Assertions for SCA Assembly Specification Section 9**

908

909

Assertion ID	ASM-TA-11001
Source	[ASM11001]

Target	an implementation type
Prerequisites	
Predicate	Meets the requirements for an implementation type defined in the "Implementation Type Documentation Requirements for SCA Assembly Model Version 1.1 Specification"
Prescription Level	Mandatory
Tags	"implementation type" "requirements"

910

911

Assertion ID	ASM-TA-10002
Source	[ASM11002]
Target	<binding/> extension element
Prerequisites	
Predicate	extension element is declared as an element in the substitution group of the sca:binding element
Prescription Level	Mandatory
Tags	"binding extension" "element" "substitution group"

912

913

Assertion ID	ASM-TA-11003
Source	[ASM11003]
Target	<binding/> extension element
Prerequisites	
Predicate	extension element is declared as a type which is an extension of the sca:Binding type
Prescription Level	Mandatory
Tags	"binding extension" "element" "type"

914

915 **A.9. Test Assertions for SCA Assembly Specification Section 10**

916

Assertion ID	ASM-TA-12001
Source	[ASM12001]
Target	SCA contribution

Prerequisites	
Predicate	Artifacts of the contribution are presented as a hierarchy of resources based off a single root
Prescription Level	Mandatory
Tags	"contribution" "resources" "hierarchy"

917

918

Assertion ID	ASM-TA-12002
Source	[ASM12002]
Target	SCA contribution
Prerequisites	
Predicate	Directory with the name META-INF exists at the root of the contribution
Prescription Level	Optional
Tags	"contribution" "META-INF"

919

920

Assertion ID	ASM-TA-12003
Source	[ASM12003]
Target	SCA contribution
Prerequisites	Contribution has a META-INF directory at the root (ASM-TA-12002)
Predicate	Contribution META-INF directory contains a file with the name sca-contribution.xml
Prescription Level	Optional
Tags	"contribution" "META-INF" "sca-contribution.xml"

921

922

Assertion ID	ASM-TA-12005
Source	[ASM12005]
Target	Artifact related declarations of how to resolve artifacts referenced in contribution
Prerequisites	Contribution contains references to artifacts not contained within the contribution but exist elsewhere such as in other contributions
Predicate	Artifacts are resolved using artifact related mechanisms

Prescription Level	Mandatory
Tags	"contribution" "artifact" "resolution"

923

924

Assertion ID	ASM-TA-12006
Source	[ASM12021]
Target	Artifact related declaration of how to resolve an artifact referenced in contribution
Prerequisites	Artifact cannot be found using artifact related mechanisms
Predicate	SCA runtime reports an error
Prescription Level	Mandatory
Tags	"contribution" "artifact" "resolution"

925

926

Assertion ID	ASM-TA-12007
Source	[ASM12006]
Target	Contribution in ZIP packaging format
Prerequisites	
Predicate	SCA runtime accepts contribution
Prescription Level	Mandatory
Tags	"contribution" "ZIP"

927

928

Assertion ID	ASM-TA-12008
Source	[ASM12007]
Target	2 contributions with exported artifacts
Prerequisites	An artifact name exported by one contribution is the same as an artifact name exported by the second contribution
Predicate	All artifact names exported by one contribution are different from any artifact name exported by the second contribution
Prescription Level	Optional
Tags	"contribution" "artifact" "name"

929

930

Assertion ID	ASM-TA-12010
Source	[ASM12009]
Target	Contribution which has dependent contributions from which it resolves artifacts
Prerequisites	2 indirect dependent contributions (ie dependents of dependents) export conflicting artifacts
Predicate	Conflicting dependent contributions are resolved by an entry in the dependent contribution list of the contribution
Prescription Level	Mandatory
Tags	"contribution" "import" "conflict"

931

932

Assertion ID	ASM-TA-12011
Source	[ASM12010]
Target	Contribution contains a reference to an artifact which is marked with a non-SCA artifact resolution mechanism
Prerequisites	
Predicate	Non-SCA artifact resolution mechanism is used to resolve the artifact reference
Prescription Level	Mandatory
Tags	"contribution" "non-SCA" "artifact" "resolution"

933

934

Assertion ID	ASM-TA-12012
Source	[ASM12011]
Target	Contribution contains a reference to an artifact which is marked with a non-SCA artifact resolution mechanism
Prerequisites	Non-SCA artifact resolution mechanism does not resolve the artifact
Predicate	SCA runtime reports an error that it cannot resolve the artifact
Prescription Level	Mandatory
Tags	"contribution" "non-SCA" "artifact" "resolution"

935

936

Assertion ID	ASM-TA-12013
Source	[ASM12012]
Target	<reference/> of a <component/> deployed at the SCA Domain level
Prerequisites	1) <reference/> has no target service configured by any means (no @target attribute, no child <binding/> elements, no @autowire attribute, no <wire/> elements with this reference in the @source attribute) 2) at least one <component/> <service/> is deployed in the Domain that is compatible with the <component/> <reference/> (ie this service is a valid target for a wire from the <component/> <reference/>)
Predicate	The <reference/> remains unwired and as a result cannot be invoked by the <component/> <implementation/>. (The principle here is that the autowire process is NOT used to wire the reference – since @autowire=false for the Domain itself)
Prescription Level	Mandatory
Tags	“Domain” “autowire” “component” “reference”

937

938

Assertion ID	ASM-TA-12014
Source	[ASM12013]
Target	<reference/> with @autowire=true of a <component/> which is deployed to the Domain
Prerequisites	(SCA runtime does not support autowire at the Domain level)
Predicate	<component/> is not deployed to the Domain and an error is reported
Prescription Level	Optional
Tags	“Domain” “autowire” “component” “reference”

939

940

Assertion ID	ASM-TA-12015
Source	[ASM12013]
Target	<reference/> with @autowire=true of a <component/> which is deployed to the Domain
Prerequisites	1) SCA runtime supports autowire at the Domain level 2) SCA Domain contains one <component/> <service/> that is compatible with the <component/> <reference/>
Predicate	<reference/> is wired to the compatible <component/> <service/>
Prescription	Optional

Level	
Tags	"Domain" "autowire" "component" "reference"

941

942

Assertion ID	ASM-TA-12016
Source	[ASM12013]
Target	<reference/> with @autowire=true of a <component/> which is deployed to the Domain
Prerequisites	<ol style="list-style-type: none"> 1) SCA runtime supports autowire at the Domain level 2) SCA runtime only evaluates autowire targets when a component is deployed 3) SCA Domain contains one <component/> <service/> that is compatible with the <component/> <reference/>, when the <component/> <reference/> is deployed 4) An additional <component/> <service/> compatible with the <component/> <reference/> s deployed to the SCA Domain, later than the time when the <component/> <reference/> is deployed.
Predicate	<reference/> wiring remains unchanged when the second <component/> <service/> is deployed
Prescription Level	Optional
Tags	"Domain" "autowire" "component" "reference"

943

944

Assertion ID	ASM-TA-12017
Source	[ASM12013]
Target	<reference/> with @autowire=true of a <component/> which is deployed to the Domain
Prerequisites	<ol style="list-style-type: none"> 1) SCA runtime supports autowire at the Domain level 2) SCA runtime re-evaluates autowire targets when the Domain configuration is updated by deployment actions 3) SCA Domain contains one <component/> <service/> that is compatible with the <component/> <reference/>, when the <component/> <reference/> is deployed 4) An additional <component/> <service/> compatible with the <component/> <reference/> s deployed to the SCA Domain, later than the time when the <component/> <reference/> is deployed. 5) <reference/> has multiplicity 0..n
Predicate	<reference/> wiring is updated when the second <component/> <service/> is deployed and the <reference/> is able to invoke the second <component/> <service/>
Prescription Level	Optional
Tags	"Domain" "autowire" "component" "reference"

--	--

945

946

Assertion ID	ASM-TA-12018
Source	[ASM12014]
Target	<reference/> of <component/> deployed at the SCA Domain level
Prerequisites	1) SCA runtime supports updating of <reference/> targets at runtime 2) New <wire/> element is deployed to the SCA Domain, with @source set to the <component/> <reference/> and @source set to a <component/> <service/> which is compatible with the <component/> <reference/>
Predicate	<reference/> wiring is updated when the <wire/> is deployed and the <reference/> is able to invoke the <component/> <service/> declared by the <wire/> @target attribute.
Prescription Level	Optional
Tags	"Domain" "component" "reference" "wire" "update"

947

948

Assertion ID	ASM-TA-12019
Source	[ASM12015]
Target	<component/> at the SCA domain level
Prerequisites	1) Configuration of the <component/> is updated by a deployment action 2) <component/> has an invocable <service/>
Predicate	Invocation of the <component/> <service/> by a new client after the deployment action is complete reflects the updated configuration of the <component/>
Prescription Level	Mandatory
Tags	"component" "configuration" "update" "Domain"

949

950

Assertion ID	ASM-TA-12020
Source	[ASM12016]
Target	<component/> at the SCA domain level
Prerequisites	1) Configuration of the <component/> is updated by a deployment action 2) Instances of the <component/> are in existence at the time of the deployment action

	3) SCA runtime maintains existing instances with the old configuration after the configuration is updated by the deployment action
Predicate	<component/> instances with the initial configuration continue to exist and to service requests after the deployment action has completed
Prescription Level	Optional
Tags	"component" "configuration" "update" "Domain"

951

952

Assertion ID	ASM-TA-12021
Source	[ASM12016]
Target	<component/> at the SCA domain level
Prerequisites	1) Configuration of the <component/> is updated by a deployment action 2) Instances of the <component/> are in existence at the time of the deployment action 3) SCA runtime stops and discards existing instances with the old configuration after the configuration is updated by the deployment action
Predicate	<component/> instances with the initial configuration are stopped and discarded and cease to service requests after the deployment action has completed
Prescription Level	Optional
Tags	"component" "configuration" "update" "Domain"

953

954

Assertion ID	ASM-TA-12022
Source	[ASM12017]
Target	<reference/> of a <component/> where the reference is wired to the <service/> of a second <component/>
Prerequisites	1) second <component/> is removed by a deployment action 2) <reference/> wire is not the result of the autowire process
Predicate	Invocation of any operation of the <reference/> receives a Service Unavailable fault
Prescription Level	Optional
Tags	"component" "reference" "deployment" "remove" "target"

955

956

Assertion ID	ASM-TA-12023
Source	[ASM12017]
Target	<reference/> of a <component/> where the reference is wired to the <service/> of a second <component/>
Prerequisites	1) second <component/> is removed by a deployment action 2) <reference/> wire is the result of the autowire process 3) SCA runtime supports dynamic rewiring of references 4) a third <component/> exists in the Domain which has a <service/> which is compatible with the <component/> <reference/>
Predicate	After the deployment action is complete, <reference/> becomes wired to the <service/> of the third <component/> and service invocations through the <reference/> result in invocations of the operations of the <service/> of the third <component/>
Prescription Level	Optional
Tags	"component" "reference" "deployment" "remove" "target" "autowire"

957

958

Assertion ID	ASM-TA-12024
Source	[ASM12018]
Target	<component/> <service/> that is the target of a wire
Prerequisites	1) <component/> configuration is updated by a deployment action
Predicate	invocations to the <service/> over that wire that take place after the deployment action is complete use the new configuration of the <component/>
Prescription Level	Preferred
Tags	"component" "service" "deployment" "update" "target"

959

960

Assertion ID	ASM-TA-12025
Source	[ASM12020]
Target	<reference/> with @autowire=true of a <component/> deployed at the Domain level
Prerequisites	1) new <component/> is deployed into the Domain which has a <service/> that is a compatible with the <reference/> 2) SCA runtime supports dynamic update of references
Predicate	target(s) of the <reference/> are dynamically updated so that all invocations of the <reference/> after the deployment of the new <component/> is

	complete can use the <service/> of the new <component/>
Prescription Level	Optional
Tags	"component" "reference" "autowire" "target" "deployment" "dynamic"

961

962

Assertion ID	ASM-TA-12026
Source	[ASM12020]
Target	<reference/> with @autowire=true of a <component/> deployed at the Domain level
Prerequisites	1) new <component/> is deployed into the Domain which has a <service/> that is a compatible with the <reference/> 2) SCA runtime does not support dynamic update of references
Predicate	target(s) of the <reference/> remain unchanged until its <component/> is stopped and restarted - invocation of operations of the <reference/> cannot use the <service/> of the new <component/> until this occurs.
Prescription Level	Optional
Tags	"component" "reference" "autowire" "target" "deployment"

963

964

Assertion ID	ASM-TA-12027
Source	[ASM12022]
Target	a reference to an artifact in a contribution where that artifact is resolved using the SCA import mechanism
Prerequisites	1) the <contribution/> document has multiple <import/> declarations which relate to the namespace of the referenced artifact
Predicate	the search to resolve the artifact is conducted by searching the locations identified by the <import/> declarations in the order in which the <import/> statements appear in the <contribution/> document
Prescription Level	Mandatory
Tags	"contribution" "import" "artifact" "resolution" "multiple"

965

966

Assertion ID	ASM-TA-12028
Source	[ASM12023] [ASM12024]

Target	a reference to an artifact in a contribution where that artifact is resolved using the SCA import mechanism
Prerequisites	1) the <contribution/> document has an <import/> declaration for the namespace of the artifact 2) the location identified by the <import/> declaration contains an instance of the artifact 3) the contribution containing the reference to the artifact also contains an instance of the artifact
Predicate	the artifact reference is resolved to the artifact instance from the location identified by the <import/> declaration
Prescription Level	Mandatory
Tags	"contribution" "import" "artifact" "resolution"

967

968

Assertion ID	ASM-TA-12029
Source	[ASM12023]
Target	a reference to an artifact in a contribution where that artifact is resolved using the SCA import mechanism
Prerequisites	1) the <contribution/> document has an <import/> declaration for the namespace of the artifact 2) the location identified by the <import/> declaration does not contain an instance of the artifact 3) the contribution containing the reference to the artifact also contains an instance of the artifact
Predicate	the artifact reference is resolved to the artifact instance in the contribution which contains the reference
Prescription Level	Mandatory
Tags	"contribution" "import" "artifact" "resolution"

969

970

Assertion ID	ASM-TA-12030
Source	[ASM12026]
Target	a reference to an artifact in a contribution which resolves to an artifact instance in a second contribution
Prerequisites	1) the resolved artifact has references to yet further artifacts 2) both the original contribution and the second contribution have <import/> statements relating to namespace(s) of the additional artifacts

Predicate	the artifact references of the resolved artifact instance are resolved using the <import/> statements of the contribution which contains the artifact instance
Prescription Level	Mandatory
Tags	"contribution" "import" "artifact" "resolution"

971

972

973

Assertion ID	ASM-TA-12031
Source	[ASM12025]
Target	a reference to an artifact in a contribution where that artifact is resolved using the SCA import mechanism
Prerequisites	1) the <contribution/> document has an <import/> declaration for the namespace of the artifact 2) the location identified by the <import/> declaration does not contain an instance of the artifact 3) the contribution containing the reference to the artifact also does not contain an instance of the artifact
Predicate	the artifact references remains unresolved and the SCA runtime reports an error to this effect
Prescription Level	Mandatory
Tags	"contribution" "import" "artifact" "resolution" "unresolved" "error"

974

975

Assertion ID	ASM-TA-12031
Source	[ASM12025]
Target	a reference to an artifact in a contribution where that artifact is resolved using the SCA import mechanism
Prerequisites	1) the <contribution/> document has an <import/> declaration for the namespace of the artifact 2) the location identified by the <import/> declaration does not contain an instance of the artifact 3) the contribution containing the reference to the artifact also does not contain an instance of the artifact
Predicate	the artifact references remains unresolved and the SCA runtime reports an error to this effect
Prescription Level	Mandatory

Tags	"contribution" "import" "artifact" "resolution" "unresolved" "error"
------	--

976

977

Assertion ID	ASM-TA-12032
Source	[ASM12027]
Target	sca-contribution.xml file in an SCA contribution
Prerequisites	sca-contribution.xml file contents do not conform to the sca-contribution.xsd
Predicate	SCA runtime raises an error when it reads the sca-contribution.xml file
Prescription Level	Mandatory
Tags	"sca-contribution.xsd" "sca-contribution.xml"

978

979

Assertion ID	ASM-TA-12034
Source	[ASM12030]
Target	@namespace attribute <export/> element in sca-contribution.xml file in an SCA contribution
Prerequisites	contribution contains one or more XML artifacts
Predicate	@namespace attribute contains the namespace of one or more of the XML artifacts contained in the contribution
Prescription Level	Optional
Tags	"sca-contribution.xsd" "export" "namespace" "artifacts"

980

981

Assertion ID	ASM-TA-12035
Source	[ASM12031]
Target	artifact with dependencies
Prerequisites	<ul style="list-style-type: none"> a) artifact is contained within a first SCA contribution b) artifact is exported from the first contribution c) artifact is used as a dependency by a second artifact in a second contribution, which imports the namespace of the first artifact d) both first contribution and the second contribution contain artifacts that could satisfy the dependencies of the first artifact
Predicate	the artifacts dependencies are resolved within the context of the first contribution

Prescription Level	Mandatory
Tags	"artifact" "resolution" "context" "contribution"

982

983

Assertion ID	ASM-TA-12036
Source	[ASM12034]
Target	Property value of a domain level component
Prerequisites	a) property value is obtained from a domain level <property/> through use of the @source attribute b) value of domain level <property/> element is updated by means of deployment actions c) component is stopped and restarted after the domain level <property/> value has been updated
Predicate	Property value of the domain level component is the same as the new value of the domain level <property/> element
Prescription Level	Mandatory
Tags	"property" "value" "domain" "source" "update"

984

Assertion ID	ASM-TA-12037
Source	[ASM12034]
Target	Property value of a domain level component
Prerequisites	a) property value is obtained from a domain level <property/> through use of the @source attribute b) value of domain level <property/> element is updated by means of deployment actions c) component is not stopped and restarted after the domain level <property/> value has been updated
Predicate	Property value of the domain level component is the same as the new value of the domain level <property/> element
Prescription Level	Optional
Tags	"property" "value" "domain" "source" "update"

985

986

Assertion ID	ASM-TA-12038
Source	[ASM12034]

Target	Contribution containing artifacts
Prerequisites	a) Artifacts are all in installed state b) none of the artifacts in the Contribution are deployed or running c) one of the artifacts in the Contribution contains statically checkable errors
Predicate	The errors in the artifact are not reported and other deployed artifacts continue to run correctly
Prescription Level	Mandatory
Tags	"contribution" "artifacts" "error" "installed"

987

988

Assertion ID	ASM-TA-12039
Source	[ASM12033]
Target	Contribution containing artifacts
Prerequisites	a) one of the artifacts in the Contribution contains statically checkable errors b) artifact containing errors is first deployed and then put into the running state
Predicate	SCA runtime raises an error and does not run the artifact that contains the error
Prescription Level	Mandatory
Tags	"artifacts" "errors" "deployed" "running"

989

990 **A.10. Test Assertions for SCA Assembly Specification Section 11**

991

Assertion ID	ASM-TA-14005
Source	[ASM14005]
Target	SCA Domain and its contents
Prerequisites	The Domain or any of its contents are in error
Predicate	SCA runtime raises an error
Prescription Level	Mandatory
Tags	"domain" "contents" "error"

992

993 **A.11. Test Assertions for SCA Assembly Specification Section 12**

994

Assertion ID	ASM-TA-13001
Source	[ASM13001]
Target	Composite file that violates one or more of the sca-core.xsd, sca-interface-wsdl.xsd, sca-implementation-composite.xsd and sca-binding-sca.xsd schemas.
Prerequisites	
Predicate	SCA runtime rejects the composite file and raises an error
Prescription Level	Mandatory
Tags	“composite” “schema” “error”

995

996

Assertion ID	ASM-TA-13002
Source	[ASM13002]
Target	Contribution file that violates the sca-contribution.xsd schema.
Prerequisites	
Predicate	SCA runtime rejects the contribution file and raises an error
Prescription Level	Mandatory
Tags	“contribution” “schema” “error”

997

998

Assertion ID	ASM-TA-13003
Source	[ASM13003]
Target	definitions file that does not conform to the sca-definitions.xsd schema
Prerequisites	
Predicate	SCA runtime rejects the definitions file and raises an error
Prescription Level	Mandatory
Tags	“composite” “schema” “error”

999

1000

Appendix B. Cross Mapping of Normative Statements to Test Assertions

1001

1002 This section contains a list of normative statements in the SCA Assembly specification and the corresponding Test Assertions.
1003

1004

Conformance statement	Test Assertion
ASM40001	Not testable
ASM40003	ASM-TA-4002
ASM40004	ASM-TA-4003
ASM40005	ASM-TA-4004
ASM40006	ASM-TA-4005
ASM40007	ASM-TA-4006
ASM40008	ASM-TA-4007
ASM40009	ASM-TA-4008
ASM40010	ASM-TA-4009 ASM-TA-4010
ASM40011	ASM-TA-4011
ASM40012	ASM-TA-4012

1005

1006

Conformance statement	Test Assertion
ASM50001	ASM-TA-5005
ASM50002	ASM-TA-5001
ASM50003	ASM-TA-5002
ASM50004	ASM-TA-5006 ASM-TA-8009 ASM-TA-8011
ASM50005	ASM-TA-5007 ASM-TA-5008 ASM-TA-5009
ASM50006	ASM-TA-5043
ASM50007	ASM-TA-5003
ASM50008	ASM-TA-5004
ASM50009	ASM-TA-5010 ASM-TA-5011 ASM-TA-5012

Conformance statement	Test Assertion
	ASM-TA-5013
ASM50010	ASM-TA-5014 ASM-TA-5015
ASM50011	ASM-TA-5016 ASM-TA-8010 ASM-TA-8011
ASM50012	ASM-TA-5017 ASM-TA-5018
ASM50013	ASM-TA-5019 ASM-TA-5020
ASM50014	ASM-TA-5021 ASM-TA-5022 ASM-TA-5023
ASM50015	ASM-TA-5024
ASM50016	Untestable (leave for Bindings specs)
ASM50022	ASM-TA-5027
ASM50025	ASM-TA-5029
ASM50026	ASM-TA-5030
ASM50027	ASM-TA-5031
ASM50028	ASM-TA-5032
ASM50029	ASM-TA-5033
ASM50031	ASM-TA-5034
ASM50032	ASM-TA-5036
ASM50033	ASM-TA-5037
ASM50034	ASM-TA-5038
ASM50035	ASM-TA-5039 ASM-TA-5040
ASM50036	ASM-TA-5041
ASM50037	ASM-TA-5042
ASM50038	ASM-TA-5045 ASM-TA-5046
ASM50039	ASM-TA-5028
ASM50040	ASM-TA-5025 ASM-TA-5027
ASM50041	ASM-TA-5026
ASM50042	ASM-TA-5047

Conformance statement	Test Assertion
ASM50043	ASM-TA-5048 ASM-TA-5049
ASM50044	ASM-TA-5050
ASM50045	ASM-TA-5051
ASM50046	ASM-TA-5052 ASM-TA-5053

1007

1008

Conformance statement	Test Assertion
ASM60001	ASM-TA-6004
ASM60002	ASM-TA-6005
ASM60003	ASM-TA-6006
ASM60004	ASM-TA-6007
ASM60005	ASM-TA-6008 ASM-TA-8012 ASM-TA-8014
ASM60006	ASM-TA-6009
ASM60007	ASM-TA-6010
ASM60008	ASM-TA-6011 ASM-TA-6012
ASM60009	ASM-TA-6013
ASM60010	ASM-TA-6014
ASM60011	ASM-TA-6015 ASM-TA-6016 ASM-TA-6017 ASM-TA-6018
ASM60012	ASM-TA-6011 ASM-TA-8013 ASM-TA-8014
ASM60013	ASM-TA-6012
ASM60014	ASM-TA-6019
ASM60022	ASM-TA-6020 ASM-TA-6021
ASM60024	ASM-TA-6022 ASM-TA-6023
ASM60025	ASM-TA-6024
ASM60026	ASM-TA-6025

Conformance statement	Test Assertion
ASM60027	ASM-TA-6026
ASM60028	ASM-TA-6027
ASM60030	ASM-TA-6031
ASM60031	ASM-TA-6032
ASM60032	ASM-TA-6028
ASM60033	ASM-TA-6029
ASM60034	ASM-TA-6030
ASM60035	ASM-TA-6033
ASM60036	ASM-TA-6034
ASM60037	ASM-TA-6035
ASM60038	ASM-TA-6036
ASM60039	ASM-TA-6037
ASM60040	ASM-TA-6038 ASM-TA-6039
ASM60041	ASM-TA-6040
ASM60042	ASM-TA-6041
ASM60043	ASM-TA-6042
ASM60045	ASM-TA-6043
ASM60046	ASM-TA-6044
ASM60047	ASM-TA-6045
ASM60048	ASM-TA-6046
ASM60049	ASM-TA-6047
ASM60050	ASM-TA-6048
ASM60051	ASM-TA-6049

1009

1010

Conformance statement	Test Assertion
ASM80001	ASM-TA-8020
ASM80002	ASM-TA-8001
ASM80003	ASM-TA-8002 ASM-TA-8003
ASM80004	ASM-TA-8004
ASM80005	ASM-TA-8005 ASM-TA-8006

Conformance statement	Test Assertion
ASM80008	ASM-TA-8018
ASM80009	ASM-TA-8015
ASM80010	ASM-TA-8007
ASM80011	ASM-TA-8008
ASM80016	ASM-TA-8021
ASM80017	ASM-TA-8022

1011

1012

Conformance statement	Test Assertion
ASM90001	ASM-TA-9002
ASM90002	ASM-TA-9003
ASM90003	ASM-TA-9004
ASM90004	ASM-TA-9005
ASM90005	ASM-TA-9006

1013

Conformance statement	Test Assertion
ASM10001	ASM-TA-10001
ASM10002	ASM-TA-10002
ASM00003	ASM-TA-10003

1014

1015

Conformance statement	Test Assertion
ASM11001	ASM-TA-11001
ASM11002	ASM-TA-11002
ASM11003	ASM-TA-11003

1016

1017

Conformance statement	Test Assertion
ASM12001	ASM-TA-12001
ASM12002	ASM-TA-12002
ASM12003	ASM-TA-12003
ASM12005	ASM-TA-12005
ASM12006	ASM-TA-12007
ASM12009	ASM-TA-12010

Conformance statement	Test Assertion
ASM12010	ASM-TA-12011
ASM12011	ASM-TA-12012
ASM12012	ASM-TA-12013
ASM12021	ASM-TA-12006
ASM12022	ASM-TA-12027
ASM12023	ASM-TA-12028 ASM-TA-12029
ASM12024	ASM-TA-12028
ASM12025	ASM-TA-12031
ASM12026	ASM-TA-12030
ASM12027	ASM-TA-12032
ASM12028	Untestable
ASM12030	ASM-TA-12034
ASM12031	ASM-TA-12035
ASM12032	ASM-TA-12038
ASM12033	ASM-TA-12039
ASM12034	ASM-TA-12036 ASM-TA-12037

1018

1019

Conformance statement	Test Assertion
ASM13001	ASM-TA-13001
ASM13002	ASM-TA-13002
ASM13003	ASM-TA-13003

1020

1021

Conformance statement	Test Assertion
ASM14005	ASM-TA-14005

1022
1023
1024

Appendix C. Cross Mapping of Test Assertions to TestCases

Test Assertion	Test Cases
ASM-TA-4002	ASM_4002_TestCase
ASM-TA-4003	ASM_4003_TestCase
ASM-TA-4004	ASM_4004_TestCase
ASM-TA-4005	Untestable - no wiredByImpl implementation type available
ASM-TA-4006	ASM_4005_TestCase
ASM-TA-4007	ASM_4006_TestCase
ASM-TA-4008	ASM_5002_TestCase
ASM-TA-4009	ASM_4007_TestCase
ASM-TA-4010	ASM_4007_TestCase
ASM-TA-4011	ASM_4008_TestCase
ASM-TA-4012	Untestable since no implementation type is required to support @file attribute in componentType

1025

Test Assertion	Test Cases
ASM-TA-5001	ASM_5005_TestCase
ASM-TA-5002	ASM_5006_TestCase
ASM-TA-5003	ASM_5007_TestCase
ASM-TA-5004	ASM_5008_TestCase
ASM-TA-5005	ASM_5009_TestCase
ASM-TA-5006	ASM_5010_TestCase
ASM-TA-5007	ASM_5032_TestCase
ASM-TA-5008	ASM_5033_TestCase
ASM-TA-5009	ASM_5034_TestCase
ASM-TA-5010	ASM_5011_TestCase
ASM-TA-5011	ASM_5012_TestCase
ASM-TA-5012	ASM_5013_TestCase ASM_5014_TestCase
ASM-TA-5013	ASM_5015_TestCase
ASM-TA-5014	Untestable - wiredByImpl
ASM-TA-5015	Untestable - wiredByImpl
ASM-TA-5016	ASM_5016_TestCase
ASM-TA-5017	ASM_5017_TestCase
ASM-TA-5018	ASM_5018_TestCase
ASM-TA-5019	Untestable - wiredByImpl
ASM-TA-5020	Untestable - wiredByImpl
ASM-TA-5021	ASM_5019_TestCase
ASM-TA-5022	ASM_5020_TestCase
ASM-TA-5023	ASM_5021_TestCase

ASM-TA-5024	ASM_5018_TestCase
ASM-TA-5025	ASM_5002_TestCase
ASM-TA-5026	ASM_5003_TestCase
ASM-TA-5027	ASM_5004_TestCase
ASM-TA-5028	ASM_5022_TestCase
ASM-TA-5029	ASM_5023_TestCase
ASM-TA-5030	ASM_5024_TestCase
ASM-TA-5031	ASM_5002_TestCase ASM_5038_TestCase
ASM-TA-5032	ASM_5025_TestCase
ASM-TA-5033	ASM_5026_TestCase
ASM-TA-5034	ASM_5027_TestCase
ASM-TA-5036	ASM_5029_TestCase
ASM-TA-5037	ASM_5030_TestCase
ASM-TA-5038	ASM_5031_TestCase
ASM-TA-5039	ASM_5035_TestCase
ASM-TA-5040	ASM_5035_TestCase
ASM-TA-5041	ASM_5036_TestCase
ASM-TA-5042	ASM_5037_TestCase
ASM-TA-5043	Requires multiple bindings - leave to Bindings TC to devise a test
ASM-TA-5045	ASM_5039_TestCase
ASM-TA-5046	ASM_5025_TestCase ASM_5036_TestCase
ASM-TA-5047	ASM_5040_TestCase
ASM-TA-5048	ASM_5041_TestCase
ASM-TA-5049	ASM_5042_TestCase
ASM-TA-5050	Untestable
ASM-TA-5051	ASM_5043_TestCase ASM_5044_TestCase
ASM-TA-5052	ASM_5043_TestCase
ASM-TA-5053	ASM_5044_TestCase

1026

Test Assertion	Test Cases
ASM-TA-6001	Untestable - interfaces compatible
ASM-TA-6002	Untestable - interfaces - compatible superset
ASM-TA-6003	Untestable - interfaces - compatible subset
ASM-TA-6004	ASM_6001_TestCase
ASM-TA-6005	Untestable - tests that components run local to each other - must be left to an implementation type that supports this capability
ASM-TA-6006	ASM_6002_TestCase
ASM-TA-6007	ASM_6003_TestCase
ASM-TA-6008	ASM_6004_TestCase
ASM-TA-6009	ASM_6005_TestCase

ASM-TA-6010	ASM_6006_TestCase
ASM-TA-6011	ASM_6007_TestCase
ASM-TA-6012	ASM_6008_TestCase
ASM-TA-6013	ASM_6031_TestCase
ASM-TA-6014	ASM_6032_TestCase
ASM-TA-6015	ASM_6009_TestCase
ASM-TA-6016	ASM_6033_TestCase
ASM-TA-6017	ASM_6010_TestCase
ASM-TA-6018	ASM_6011_TestCase
ASM-TA-6019	ASM_6012_TestCase
ASM-TA-6020	ASM_6013_TestCase
ASM-TA-6021	ASM_6014_TestCase
ASM-TA-6022	Untestable due to lack of mandatory support for Intents
ASM-TA-6023	ASM_6016_TestCase
ASM-TA-6024	ASM_6017_TestCase
ASM-TA-6025	ASM_6018_TestCase
ASM-TA-6026	ASM_6019_TestCase
ASM-TA-6027	ASM_6020_TestCase
ASM-TA-6028	ASM_6021_TestCase
ASM-TA-6029	ASM_6022_TestCase
ASM-TA-6030	ASM_6023_TestCase
ASM-TA-6031	ASM_6024_TestCase
ASM-TA-6032	ASM_6025_TestCase
ASM-TA-6033	Untestable - no wiredByImpl implementation
ASM-TA-6034	Untestable - no wiredByImpl implementation
ASM-TA-6035	ASM_6026_TestCase
ASM-TA-6036	ASM_6026_TestCase
ASM-TA-6037	ASM_6027_TestCase
ASM-TA-6038	ASM_6028_TestCase
ASM-TA-6039	ASM_6028_TestCase
ASM-TA-6040	ASM_6029_TestCase
ASM-TA-6041	ASM_6030_TestCase
ASM-TA-6042	ASM_6034_TestCase
ASM-TA-6043	Tests the introspection of componentType for a composite. No specific testcase for this, since almost all the tests in the test suite depend on this introspection and as a result it is heavily tested.
ASM-TA-6044	ASM_6035_TestCase
ASM-TA-6045	ASM_6036_TestCase
ASM-TA-6046	ASM_6037_TestCase
ASM-TA-6047	ASM_6038_TestCase
ASM-TA-6048	ASM_6039_TestCase
ASM-TA-6049	ASM_6040_TestCase

1027

1028

Test Assertion	Test Cases
ASM-TA-8001	Language Dependent
ASM-TA-8002	ASM_8002_TestCase

ASM-TA-8003	Untestable
ASM-TA-8004	ASM_8003_TestCase
ASM-TA-8005	Language Dependent
ASM-TA-8006	Language Dependent
ASM-TA-8007	ASM_8003_TestCase
ASM-TA-8008	ASM_8006_TestCase
ASM-TA-8009	ASM_8007_TestCase
ASM-TA-8010	ASM_8008_TestCase
ASM-TA-8011	ASM_8009_TestCase ASM_8018_TestCase
ASM-TA-8012	ASM_8010_TestCase
ASM-TA-8013	ASM_8011_TestCase
ASM-TA-8014	ASM_8012_TestCase ASM_8017_TestCase
ASM-TA-8015	ASM_8013_TestCase
ASM-TA-8018	ASM_8014_TestCase
ASM-TA-8020	ASM_8015_TestCase
ASM-TA-8021	ASM_8016_TestCase
ASM-TA-8022	ASM_8019_TestCase

1029

1030

Test Assertion	Test Cases
ASM-TA-9002	ASM_9001_TestCase
ASM-TA-9003	ASM_9002_TestCase
ASM-TA-9004	ASM_9003_TestCase
ASM-TA-9005	ASM_9004_TestCase
ASM-TA-9006	ASM_9005_TestCase

1031

1032

Test Assertion	Test Cases
ASM-TA-10001	ASM_10001_TestCase
ASM-TA-10002	ASM_10002_TestCase
ASM-TA-10003	ASM_10003_TestCase

1033

1034

Test Assertion	Test Cases
ASM-TA-11001	Depend on a specific implementation extension type or extension binding type - leave tests for test suite for the implementation / binding type
ASM-TA-11002	
ASM-TA-11003	

1035

Test Assertion	Test Cases
ASM-TA-12001	Untestable, since it is about contribution packaging

	types and only 1 is required to be supported.
ASM-TA-12002	Many testcases are based on the existence of a META-INF directory in one or more contributions.
ASM-TA-12003	Untestable due to there being no formal deployment API that can assure that "runnable composites" are actually run when deployed.
ASM-TA-12005	ASM_12002_TestCase
ASM-TA-12006	ASM_12003_TestCase
ASM-TA-12007	ASM_12004_TestCase
ASM-TA-12010	ASM_12005_TestCase
ASM-TA-12011	ASM_12002_TestCase
ASM-TA-12012	ASM_12003_TestCase
ASM-TA-12013	ASM_12006_TestCase
ASM-TA-12027	ASM_12007_TestCase
ASM-TA-12028	ASM_12008_TestCase
ASM-TA-12029	ASM_12009_TestCase
ASM-TA-12030	ASM_12010_TestCase
ASM-TA-12031	ASM_12011_TestCase
ASM-TA-12032	ASM_12012_TestCase
ASM-TA-12034	Untestable
ASM-TA-12035	ASM_12013_TestCase
ASM-TA-12036	Untestable due to lack of Domain update API
ASM-TA-12037	Untestable due to lack of Domain update API
ASM-TA-12038	Untestable due to lack of deployment API
ASM-TA-12039	Tested by many other tests that contain artifacts in error

1036

1037

Test Assertion	Test Cases
ASM-TA-13001	ASM_13001_TestCase ASM_13002_TestCase ASM_13003_TestCase ASM_13004_TestCase ASM_13005_TestCase ASM_13006_TestCase ASM_13007_TestCase ASM_13008_TestCase
ASM-TA-13002	ASM_12012_TestCase
ASM-TA-13003	ASM_10003_TestCase

1038

1039

Test Assertion	Test Cases
ASM-TA-14005	No specific testcase required since various negative

	tests depend on the runtime raising an error when artifacts are in error.
--	---

1040 **Appendix D. Acknowledgments**

1041 The following individuals have participated in the creation of this specification and are gratefully acknow-
1042 ledged

Participants:

Participant Name	Affiliation
Bryan Aupperle	IBM
Vladislav Bezrukov	SAP AG*
David Booz	IBM
Martin Chapman	Oracle Corporation
Vamsavardhana Reddy Chillakuru	IBM
Mark Combella	Avaya, Inc.
Mike Edwards	IBM
Anish Karmarkar	Oracle Corporation
Ashok Malhotra	Oracle Corporation
Plamen Pavlov	SAP AG*
Eric Wells	Hitachi, Ltd.

1043

1044

Appendix E. Revision History

1045

Revision	Date	Editor	Changes Made
17	2009-04-15	Mike Edwards	Section 4 testcases added
18	2009-04-16	Mike Edwards	Section 7 testcases added Tables of Artifacts added
19	05/04/09	Mike Edwards	Section 8, 9, 10 testcases added
20	05/06/09	Mike Edwards	Section 12 testcases added
21	05/06/09	Mike Edwards	Section 13, 14 testcases added. All sections now covered.
22	05/19/09	Mike Edwards	Most testcases converted to WSDL interfaces
23	06/02/09	Mike Edwards	Added Acknowledgements Added missing descriptions of artifacts Added extra testcases to cover previously untreated Test Assertions
24	06/10/09	Mike Edwards	Added ASM_7010_TestCase Added ASM_8017_TestCase Added ASM_8018_TestCase Added ASM_8019_TestCase Added Namespace and Package Name declarations
25	06/16/09	Mike Edwards	CD01 / Public Review draft 01 All changes accepted, file name changed to match OASIS guidelines.
cd01_rev1	03/08/10	Mike Edwards	Issue 205 - deleted ASM_12001_TestCase Issue 165 - descriptions of ASM_8009_TestCase and ASM_8018_TestCase updated Issue 150 - marked ASM_8004_TestCase as language specific and removed from Assembly test suite (given to Java TC for their test suite)
cd01_rev2	03/10/10	Mike Edwards	Issue 172 - Added new testcase ASM_5038 and associated artifacts
cd01_rev3	04/12/10	Mike Edwards	Issue 159 - Testcases deleted, added and re-assigned to align with latest CD of the Assembly specification Issue 154 Issue 155

			<p>Issue 161</p> <p>Issue 162</p> <p>Issue 163</p> <p>Issue 164</p> <p>Issue 165</p> <p>Issue 166</p> <p>Issue 167</p> <p>Issue 168</p> <p>Issue 169</p> <p>Issue 170</p> <p>Issue 171</p> <p>Issue 172 - Added new testcase ASM_5038_TestCase</p> <p>Issue 173</p> <p>Issue 174</p> <p>Issue 184</p> <p>Issue 185</p> <p>Issue 186</p> <p>Issue 190</p> <p>Issue 191</p> <p>Issue 193</p> <p>Issue 196</p> <p>Issue 197</p> <p>Issue 198</p> <p>Issue 199</p> <p>Issue 202</p> <p>Issue 205</p> <p>Issue 207</p> <p>Issue 208</p> <p>Issue 209</p> <p>Issue 216</p> <p>Issue 219</p> <p>Issue 226</p>
cd01-Rev4	04/19/10	Mike Edwards	Issue 220 - Remove testcase ASM_6015 and associated artifacts (TestComposite29)

			Issue 224
cd01-Rev5	05/18/10	Mike Edwards	Issue 206 Issue 230
cd01-rev6	06/08/10	Bryan Aupperle	Editorial fixes to front matter including links and references
cd02	06/08/10	Mike Edwards	Create CD02 All changes accepted
cd02-rev1	07/20/10	Mike Edwards	Issue 236 - added testcases: ASM_5043_TestCase ASM_5044_TestCase
cd02-rev2	08/10/10	Bryan Aupperle	Issue 150 - removed testcases: ASM_8001_TestCase ASM_8005_TestCase
cd03	10/08/10	Bryan Aupperle	Create CD03 All changes accepted
wd031	05/23/11	Mike Edwards	1) Include the TestAssertions main body as a new Appendix A 2) New Appendix B is the mapping from Normative Statements to TestAssertions from the TestAssertions document 3) New Appendix C is the mapping from Test-Assertions to TestCases moved from Section 3 of the TestCases document - old section 3 is removed 4) Removed the reference to the Test Assertions document from section 1.4 5) Add a reference to the SCA Assembly spec in section 1.4 Add a reference to the Test Assertions Guidelines specification. 6) Modify section 1 to reference the new Appendix A 7) Remove Normative statements no longer in CSD08 specification: 8) Added Conformance statements in Section 4
wd032	05/25/11	Mike Edwards	1) Renumbered testcase section identifiers to match the Assembly spec 2) Renumbered Test Assertion section headers to match Assembly spec 3) Removed test assertions:

			<p>ASM-TA-14001 ASM-TA-14002 ASM-TA-14003 ASM-TA-14004</p> <p>ASM-TA-12008 ASM-TA-12009 ASM-TA-12014 ASM-TA-12015 ASM-TA-12016 ASM-TA-12017 ASM-TA-12018 ASM-TA-12019 ASM-TA-12020 ASM-TA-12021 ASM-TA-12022 ASM-TA-12023 ASM-TA-12024 ASM-TA-12025 ASM-TA-12026 ASM-TA-12033</p> <p>4) Added test assertions</p> <p>ASM-TA-11001 ASM-TA-11002 ASM-TA-11003 ASM-TA-14005</p>
wd033	06/07/11	Mike Edwards	<p>1) Removed ASM-TA-12033 since ASM12029 has been removed from the Assembly spec</p> <p>2) Corrected relationship of ASM-TA-5007 ASM-TA-5008, ASM-TA-5009 to ASM50005 normative statement</p> <p>3) Added cross reference table entries for ASM-TA-12036, ASM-TA-12037, ASM-TA-12038, ASM-TA-12039</p> <p>4) Cleaned the Cross Reference tables to ensure that all entries are present and correct.</p>
wd044	06/14/11	Mike Edwards	All changes accepted - clean copy

1046