



# TestCases for the SCA Assembly Model Version 1.1

## Committee Specification Draft 04

21 June 2011

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#### 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-csd04/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/>.

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# 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. <a href="#">Acknowledgments</a> .....  | 166 |
| Appendix E. <a href="#">Revision History</a> ..... | 167 |

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# 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<br>Test_ASM_4002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite16.composite<br>Service1.wsdl                             |
| Expected output | Negative test:<br>"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<br>Test_ASM_4003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite19.composite<br>Service1.wsdl                                 |
| Expected output | Negative test:<br>"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<br>Test_ASM_4004.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite26.composite                    |
| Expected output | Negative test:<br>"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<br>Test_ASM_4005.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite43.composite<br>Service1.wsdl |
| Expected output | Positive test:<br>"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<br>Test_ASM_4006.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite44.composite<br>Service1.wsdl |
| Expected output | Positive test:<br>"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<br>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<br>Test_ASM_4007.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite45.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_4008.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite46.composite<br>Service1.wsdl                                  |
| Expected output | Negative test:<br>"exception"  |

164

165 **2.2 Section 4**

166 **ASM\_5002\_TestCase**

167

|                 |  |
|-----------------|--|
| Testcase ID     | ASM_5002_TestCase  |
| Test Assertion  | ASM-TA-5025<br>( + ASM-TA-5031 as it uses simple property values)<br>( + 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<br>Test_ASM_5002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>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<br>Test_ASM_5003.composite<br>TestInvocation.wsdl<br>TestClient_5003.composite<br>TestComposite1.composite<br>Service1.wsdl  |
| Expected output | Positive test:<br>"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<br>Test_ASM_5004.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl  |
| Expected output | Negative test:<br>"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<br>Test_ASM_5005.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite2.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_5006.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_5007.composite<br>TestInvocation.wsdlTestClient_0002.composite<br>TestComposite3.composite<br>TestComposite1.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_5008.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite4.composite<br>TestComposite1.composite<br>Service1.wsdl                         |
| Expected output | Negative test:<br>"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<br>Test_ASM_5009.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl               |
| Expected output | Negative test:<br>“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<br>Test_ASM_5010.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite5.composite<br>Service1.wsdl  |
| Expected output | Negative test:<br>“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<br>Test_ASM_5011.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite6.composite<br>ASM_0002_Client.java<br>Service1.wsdl                         |
| Expected output | Positive test:<br>"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<br>Test_ASM_5012.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite7.composite<br>Service1.wsdl  |
| Expected output | Positive test:<br>"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<br>Test_ASM_5013.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>“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<br>Test_ASM_5014.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite  |

|                 |                                       |
|-----------------|---------------------------------------|
|                 | ASM_0002_Client.java<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_5015.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite8.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_5016.composite  |

|                 |  |
|-----------------|--|
|                 | TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite4.composite<br>TestComposite9.composite<br>Service1.wsdl<br>Service1Superset.wsdl |
| Expected output | Positive test:<br>“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<br>Test_ASM_5017.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite10.composite<br>ASM_0002_Client.java<br>Service1.wsdl   |
| Expected output | Positive test:<br>“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<br>Test_ASM_5018.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite10.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_5019.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite7.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_5020.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite7.composite<br>Service1.wsdl  |
| Expected output | Positive test:<br>"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<br>Test_ASM_5021.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite7.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_5022.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite8.composite<br>Service1.wsdl |
| Expected output | Positive test:<br>"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<br>Test_ASM_5023.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite11.composite<br>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<br>Test_ASM_5024.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"exception"  |

248

249

250 **ASM\_5025\_TestCase**

251

|                |   |
|----------------|---|
| Testcase ID    | ASM_5025_TestCase   |
| Test Assertion | ASM-TA-5032<br>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<br>Test_ASM_5025.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite12.composite<br>ASM_0002_Client.java                                      |

|                 |  |
|-----------------|--|
|                 | Service1.wsdl  |
| Expected output | Positive test:<br>“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<br>Test_ASM_5026.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite13.composite<br>Service1.wsdl  |
| Expected output | Positive test:<br>“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<br>Test_ASM_5027.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl |

|                 |                               |
|-----------------|-------------------------------|
| Expected output | Negative test:<br>"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<br>Test_ASM_5029.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite12.composite<br>Service1.wsdl<br>Test_Types.xsd |
| Expected output | Negative test:<br>"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<br>Test_ASM_5030.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite14.composite<br>Service1.wsdl |

|                 |                               |
|-----------------|-------------------------------|
| Expected output | Negative test:<br>"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<br>Test_ASM_5031.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_5032.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite  |

|                 |   |
|-----------------|---|
|                 | TestComposite6.composite<br>TestComposite15.composite<br>Service1.wsdl<br>sca-variables.dtd                                 |
| Expected output | Positive test:<br>"ASM_5032 request service1 operation1 invokedservice2 operation1 in-<br>vokedservice2 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/> subele-<br>ments and the corresponding <service/> element of the<br><componentType/> of the <component/> <implementation/> has no <bind-<br>ing/> subelements, the <component/> <service/> is made available with<br>binding.sca |
| Artifacts       | ASM_5033_TestCase.java<br>Test_ASM_5033.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite6.composite<br>TestComposite1.composite<br>Service1.wsdl  |
| Expected output | Positive test:<br>"ASM_5033 request service1 operation1 invokedservice2 operation1 in-<br>vokedservice2 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<br>Test_ASM_5034.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite6.composite<br>TestComposite1.composite<br>Service1.wsdl<br>sca-variables.dtd |
| Expected output | Positive test:<br>"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<br>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<br>Test_ASM_5035.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite12.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"exception"   |

286

287 **ASM\_5036\_TestCase**

288

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

|                 |   |
|-----------------|---|
|                 |   |
| Test Assertion  | ASM-TA-5041<br>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<br>Test_ASM_5036.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite12.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_5037.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite12.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_5038.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite73.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_5039.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite12.composite<br>TestComposite71.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_5040.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite74.composite<br>Service1.wsdl    |
| Expected output | Negative test:<br>"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<br>Test_ASM_5041.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite8.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_5042.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite8.composite<br>TestComposite1.composite<br>Service1.wsdl  |
| Expected output | Positive test:<br>"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<br>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<br>Test_ASM_5043.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite71.composite<br>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<br>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<br>Test_ASM_5044.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite76.composite<br>TestComposite71.composite  |
| Expected output | Positive test:<br>"ASM_5044 request service1 operation1 invoked Sample first data Altern-<br>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<br>Test_ASM_6001.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite   |

|                 |   |
|-----------------|---|
|                 | TestDuplicate1.composite<br>TestDuplicate2.composite<br>ASM_0002_Client.java<br>Service1.wsdl |
| Expected output | Negative test:<br>“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<br>Test_ASM_6002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite16.composite |
| Expected output | Negative test:<br>“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<br>Test_ASM_6003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite   |

|                 |  |
|-----------------|--|
|                 | TestComposite17.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_6004.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite18.composite   |
| Expected output | Positive test:<br>"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<br>Test_ASM_6005.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite19.composite                                 |
| Expected output | Negative test:<br>"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<br>Test_ASM_6006.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite20.composite<br>TestComposite1.composite     |
| Expected output | Negative test:<br>"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<br>Test_ASM_6007.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite21.composite<br>TestComposite9.composite                                      |
| Expected output | Positive test:<br>"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<br>Test_ASM_6008.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite22.composite<br>TestComposite1.composite  |
| Expected output | Negative test:<br>"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<br>Test_ASM_6009.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite23.composite<br>TestComposite1.composite |
| Expected output | Positive test:<br>"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<br>Test_ASM_6010.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite24.composite<br>TestComposite1.composite |
| Expected output | Positive test:<br>"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<br>Test_ASM_6011.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite25.composite<br>TestComposite1.composite |
| Expected output | Positive test:<br>"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<br>Test_ASM_6012.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite26.composite<br>TestComposite1.composite              |
| Expected output | Negative test:<br>"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<br>Test_ASM_6013.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite27.composite   |
| Expected output | Positive test:<br>"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<br>Test_ASM_6014.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite28.composite  |
| Expected output | Positive test:<br>"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<br>Test_ASM_6016.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite30.composite  |
| Expected output | Negative test:<br>"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<br>Test_ASM_6017.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite8.composite<br>TestComposite1.composite<br>Service1.wsdl                           |
| Expected output | Positive test with 2 alternative outputs:<br><br>"ASM_6017 request service1 operation1 invoked second operation1 invoked"<br><br>"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<br>Test_ASM_6018.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite7.composite<br>TestComposite1.composite<br>Service1.wsdl |
| Expected output | Positive test:<br><br>"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<br>Test_ASM_6019.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite7.composite<br>Service1.wsdl                                   |
| Expected output | Positive test:<br>"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<br>Test_ASM_6020.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite6.composite<br>Service1.wsdl  |
| Expected output | Negative test:<br>"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<br>Test_ASM_6021.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite31.composite |
| Expected output | Negative test:<br>"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<br>Test_ASM_6022.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite32.composite  |
| Expected output | Negative test:<br>"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<br>Test_ASM_6023.composite   |

|                 |   |
|-----------------|---|
|                 | TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite33.composite |
| Expected output | Negative test:<br>"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<br>Test_ASM_6024.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite                     |
| Expected output | Negative test:<br>"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<br>Test_ASM_6025.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite34.composite                         |
| Expected output | Negative test:<br>"exception"  |

398

399 **ASM\_6026\_TestCase**

400

|                 |  |
|-----------------|--|
| Testcase ID     | ASM_6026_TestCase  |
| Test Assertion  | ASM-TA-6035<br>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<br>Test_ASM_6026.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite<br>TestComposite35.composite<br>TestComposite36.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite<br>TestComposite37.composite |
| Expected output | Positive test:<br>"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<br>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<br>Test_ASM_6028.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite     |
| Expected output | Negative test:<br>"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<br>Test_ASM_6029.composite  |



|                 |   |
|-----------------|---|
|                 | TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite4.composite<br>TestComposite38.composite |
| Expected output | Negative test:<br>"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<br>Test_ASM_6030.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite       |
| Expected output | Negative test:<br>"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<br>Test_ASM_6031.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite  |

|                 |   |
|-----------------|---|
|                 | TestComposite1.composite<br>TestComposite39.composite |
| Expected output | Negative test:<br>"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<br>Test_ASM_6032.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestComposite40.composite   |
| Expected output | Negative test:<br>"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<br>Test_ASM_6033.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>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<br>Test_ASM_6034.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite9.composite<br>TestComposite4.composite                               |
| Expected output | Positive test:<br>"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<br>Test_ASM_6035.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite75.composite<br>TestComposite1.composite  |

|                 |  |
|-----------------|--|
| Expected output | Positive test:<br>"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<br>Test_ASM_6036.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite75.composite<br>TestComposite1.composite   |
| Expected output | Negative test:<br>"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<br>Test_ASM_6037.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>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<br>Test_ASM_6038.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite  |
| Expected output | Positive test:<br>"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<br>Test_ASM_6039.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>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<br>Test_ASM_6040.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite  |
| Expected output | Positive test:<br>"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<br>Test_ASM_8002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite52.composite  |

|                 |  |
|-----------------|--|
|                 | TestComposite53.composite<br>Service1.wsdl<br>Service4.wsdl      |
| Expected output | Positive test:<br>"ASM_8002 request service1 operation1 invoked" |

448

449 **ASM\_8003\_TestCase**

450

|                 |   |
|-----------------|---|
| Testcase ID     | ASM_8003_TestCase   |
| Test Assertion  | ASM-TA-8004<br>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<br>Test_ASM_8003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite54.composite<br>TestComposite55.composite<br>Service1.wsdl<br>Service5.wsdl<br>Service5Callback.wsdl  |
| Expected output | Positive test:<br>"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<br>Test_ASM_8006.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite60.composite<br>TestComposite61.composite<br>Service1.wsdl<br>Service9.wsdl<br>Service8Callback.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_8007.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite54.composite<br>TestComposite55.composite<br>Service1.wsdl<br>Service5.wsdl<br>Service5Callback.wsdl<br>Service8Callback.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_8008.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite54.composite<br>TestComposite55.composite<br>Service1.wsdl<br>Service5.wsdl<br>Service5Callback.wsdl<br>Service8Callback.wsdl   |
| Expected output | Negative test:<br>"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<br>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<br>Test_ASM_8009.composite<br>TestInvocation.wsdl  |

|                 |   |
|-----------------|---|
|                 | TestClient_0002.composite<br>TestComposite54.composite<br>TestComposite55.composite<br>Service1.wsdl<br>Service5Callback.java |
| Expected output | Negative test:<br>"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<br>Test_ASM_8010.composite<br>TestInvocation.wsdlTestClient_0002.composite<br>TestComposite54.composite<br>TestComposite63.composite<br>Service1.wsdl<br>Service5.wsdl<br>Service5Callback.wsdl<br>Service8Callback.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_8011.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite62.composite<br>TestComposite55.composite<br>Service5.wsdl<br>Service5Callback.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_8012.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite64.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_8013.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite54.composite<br>TestComposite65.composite<br>Service1.wsdl<br>Service5.wsdl<br>Service5Callback.wsdl |
| Expected output | Positive test:<br>"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<br>Test_ASM_8014.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite4.composite<br>TestComposite66.composite<br>Service1.wsdl<br>Service1_Intent.wsdl |
| Expected output | Positive test:<br>"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<br>Test_ASM_8015.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>TestInvocation.wsdl<br>Service1.wsdl |
| Expected output | Positive test:<br>"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<br>Test_ASM_8016.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite54.composite<br>TestComposite55.composite<br>ASM_0002_Client.java<br>Service1.wsdl<br>Service5.wsdl<br>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<br>Test_ASM_8017.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite64.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_8018.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl<br>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<br>Test_ASM_8019.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_9001.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl |
| Expected output | Positive test:<br>"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<br>Test_ASM_9002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_9003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_9004.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Positive test:<br>"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<br>Test_ASM_9005.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_5002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl<br>ASM_10001/definitions.xml |
| Expected output | Negative test:<br>"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<br>Test_ASM_10002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl<br>General/META-INF/definitions.xml |
| Expected output | Positive test:<br>"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<br>Test_ASM_10003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl<br>ASM_10003/META-INF/definitions.xml |
| Expected output | Negative test:<br>"exception"  |

519

## 520 2.8 Section 10

521

### 522 ASM\_12002\_TestCase

523

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

524

525 **ASM\_12003\_TestCase**

526

|                 |  |
|-----------------|--|
| Testcase ID     | ASM_12003_TestCase   |
| Test Assertion  | ASM-TA-12006<br>ASM-TA-12012   |
| Description     | Tests that where a WSDL document references its schema using @s-<br>chemaLocation attribute (schema artifact specific artifact resolution mech-<br>anism), and that this mechanism fails, then the SCA runtime reports an er-<br>ror |
| Artifacts       | ASM_12003_TestCase.java<br>Test_ASM_12003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1b.wsdl  |
| Expected output | Negative test:<br>"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<br>Test_ASM_12004.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl<br>ASM_12004.zip |
| Expected output | Positive test:<br>"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<br>Test_ASM_12005.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite5.composite (version 1 - contribution = General)<br>TestComposite5.composite (version 2 - contribution = Contribution1)<br>Service1.wsdl  |
| Expected output | Positive test:<br>"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<br>Test_ASM_12006.composite<br>TestClient_0004.composite<br>TestComposite1.composite<br>ASM_0002_Client.java<br>Service1.wsdl  |
| Expected output | Positive test:<br>"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<br>Test_ASM_12007.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite5.composite (version 1 - contribution = General)<br>TestComposite5.composite (version 2 - contribution = Contribution1)<br>Service1.wsdl<br>ASM_12007/META-INF/sca-contribution.xml |
| Expected output | Negative test:<br>"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<br>Test_ASM_12008.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite5a.composite (version 1 - contribution = General)<br>TestComposite5.composite (version 2 - contribution = ASM_12008)<br>Service1.wsdl<br>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<br>Test_ASM_12009.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite66.composite<br>Service1.wsdl<br>Contribution1<br>ASM_12009/META-IF/sca-contribution.xml  |
| Expected output | Positive test:<br>"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<br>Test_ASM_12010.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite   |

|                 |   |
|-----------------|---|
|                 | TestComposite67.composite (Contribution2)<br>TestComposite5.composite (version 1 - contribution = General)<br>TestComposite5.composite (version 2 - contribution = Contribution1)<br>Service1.wsdl<br>ASM_12010/META-IF/sca-contribution.xml<br>Contribution2/META-INF/sca-contribution.xml |
| Expected output | Positive test:<br>"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<br>Test_ASM_12011.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite68.composite<br>Service1.wsdl<br>ASM_12010/META-IF/sca-contribution.xml  |
| Expected output | Negative test:<br>"exception"  |

551

552 **ASM\_12012\_TestCase**

553

|                |   |
|----------------|---|
| Testcase ID    | ASM_12012_TestCase  |
| Test Assertion | ASM-TA-12032<br>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<br>Test_ASM_12012.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite5.composite (version 1 - contribution = General)<br>Service1.wsdl<br>ASM_12012/META-IF/sca-contribution.xml |
| Expected output | Negative test:<br>"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<br>Test_ASM_12013.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite69.composite<br>TestComposite1.composite (version 1 - contribution = General)<br>TestComposite1.composite (version 2 - contribution = ASM_12013)<br>Service1.wsdl<br>Service1.java<br>service1Impl.java<br>ASM_12013/META-IF/sca-contribution.xml   |
| Expected output | Positive test:<br>"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<br>Test_ASM_13001.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_13002.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_13003.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_13004.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br>Test_ASM_13005.composite<br>TestInvocation.wsdl<br>TestComposite1.composite<br>Service1.wsdl  |
| Expected output | Negative test:<br>"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<br>Test_ASM_13006.composite<br>TestClient_0002.composite<br>TestComposite1.composite<br>Service1.wsdl<br>** test.TestInvocation.java **                                      |
| Expected output | Negative test:<br>"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<br>Test_ASM_13007.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>Service1.wsdl |
| Expected output | Negative test:<br>"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<br>Test_ASM_13008.composite<br>TestInvocation.wsdl<br>TestClient_0002.composite<br>Service1.wsdl   |
| Expected output | Negative test:<br>"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<br><i>"Impl Specific"</i>           | <b>Y</b> | 1 service<br>service1Impl  |
| TestComposite2.composite                                     | <b>N</b> | 2 services - with same name<br>0 references<br>service1Impl<br>Contribution: ASM_5005  |
| TestComposite3.composite                                     | <b>N</b> | 1 service,<br>2 references - with same name<br>service1Impl2<br>Contribution: ASM_5007 |
| TestComposite4.composite<br><i>"Impl Specific"</i>           | <b>Y</b> | 1 service,<br>1 reference (1..1)<br>service1Impl2                                      |
| TestComposite5.composite<br><i>"Impl Specific"</i>           | <b>Y</b> | 1 service - interface = Service2<br>0 references<br>service2Impl                       |
| TestComposite6.composite<br><i>"Impl Specific"</i>           | <b>Y</b> | 1 service,<br>1 reference (1..n)<br>service1Impl3                                      |
| TestComposite7.composite<br><i>"Impl Specific"</i>           | <b>Y</b> | 1 service,<br>1 reference (0..n)<br>service1Impl4                                      |
| TestComposite8.composite<br><i>"Impl Specific"</i>           | <b>Y</b> | 1 service,<br>1 reference (0..1)<br>service1Impl6                                      |
| TestComposite9.composite                                     | <b>Y</b> | 1 service - superset interface = Service1Superset                                      |

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

|                           |   |   |
|---------------------------|---|---|
|                           |   | 1 reference (1..1) with interface that is compatible superset of interface of promoted component reference  |
| TestComposite22.composite | Y | 1 service,<br>1 reference (1..1) promotes 2 component references with different interfaces declared (Service1, Service1Superset)<br>uses TestComposite70                            |
| TestComposite23.composite | Y | 1 service,<br>1 reference (1..1) that promotes component reference with (0..1) multiplicity<br>uses TestComposite8  |
| TestComposite24.composite | Y | 1 service,<br>1 reference (0..1) that promotes component reference with (0..n) multiplicity   |
| TestComposite25.composite | Y | 1 service,<br>1 reference (1..1) that promotes component reference with (1..n) multiplicity   |
| TestComposite26.composite | N | 1 service,<br>1 reference,<br>3 properties - all with same name<br>Contributions: ASM_4004, ASM_6012  |
| TestComposite27.composite | Y | 1 service,<br>2 components, one with @autowire="true" reference , one with service with compatible interface  |
| TestComposite28.composite | Y | 1 service,<br>2 components, one with @autowire="true" reference , one with service with superset interface  |
|                           |   |   |
| TestComposite30.composite | N | 1 service,<br>2 components, one with @autowire="true" reference + set of intents, one with service with compatible interface but different set of intents<br>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<br>0 references<br>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<br>Contribution: ASM_6031 |
| TestComposite40.composite | N | 1 service, 1 reference where the reference has @requires containing 2 mutually exclusive intents<br>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<br>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,<br>1 reference,<br>2 properties. 1 property declares its type using the @type attribute (complex type sca:Callback)  |
| TestComposite44.composite | Y | 1 service,<br>1 reference,<br>2 properties. 1 property declares its type using the @element attribute (complex type sca:callback)   |
| TestComposite45.composite | N | 1 service,<br>1 reference,  |

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

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

|   |          |  |
|---|----------|--|
|   |          | Contribution: ASM_8017   |
| TestComposite73.composite<br><i>"Impl Specific"</i> | <b>Y</b> | 1 service<br>0 references<br>1 property of type float  |
| TestComposite74.composite                           | <b>N</b> | 1 service<br>1 reference "Reference1"<br>- reference promotes a component reference with multiplicity 1..1 and @nonOverridable="true"<br>Contribution ASM_5040 |
| TestComposite75.composite                           | <b>Y</b> | 3 services all with interface = Service1<br>0 references<br>0 properties<br>Contribution: General  |
| TestComposite76.composite                           | <b>Y</b> | 1 service<br>0 references<br>1 property multi-valued of complex type typed with @type<br>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<br>2 operations with 1 input, 1 output parameter                    |
| test.Service4.java         | Remotable service interface<br>1 operation with 1 input, 1 output parameter<br>- input parameter is a Java mutable type = List of Strings |
| test.Service5.java         | Remotable service interface with a Callback interface (Service5Callback)<br>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<br>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<br>0 references   |
| test..Service1Impl2.java | 1 service<br>1 reference (1..1)   |
| test.Service1Impl3.java  | 1 service<br>1 reference (1..n)   |
| test.Service1Impl4.java  | 1 service<br>1 reference (0..n)   |
| test.Service1Impl5.java  | 1 service<br>0 references<br>3 properties   |
| test.Service1Impl6.java  | 1 service<br>1 reference (0..1)   |
| test.Service1impl7.java  | 1 service<br>1 reference (1..1) with interface Service4<br>- operation1 method calls reference operation and checks for modification of the input parameter |
| test.Service1Impl8.java  | 1 service<br>1 reference (1..1) - interface Service1Superset  |
| test.Service1Impl9       | 1 service<br>0 references<br>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<br>- 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<br>1 service<br>0 references                          |
| ASM_0002_Client.java           | "Standard" client invocation component<br>1 service<br>1 reference (0..1)         |
| ASM_0003_Client.java           | Client invocation component<br>1 service<br>1 reference (1..n)                    |

### 593 3.4 WSDL Interface Files

594

| Name                  | Description   |
|-----------------------|---|
| Service1.wsdl         | portType = Service1<br>1 operation with 1 input, 1 output parameter   |
| Service1Superset.wsdl | portType = Service1Superset - superset of Service1<br>2 operations - 1 input, 1 output parameter  |
| Service1_Intent.wsdl  | portType = Service1_Intent<br>equivalent to Service1, but with @requires="sca:confidentiality" applied to the port-Type element<br>1 operation with 1 input, 1 output parameter |
| Service1a.wsdl        | Version of Service1.wsdl containing no XML type declarations, but instead containing a @schema-Location 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 @schema-Location attribute, but one which points to an in-                               |

|                       |  |
|-----------------------|--|
|                       | valid file   |
| Service2.wsdl         | 1 service - incompatible with Service1<br>1 operation with 1 input, 1 output parameter   |
| Service4.wsdl         | portType = Service4<br>1 operation with 1 input, 1 output parameter<br>- 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<br>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)<br>1 operation with 1 input and 1 output parameter |
| Service9Callback.wsdl | Callback interface for Service9<br>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

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|                    |   |
|--------------------|---|
| 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

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|              |             |
|--------------|-------------|
| 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"   |

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|                    |  |
|--------------------|--|
| 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

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|              |   |
|--------------|---|
| 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<br>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

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|                    |  |
|--------------------|--|
| 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

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|                    |   |
|--------------------|---|
| 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

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|               |  |
|---------------|--|
| 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"  |

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|                    |  |
|--------------------|--|
| 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**

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|                    |  |
|--------------------|--|
| 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"   |

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|               |   |
|---------------|---|
| 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"  |

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|                    |  |
|--------------------|--|
| 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

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|                    |   |
|--------------------|---|
| 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"  |

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|               |  |
|---------------|--|
| 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

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|                    |  |
|--------------------|--|
| 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

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|                    |  |
|--------------------|--|
| Assertion ID       | ASM-TA-5007  |
| Source             | [ASM50005]   |
| Target             | <service/> element of a <component/> element   |
| Prerequisites      | The <service/> element has no <binding/> elements<br>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<br>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

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|                    |  |
|--------------------|--|
| 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

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|                    |   |
|--------------------|---|
| 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

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|               |   |
|---------------|---|
| 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

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|                    |   |
|--------------------|---|
| 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"                  |

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|                    |  |
|--------------------|--|
| 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

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|                    |   |
|--------------------|---|
| Assertion ID       | ASM-TA-5017   |
| Source             | [ASM50012]  |
| Target             | <reference/> element of a <component/> element  |
| Prerequisites      | a) <reference/> has no <binding/> child elements<br>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<br>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

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|                    |  |
|--------------------|--|
| 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

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|                    |  |
|--------------------|--|
| Assertion ID       | ASM-TA-5021  |
| Source             | [ASM50014]   |
| Target             | <reference/> element of a <component/> element   |
| Prerequisites      | a) <reference/> element has @autowire="true"<br>b) There are multiple valid target services for the reference which satisfy the autowire process.<br>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

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|                    |   |
|--------------------|---|
| Assertion ID       | ASM-TA-5022   |
| Source             | [ASM50014]  |
| Target             | <reference/> element of a <component/> element  |
| Prerequisites      | a) <reference/> element has @autowire="true"<br>b) There are multiple valid target services for the reference which satisfy the autowire process.<br>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"   |

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

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|                    |  |
|--------------------|--|
| Assertion ID       | ASM-TA-5025  |
| Source             | [ASM50040]   |
| Target             | <reference/> element of a <component/> element   |
| Prerequisites      | a) @multiplicity is 1..1<br>b) @target attribute contains a single target service which is a service on a second component in the same <composite/> as the first components<br>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

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|               |  |
|---------------|--|
| 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 &lt;composite/&gt; containing the &lt;component/&gt; 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]<br>[ASM50022]  |
| Target             | <reference/> element of a <component/> element  |
| Prerequisites      | <p>a) @multiplicity is 1..1</p> <p>b) multiple target services exist in the &lt;composite/&gt; containing the &lt;component/&gt; which are compatible with the &lt;reference/&gt;</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

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|                    |  |
|--------------------|--|
| 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"  |

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|                    |   |
|--------------------|---|
| 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<br>b) a <reference/> element of the <composite/> promotes the <reference/> element of the component<br>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

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|                    |   |
|--------------------|---|
| 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"   |

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| 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"  |

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| 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"   |

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| 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"   |

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| 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"  |

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|--------------------|---|
| 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"  |

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|---------------|--|
| Assertion ID  | ASM-TA-5038  |
| Source        | [ASM50034]   |
| Target        | <reference/> element of a <component/> element within a <composite/>   |
| Prerequisites | <p>a) &lt;composite/&gt; contains at least 2 distinct valid target services for the &lt;reference/&gt;</p> <p>b) &lt;composite/&gt; contains a &lt;wire/&gt; element with @source set to the &lt;reference/&gt; of the &lt;component/&gt; and @target set to one valid target service for the &lt;reference/&gt; ("serviceA")</p> <p>c) &lt;wire/&gt; element has @replace=true</p> <p>d) &lt;reference/&gt; 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   |

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

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| 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"                          |

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|--------------------|---|
| 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"                       |

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|--------------------|---|
| Assertion ID       | ASM-TA-5041   |
| Source             | [ASM50036]<br>[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"  |

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|--------------------|---|
| 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"   |

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|--------------------|--|
| 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"   |

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| Assertion ID       | ASM-TA-5045  |
| Source             | [ASM50038]   |
| Target             | <property/> element of a <component/>  |
| Prerequisites      | a) property element declares a type<br>b) property element has a @source attribute which gets the value for the property from a <composite/> <property/> element<br>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"  |

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|--------------------|---|
| 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<br>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"   |

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

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

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

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| 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"   |

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|--------------------|--|
| 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"                              |

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

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|--------------------|--|
| 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"  |

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|--------------------|---|
| 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<br>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"   |

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| 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<br>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"   |

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

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|--------------------|---|
| 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"> <li>1) (InterfaceA is remotable AND InterfaceB is remotable) OR (InterfaceA is local AND InterfaceB is local)</li> <li>2) The number of operations and each of their names is the same in InterfaceA and InterfaceB</li> <li>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</li> <li>4) Other specified SCA attributes of InterfaceA match the specified SCA attributes of InterfaceB</li> </ol> |
| Predicate          | InterfaceA is compatible with InterfaceB  |
| Prescription Level | Mandatory   |
| Tags               | "interface" "compatible"  |

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|--------------------|--|
| 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"> <li>1) (InterfaceA is remotable AND InterfaceB is remotable) OR (InterfaceA is local AND InterfaceB is local)</li> <li>2) All of the operations in Interface A are present in InterfaceB</li> <li>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</li> <li>4) Other specified SCA attributes of InterfaceA match the specified SCA attributes of InterfaceB</li> </ol> |
| Predicate          | InterfaceB is compatible superset of InterfaceA  |
| Prescription Level | Mandatory  |
| Tags               | "interface" "compatible"   |

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|--------------------|---|
| 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      | 1) (InterfaceA is remotable AND InterfaceB is remotable) OR (InterfaceA is local AND InterfaceB is local)<br>2) All of the operations in InterfaceB are present in InterfaceA<br>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<br>4) Other specified SCA attributes of InterfaceA match the specified SCA attributes of InterfaceB |
| Predicate          | InterfaceB is compatible subset of InterfaceA   |
| Prescription Level | Mandatory   |
| Tags               | "interface" "compatible"  |

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| 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"   |

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



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|--------------------|---|
| 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"   |

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|--------------------|--|
| 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"   |

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| 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"   |

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| 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/> |

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| 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"   |

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|--------------------|--|
| 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"   |

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| 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"   |

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

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| 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"  |

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| Assertion ID       | ASM-TA-6012  |
| Source             | [ASM60008]<br>[ASM60013]   |
| Target             | <reference/> element of a <composite/>   |
| Prerequisites      | 1) <composite contains multiple <component/> child elements which have one or more <reference/> child element<br>2) <reference/> promotes multiple <component/> <reference/> elements<br>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"  |

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| Assertion ID       | ASM-TA-6013  |
| Source             | [ASM60009]   |
| Target             | <reference/> element of a <composite/>   |
| Prerequisites      | 1) <reference/> has @intent attribute declaring one or more intents<br>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"   |

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| Assertion ID | ASM-TA-6014 |
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| 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"  |

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| 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"                                   |

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| 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"                                   |

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| 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 |

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| 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"   |

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| 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"                                   |

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| 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"  |

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| 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   |

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| Level |                                    |
| Tags  | “component” “reference” “autowire” |

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| 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”  |

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| 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”  |

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| 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- |

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|                    | 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"  |

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|--------------------|---|
| 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"  |

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|--------------------|---|
| 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"  |

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|--------------|--|
| 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"  |

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|                    |   |
|--------------------|---|
| 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"  |

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|--------------------|--|
| 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"   |

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|--------------|-------------|
| Assertion ID | ASM-TA-6029 |
| Source       | [ASM60033]  |



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|--------------------|---|
| 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"   |

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|--------------------|---|
| 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"   |

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|--------------------|--|
| 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"                      |

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

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|                    |  |
| Prerequisites      | a) <composite/> contains an <include/> element referencing a second <composite><br>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"  |

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|                    |   |
|--------------------|---|
| Assertion ID       | ASM-TA-6033   |
| Source             | [ASM60035]  |
| Target             | <reference/> of <composite>   |
| Prerequisites      | a) <reference/> promotes 2 or more <component> <reference>s<br>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"   |

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|                    |   |
|--------------------|---|
| 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"   |

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

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

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|                    |   |
|--------------------|---|
| Assertion ID       | ASM-TA-6037   |
| Source             | [ASM60039]  |
| Target             | <wire/> element of <composite/>   |
| Prerequisites      | <p>a) &lt;composite/&gt; contains an &lt;include/&gt; element referencing a second &lt;composite/&gt;</p> <p>b) @source attribute of &lt;wire/&gt; contains a URI pointing to a &lt;component/&gt; &lt;reference/&gt; which is contained in the second &lt;composite/&gt;</p> <p>c) @target attribute of &lt;wire/&gt; contains a URI pointing to a &lt;component/&gt; &lt;service/&gt; which is contained in the second &lt;composite/&gt;</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"  |

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|--------------------|--|
| 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"                          |

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|--------------------|---|
| 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"                       |

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|--------------------|--|
| 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" |

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|--------------------|---|
| 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<br>b) wire @target attribute declares a component service in the composite<br>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"  |

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|--------------------|--|
| 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"   |

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|---------------|---|
| 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-   |

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|--------------------|--|
|                    | ent-name/service-name"<br>b) the component named in the @target attribute offers multiple services, each of which is compatible with the reference<br>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"  |

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|--------------------|---|
| 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"<br>b) the component named in the @target attribute does not have a service with the name "service-name"<br>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

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|                    |  |
|--------------------|--|
| 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

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|                    |   |
|--------------------|---|
| 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"<br>b) the component named in the @target attribute offers a service with the name "service-name"<br>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

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|--------------------|--|
| 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"<br>b) the component named in the @target attribute offers a service with the name "service-name"<br>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

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|               |   |
|---------------|---|
| 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"<br>b) the reference has some policy requirements<br>c) the component named in the @target attribute offers a service with the name "service-name"<br>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

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|--------------------|--|
| 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.<br>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

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|               |  |
|---------------|--|
| 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.<br>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"  |

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|                    |   |
|--------------------|---|
| 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.<br>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"   |

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|                    |   |
|--------------------|---|
| 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

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|               |   |
|---------------|---|
| 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.<br>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

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|                    |  |
|--------------------|--|
| 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.<br>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

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|                    |   |
|--------------------|---|
| 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"   |

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|              |             |
|--------------|-------------|
| Assertion ID | ASM-TA-8008 |
| Source       | [ASM80011]  |

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|--------------------|--|
|                    |  |
| 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.<br>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

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|                    |   |
|--------------------|---|
| 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"  |

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|                    |   |
|--------------------|---|
| 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"  |

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|                    |  |
|--------------------|--|
| Assertion ID       | ASM-TA-8011  |
| Source             | [ASM50004]<br>[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"   |

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|                    |   |
|--------------------|---|
| 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

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|               |   |
|---------------|---|
| 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" |

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|                    |   |
|--------------------|---|
| Assertion ID       | ASM-TA-8014   |
| Source             | [ASM60005]<br>[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"                                 |

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|                    |  |
|--------------------|--|
| 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"  |

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|               |   |
|---------------|---|
| 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"          |

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|--------------------|--|
| 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"                                |

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|--------------------|--|
| 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"  |

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|--------------------|---|
| 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

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|--------------------|---|
| 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.<br><br>OR<br>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"   |

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|--------------------|---|
| 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"  |

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|---------------|--|
| 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"   |

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|--------------------|---|
| 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<br><br>target <service/> has multiple <binding/> subelements, each with an @name attribute declared<br><br>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"   |

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|--------------------|---|
| 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"                                      |

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

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|--------------|--------------|
| Assertion ID | ASM-TA-10001 |
| Source       | [ASM10001]   |



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|--------------------|--|
| 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"   |

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|--------------------|---|
| 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"  |

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|--------------------|--|
| 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-definitions.xsd" "schema"                    |

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

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|--------------|--------------|
| Assertion ID | ASM-TA-11001 |
| Source       | [ASM11001]   |

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|--------------------|--|
| 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"   |

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|--------------------|--|
| 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"   |

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|--------------------|---|
| 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"  |

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

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

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|--------------------|---|
| 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"  |

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|--------------------|---|
| 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"   |

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|--------------------|--|
| 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"                                   |

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|---------------|--|
| 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   |

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

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|--------------------|---|
| 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"  |

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|--------------------|--------------------------------------|
| 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"                 |

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|--------------------|--|
| 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"   |

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|--------------------|---|
| 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"  |

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|--------------------|---|
| 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"  |

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|--------------------|---|
| 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"  |

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|--------------------|---|
| 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)<br><br>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/>.<br><br>(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”   |

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|--------------------|--|
| 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”  |

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| 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<br>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   |

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

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|--------------------|---|
| 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"> <li>1) SCA runtime supports autowire at the Domain level</li> <li>2) SCA runtime only evaluates autowire targets when a component is deployed</li> <li>3) SCA Domain contains one &lt;component/&gt; &lt;service/&gt; that is compatible with the &lt;component/&gt; &lt;reference/&gt;, when the &lt;component/&gt; &lt;reference/&gt; is deployed</li> <li>4) An additional &lt;component/&gt; &lt;service/&gt; compatible with the &lt;component/&gt; &lt;reference/&gt; s deployed to the SCA Domain, later than the time when the &lt;component/&gt; &lt;reference/&gt; is deployed.</li> </ol> |
| Predicate          | <reference/> wiring remains unchanged when the second <component/> <service/> is deployed   |
| Prescription Level | Optional  |
| Tags               | "Domain" "autowire" "component" "reference"   |

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|--------------------|--|
| 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"> <li>1) SCA runtime supports autowire at the Domain level</li> <li>2) SCA runtime re-evaluates autowire targets when the Domain configuration is updated by deployment actions</li> <li>3) SCA Domain contains one &lt;component/&gt; &lt;service/&gt; that is compatible with the &lt;component/&gt; &lt;reference/&gt;, when the &lt;component/&gt; &lt;reference/&gt; is deployed</li> <li>4) An additional &lt;component/&gt; &lt;service/&gt; compatible with the &lt;component/&gt; &lt;reference/&gt; s deployed to the SCA Domain, later than the time when the &lt;component/&gt; &lt;reference/&gt; is deployed.</li> <li>5) &lt;reference/&gt; has multiplicity 0..n</li> </ol> |
| 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"  |

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| 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<br>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"   |

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|--------------------|--|
| 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<br>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"  |

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|---------------|--|
| 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<br>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"   |

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| 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<br>2) Instances of the <component/> are in existence at the time of the deployment action<br>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"   |

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| 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<br>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"   |

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|--------------------|--|
| 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<br>2) <reference/> wire is the result of the autowire process<br>3) SCA runtime supports dynamic rewiring of references<br>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"  |

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| 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"   |

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|---------------|---|
| 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/><br>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                         |

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

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|--------------------|--|
| 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/><br>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"   |

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|--------------------|---|
| 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"  |

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|--------------|--------------------------|
| Assertion ID | ASM-TA-12028             |
| Source       | [ASM12023]<br>[ASM12024] |

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| 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<br>2) the location identified by the <import/> declaration contains an instance of the artifact<br>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"  |

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| 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<br>2) the location identified by the <import/> declaration does not contain an instance of the artifact<br>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"  |

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|---------------|--|
| 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<br>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"  |

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|--------------------|--|
| 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<br>2) the location identified by the <import/> declaration does not contain an instance of the artifact<br>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"   |

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|--------------------|--|
| 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<br>2) the location identified by the <import/> declaration does not contain an instance of the artifact<br>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" |
|------|--|

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|                    |   |
|--------------------|---|
| 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"                                 |

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|                    |   |
|--------------------|---|
| 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"   |

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

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

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|                    |   |
|--------------------|---|
| 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<br>b) value of domain level <property/> element is updated by means of deployment actions<br>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<br>b) value of domain level <property/> element is updated by means of deployment actions<br>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"   |

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|              |              |
|--------------|--------------|
| Assertion ID | ASM-TA-12038 |
| Source       | [ASM12034]   |

|                    |   |
|--------------------|---|
| Target             | Contribution containing artifacts   |
| Prerequisites      | a) Artifacts are all in installed state<br>b) none of the artifacts in the Contribution are deployed or running<br>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"  |

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|                    |   |
|--------------------|---|
| Assertion ID       | ASM-TA-12039  |
| Source             | [ASM12033]  |
| Target             | Contribution containing artifacts   |
| Prerequisites      | a) one of the artifacts in the Contribution contains statically checkable errors<br>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**

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|                    |  |
|--------------------|--|
| 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**

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|                    |   |
|--------------------|---|
| 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”  |

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|                    |  |
|--------------------|--|
| 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”                                  |

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|                    |  |
|--------------------|--|
| 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”   |

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## 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.

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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<br>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<br>ASM-TA-8009<br>ASM-TA-8011 |
| ASM50005              | ASM-TA-5007<br>ASM-TA-5008<br>ASM-TA-5009 |
| ASM50006              | ASM-TA-5043                               |
| ASM50007              | ASM-TA-5003                               |
| ASM50008              | ASM-TA-5004                               |
| ASM50009              | ASM-TA-5010<br>ASM-TA-5011<br>ASM-TA-5012 |

| Conformance statement | Test Assertion                            |
|-----------------------|---|
|                       | ASM-TA-5013                               |
| ASM50010              | ASM-TA-5014<br>ASM-TA-5015                |
| ASM50011              | ASM-TA-5016<br>ASM-TA-8010<br>ASM-TA-8011 |
| ASM50012              | ASM-TA-5017<br>ASM-TA-5018                |
| ASM50013              | ASM-TA-5019<br>ASM-TA-5020                |
| ASM50014              | ASM-TA-5021<br>ASM-TA-5022<br>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<br>ASM-TA-5040                |
| ASM50036              | ASM-TA-5041                               |
| ASM50037              | ASM-TA-5042                               |
| ASM50038              | ASM-TA-5045<br>ASM-TA-5046                |
| ASM50039              | ASM-TA-5028                               |
| ASM50040              | ASM-TA-5025<br>ASM-TA-5027                |
| ASM50041              | ASM-TA-5026                               |
| ASM50042              | ASM-TA-5047                               |

| Conformance statement | Test Assertion             |
|-----------------------|----------------------------|
| ASM50043              | ASM-TA-5048<br>ASM-TA-5049 |
| ASM50044              | ASM-TA-5050                |
| ASM50045              | ASM-TA-5051                |
| ASM50046              | ASM-TA-5052<br>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<br>ASM-TA-8012<br>ASM-TA-8014                    |
| ASM60006              | ASM-TA-6009  |
| ASM60007              | ASM-TA-6010  |
| ASM60008              | ASM-TA-6011<br>ASM-TA-6012                                   |
| ASM60009              | ASM-TA-6013  |
| ASM60010              | ASM-TA-6014  |
| ASM60011              | ASM-TA-6015<br>ASM-TA-6016<br>ASM-TA-6017<br><br>ASM-TA-6018 |
| ASM60012              | ASM-TA-6011<br>ASM-TA-8013<br>ASM-TA-8014                    |
| ASM60013              | ASM-TA-6012  |
| ASM60014              | ASM-TA-6019  |
| ASM60022              | ASM-TA-6020<br>ASM-TA-6021                                   |
| ASM60024              | ASM-TA-6022<br>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<br>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                |

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| Conformance statement | Test Assertion             |
|-----------------------|----------------------------|
| ASM80001              | ASM-TA-8020                |
| ASM80002              | ASM-TA-8001                |
| ASM80003              | ASM-TA-8002<br>ASM-TA-8003 |
| ASM80004              | ASM-TA-8004                |
| ASM80005              | ASM-TA-8005<br>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<br>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<br>ASM-TA-12037 |

1018

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

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| Conformance statement | Test Assertion |
|-----------------------|----------------|
| ASM14005              | ASM-TA-14005   |

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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<br>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<br>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<br>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<br>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  |

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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<br>ASM_8018_TestCase |
| ASM-TA-8012 | ASM_8010_TestCase                      |
| ASM-TA-8013 | ASM_8011_TestCase                      |
| ASM-TA-8014 | ASM_8012_TestCase<br>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                      |

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| 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 |

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

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| 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   |   |

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| 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  |

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

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| 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. |
|--|---|

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1040 **Appendix D. Acknowledgments**

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

**Participants:**

| <b>Participant Name</b>        | <b>Affiliation</b> |
|--------------------------------|--------------------|
| Bryan Aupperle                 | IBM                |
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| Vamsavardhana Reddy Chillakuru | IBM                |
| Mark Combellack                | Avaya, Inc.        |
| Mike Edwards                   | IBM                |
| Anish Karmarkar                | Oracle Corporation |
| Ashok Malhotra                 | Oracle Corporation |
| Plamen Pavlov                  | SAP AG*            |
| Eric Wells                     | Hitachi, Ltd.      |

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## Appendix E. Revision History

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| 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<br>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<br>Added missing descriptions of artifacts<br>Added extra testcases to cover previously untreated Test Assertions  |
| 24        | 06/10/09   | Mike Edwards | Added ASM_7010_TestCase<br>Added ASM_8017_TestCase<br>Added ASM_8018_TestCase<br>Added ASM_8019_TestCase<br>Added Namespace and Package Name declarations   |
| 25        | 06/16/09   | Mike Edwards | CD01 / Public Review draft 01<br>All changes accepted, file name changed to match OASIS guidelines.   |
| cd01_rev1 | 03/08/10   | Mike Edwards | Issue 205 - deleted ASM_12001_TestCase<br>Issue 165 - descriptions of ASM_8009_TestCase and ASM_8018_TestCase updated<br>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<br>Issue 154<br>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<br/>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<br>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<br>All changes accepted   |
| cd02-rev1 | 07/20/10 | Mike Edwards   | Issue 236 - added testcases:<br>ASM_5043_TestCase<br>ASM_5044_TestCase  |
| cd02-rev2 | 08/10/10 | Bryan Aupperle | Issue 150 - removed testcases:<br>ASM_8001_TestCase<br>ASM_8005_TestCase  |
| cd03      | 10/08/10 | Bryan Aupperle | Create CD03<br>All changes accepted   |
| wd031     | 05/23/11 | Mike Edwards   | 1) Include the TestAssertions main body as a new Appendix A<br>2) New Appendix B is the mapping from Normative Statements to TestAssertions from the TestAssertions document<br>3) New Appendix C is the mapping from Test-Assertions to TestCases moved from Section 3 of the TestCases document<br>- old section 3 is removed<br>4) Removed the reference to the Test Assertions document from section 1.4<br>5) Add a reference to the SCA Assembly spec in section 1.4<br>Add a reference to the Test Assertions Guidelines specification.<br>6) Modify section 1 to reference the new Appendix A<br>7) Remove Normative statements no longer in CSD08 specification:<br>8) Added Conformance statements in Section 4 |
| wd032     | 05/25/11 | Mike Edwards   | 1) Renumbered testcase section identifiers to match the Assembly spec<br>2) Renumbered Test Assertion section headers to match Assembly spec<br>3) Removed test assertions:   |

|       |          |              |   |
|-------|----------|--------------|---|
|       |          |              | <p>ASM-TA-14001<br/> ASM-TA-14002<br/> ASM-TA-14003<br/> ASM-TA-14004</p> <p>ASM-TA-12008<br/> ASM-TA-12009<br/> ASM-TA-12014<br/> ASM-TA-12015<br/> ASM-TA-12016<br/> ASM-TA-12017<br/> ASM-TA-12018<br/> ASM-TA-12019<br/> ASM-TA-12020<br/> ASM-TA-12021<br/> ASM-TA-12022<br/> ASM-TA-12023<br/> ASM-TA-12024<br/> ASM-TA-12025<br/> ASM-TA-12026<br/> ASM-TA-12033</p> <p>4) Added test assertions</p> <p>ASM-TA-11001<br/> ASM-TA-11002<br/> ASM-TA-11003<br/> 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