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# TestCases for the SCA\_J Common Annotations and APIs Version 1.1 Specification

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**Abstract:**

This document defines the TestCases for the SCA Java Common Annotations and APIs 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 Java Common Annotations and APIs Assembly specification.

**Status:**

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

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# 1 Introduction

This document defines the TestCases for the SCA Assembly specification.

The tests described in this document are related to the Test Assertions described in the [SCA Assembly Test Assertions document \[CAA-TA\]](#).

## 1.1 TestCase Structure

The SCA J CAA 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.

### Test Application

Each Test Application consists of one top level SCA Composite file and one or more other SCA Composite files and their associated artifacts (implementations, interface files), plus test client invocation application described above.

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

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

71 The application is structured so that alternative technologies can be used. For example, replacing the  
72 contents of the second-level or third-level composites allows different Java implementation technologies to  
73 be tested – eg POJOs or Spring Application Contexts may be used. Similarly, the binding used to connect  
74 from the top level composite to the client application may be changed from Web services to JMS if  
75 required, simply by changing the binding on the <service/> of the top level composite.

76 Which implementation language to use for test artifacts is controlled by a system variable or environment  
77 variable which is read by the test client application, with the name "OASIS\_TESTENV\_IMPL\_LANG". This  
78 variable can have one of the following values:

- 79 • "POJO" - for Java implementations
- 80 • "Spring" - for Spring implementations

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

## 82 Test Artifacts Organization

83 Note that the design of these testcases promotes reuse of artifacts between testcases, so that many  
84 testcases share components. For example, components implementing simple invocable services are all  
85 implemented using a single parameterized implementation artifact.

86 All the test artifacts are contained in a number of Contributions, which are simply filesystem directories  
87 which are all peers in the filesystem hierarchy. The names of the directories are the names of the  
88 Contributions and the names are significant. The names of Contributions containing implementation type  
89 specific artifacts (such as Java classes) are also specially structured to allow for replacement of one type  
90 of implementation artifact with another.

91 Broadly, Contribution names are as follows:

- 92 • JCA\_nnnn - a contribution that is specific for a particular testcase, where "nnnn" is the number of  
93 the testcase. Often this is required because a particular testcase involves artifacts that contain  
94 errors that are statically checkable - an SCA runtime is permitted to reject such artifacts when  
95 they are contributed and deployed and it is important to ensure that contributions containing  
96 deliberate errors for one testcase do not interfere with the operation of other testcases.
- 97 • JCA\_nnnn\_POJO - a contribution for a specific testcase where there is a need for language  
98 specific artifacts that relate to that testcase alone
- 99 • JCA\_General - a shared contribution containing implementation type independent artifacts that  
100 can be used by many testcases.
- 101 • JCA\_General\_POJO - a shared contribution containing implementation type dependent artifacts  
102 for Java POJOs. These artifacts can include both Java classes and also SCA composites that  
103 directly use Java classes.

104 Note that the names of Contributions containing implementation specific artifacts ends with a name that is  
105 specific to the implementation type - so "\_POJO" is used for Java POJO implementations, "\_Spring" is  
106 used for Spring implementations (and so on). Note that the name following the underscore matches the  
107 name used in the "OASIS\_TESTENV\_IMPL\_LANG" variable used to control execution of the test client.  
108 The concept is that where there is an implementation type specific contribution, each implementation type

109 must provide its own versions of the same basic artifacts. Typically, this means that each contribution  
110 must contain the same set of Composites, but that the implementation type dependent artifacts that these  
111 composites use will differ from implementation type to implementation type.

112 Basically, the setting of the variable is used to select the suffix used for implementation type dependent  
113 contributions. If the variable is set to "POJO" then the contribution "JCA\_General\_POJO" is selected,  
114 whereas if the variable is set to "Spring", the contribution "JCA\_General\_Spring" is selected.

## 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  
130 described 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  
133 RFC 2119, March 1997.  
134 <http://www.ietf.org/rfc/rfc2119.txt>.

135 **[CAA-TA]** SCA\_J Common Annotations and APIs Test Assertions  
136 [http://docs.oasis-open.org/sca-j/sca-j-caa-1.1-test-assertions\\_WD07.pdf](http://docs.oasis-open.org/sca-j/sca-j-caa-1.1-test-assertions_WD07.pdf)

137

## 138 **1.5 Non-normative References**

139 [TBD] [TBD]

140

---

141 **2 TestCases**

142 **2.1 Section 2**

143 **JCA\_2001\_TestCase**

144

Testcase ID	JCA_2001_TestCase
Test Assertion	JCA-TA-2001
Description	Tests that a Java service which is marked remotable does not use method overloading
Artifacts	JCA_2001_TestCase.java Test_JCA_2001.composite TestInvocation.wsdl TestClient_0002.composite Service1Overload.java service1OverloadImpl.java
Expected output	Negative test: "exception"

145

146 **JCA\_2002\_TestCase**

147

Testcase ID	JCA_2002_TestCase
Test Assertion	JCA-TA-2002
Description	Tests that a stateless scoped Java implementation instance is not dispatched on more than a single thread at one time
Artifacts	JCA_2002_TestCase.java Test_JCA_2002.composite TestInvocation.wsdl TestClient_0002.composite Service1.java ParallelService.java parallelServiceClientImpl.java parallelServiceImpl.java
Expected output	Positive test:



	"JCA_2002 request service1 parallel service invocation successful"
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148

149 **JCA\_2003\_TestCase**

150

Testcase ID	JCA_2003_TestCase
Test Assertion	JCA-TA-2003
Description	Tests that an implementation instance annotated with @Scope("STATELESS") is invoked only once through one business method during the lifetime of the implementation instance
Artifacts	JCA_2003_TestCase.java Test_JCA_2003.composite TestInvocation.wsdl TestClient_0002.composite MultipleService.java multipleServiceClientImpl.java multipleServiceImpl.java
Expected output	Positive test: "JCA_2003 request service1 multiple service invocation successful"

151

152 **JCA\_2004\_TestCase**

153

Testcase ID	JCA_2004_TestCase
Test Assertion	JCA-TA-2004
Description	Tests that where there is a Domain-level component implementation marked as COMPOSITE scope, that all its clients appear to interact with a single runtime instance of the class.
Artifacts	JCA_2004_TestCase.java Test_JCA_2004.composite TestInvocation.wsdl TestClient_0002.composite Service1.java service1CoordinatorImpl.java service1Impl2.java

	service1CompositeImpl.java
Expected output	Positive test: "JCA_2004 request serviceCoordinator operation1 invoked service1 operation1 invoked serviceComposite operation1 Initial service2 operation1 invoked serviceComposite operation1 1 service3 operation1 invoked serviceComposite operation1 2 service4 operation1 invoked serviceComposite operation1 3"

154

## 155 JCA\_2005\_TestCase

156

Testcase ID	JCA_2005_TestCase
Test Assertion	JCA-TA-2005
Description	Tests that where a component implementation is marked with COMPOSITE scope and with @EagerInit, that the implementation instance is created and initialized when the component is started.
Artifacts	JCA_2005_TestCase.java Test_JCA_2005.composite TestInvocation.wsdl TestClient_0002.composite Service1.java compositeEagerInitImpl.java service1CompositeImpl.java
Expected output	Positive test: "JCA_2005 request serviceComposite2 operation1 EagerInit called"

157

## 158 JCA\_2006\_TestCase

159

Testcase ID	JCA_2006_TestCase
Test Assertion	JCA-TA-2006
Description	Tests that where a component implementation has a method marked with @Init, that this method is called when the implementation instance is created
Artifacts	JCA_2006_TestCase.java Test_JCA_2006.composite TestInvocation.wsdl TestClient_0002.composite

	Service1.java service1InitCheckerImpl.java service1InitImpl.java
Expected output	Positive test: "JCA_2006 request serviceComposite1 operation1 Init check succeeded"

160

## 161 JCA\_2007\_TestCase

162

Testcase ID	JCA_2007_TestCase
Test Assertion	JCA-TA-2007
Description	Tests that for a Java implementation with COMPOSITE scope, that multiple invocations of service operations which overlap in time can run within a single instance of the implementation on separate Java threads.
Artifacts	JCA_2007_TestCase.java Test_JCA_2007.composite TestInvocation.wsdl TestClient_0002.composite Service1.java ParallelService.java parallelCompositeClientImpl.java parallelCompositeServiceImpl.java
Expected output	Positive test: "JCA_2007 request serviceCompositeClient COMPOSITE service invocation successfully used by multiple threads simultaneously"

163

## 164 JCA\_2008\_TestCase

165

Testcase ID	JCA_2008_TestCase
Test Assertion	JCA-TA-2008
Description	Tests that for a Java implementation class with COMPOSITE scope offering a service, used as the implementation of a component within a composite which is itself the implementation of a Domain level component, all clients of the component service appear to interact with a single instance of the implementation class
Artifacts	JCA_2008_TestCase.java

	Test_JCA_2008.composite TestInvocation.wsdl TestClient_0002.composite CompositeScope.composite Service1.java service1CoordinatorImpl.java service1Impl2.java service1CompositeImpl.java
Expected output	Positive test: "JCA_2008 request serviceComposite operation1 invoked service1 operation1 invoked serviceComposite operation1 Initial service2 operation1 invoked serviceComposite operation1 1 service3 operation1 invoked serviceComposite operation1 2 service4 operation1 invoked serviceComposite operation1 3"

166

167 **JCA\_2009\_TestCase**

168

Testcase ID	JCA_2009_TestCase
Test Assertion	JCA-TA-2011, JCA-TA-10004
Description	Tests that where one component is a client of a service provided by a second component, both with Java implementations and which both run in the same JVM, and the client reference is marked with @AllowsPassByReference but the service implementation methods are not marked with @AllowsPassByReference that invocations of the service use "pass by value" semantics.
Artifacts	JCA_2009_TestCase.java Test_JCA_2009.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service4.java service1Impl7.java service4Impl.java
Expected output	Positive test: "JCA_2009 request service1 operation1 invoked service2 operation1 invoked request+1"

169

170 **JCA\_2010\_TestCase**

171

Testcase ID	JCA_2010_TestCase
Test Assertion	JCA-TA-2011, JCA-TA-10004
Description	Tests that where one component is a client of a service provided by a second component, both with Java implementations and which both run in the same JVM, and the service implementation methods are not marked with @AllowsPassByReference but the client reference is not marked with @AllowsPassByReference that invocations of the service use "pass by value" semantics.
Artifacts	JCA_2010_TestCase.java Test_JCA_2010.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service4.java service1Impl7b.java service4Impl1.java
Expected output	Positive test: "JCA_2010 request service1 operation1 invoked service2 operation1 invoked request+1"

172

173

174 **2.2 Section 3**

175 **JCA\_3001\_TestCase**

176

Testcase ID	JCA_3001_TestCase
Test Assertion	JCA-TA-3001
Description	Tests that a Java Interface class name is fully qualified on a service <interface.java> element
Artifacts	JCA_3001_TestCase.java Test_JCA_3001.composite TestInvocation.wsdl

	TestClient_0002.composite ASM_0002_Client.java Service1.java Service1Impl.java
Expected output	Negative test: "exception"

177

## 178 JCA\_3002\_TestCase

179

Testcase ID	JCA_3002_TestCase
Test Assertion	JCA-TA-3001
Description	Tests that a Java Interface is fully qualified on a reference <interface.java> element
Artifacts	JCA_3002_TestCase.java Test_JCA_3002.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java Service1Impl.java Service1Impl2.java
Expected output	Negative test: "exception"

180

## 181 JCA\_3003\_TestCase

182

Testcase ID	JCA_3003_TestCase
Test Assertion	JCA-TA-3002, JCA-TA-10031
Description	Tests that callback interfaces on a service are specified in their fully qualified form
Artifacts	JCA_3003_TestCase.java Test_JCA_3003.composite TestInvocation.wsdl

	TestClient_0002.composite ASM_0002_Client.java Service1.java service1CalbackImpl.java Service3WithCallback.java Service3Callback.java service3Impl1.java
Expected output	Negative test: "exception"

183

184 **JCA\_3004\_TestCase**

185

Testcase ID	JCA_3004_TestCase
Test Assertion	JCA-TA-3002, JCA-TA-10031
Description	Tests that callback interfaces on a reference are specified in their fully qualified form
Artifacts	JCA_3004_TestCase.java Test_JCA_3004.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1CalbackImpl.java Service3WithCallback.java Service3Callback.java service3Impl1.java
Expected output	Negative test: "exception"

186

187 **JCA\_3005\_TestCase**

188

Testcase ID	JCA_3005_TestCase
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Test Assertion	JCA-TA-3003, JCA-TA-10031
Description	Tests that callback interfaces specified in the composite match the callback interface specified in the service interface class
Artifacts	JCA_3005_TestCase.java Test_JCA_3005.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1CalbackImpl.java Service3WithCallback.java Service3Callback.java service3Impl1.java
Expected output	Positive test: "JCA_3005 request service1 operation1 invoked service3 operation1 invoked service1 callback1 invoked"

189

190 **JCA\_3006\_TestCase**

191

Testcase ID	JCA_3006_TestCase
Test Assertion	JCA-TA-3003, JCA-TA-10031
Description	Tests that callback interfaces specified in the composite match the callback interface specified in the service interface class
Artifacts	JCA_3006_TestCase.java Test_JCA_3006.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1CalbackImpl.java Service3WithCallback.java Service3Callback.java service3Impl1.java
Expected output	Negative test:



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

192

193 **JCA\_3007\_TestCase**

194

Testcase ID	JCA_3007_TestCase
Test Assertion	JCA-TA-3003, JCA-TA-10031
Description	Tests that callback interfaces specified in the composite match the callback interface specified in the reference interface class
Artifacts	JCA_3007_TestCase.java Test_JCA_3007.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1CallbackImpl.java Service3WithCallback.java Service3Callback.java service3Impl1.java
Expected output	Negative test: "exception"

195

196 **JCA\_3008\_TestCase**

197

Testcase ID	JCA_3008_TestCase
Test Assertion	JCA-TA-3004
Description	Tests that <interface.java/> conforms to the schema
Artifacts	JCA_3008_TestCase.java Test_JCA_3008.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java

	service1Impl.java
Expected output	Negative test: "exception"

198

199 **JCA\_3009\_TestCase**

200

Testcase ID	JCA_3009_TestCase
Test Assertion	JCA-TA-3005
Description	Tests that remotable attribute matches @Remotable annotation
Artifacts	JCA_3009_TestCase.java Test_JCA_3009.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1Impl.java
Expected output	Negative test: "exception"

201

202 **JCA\_3010\_TestCase**

203

Testcase ID	JCA_3010_TestCase
Test Assertion	JCA-TA-3005
Description	Tests that remotable attribute matches @Remotable annotation
Artifacts	JCA_3010_TestCase.java Test_JCA_3010.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1Impl.java
Expected output	Positive test:

	"JCA_3010 request service1 operation1 invoked"
--	--

204

## 205 JCA\_3011\_TestCase

206

Testcase ID	JCA_3011_TestCase
Test Assertion	JCA-TA-3006
Description	Tests that a service interfaces doesn't contain forbidden annotations
Artifacts	JCA_3011_TestCase.java Test_JCA_3011.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java JCA3011Service.java JCA3011serviceImpl.java
Expected output	Negative test: "exception"

207

## 208 JCA\_3012\_TestCase

209

Testcase ID	JCA_3012_TestCase
Test Assertion	JCA-TA-3007
Description	Tests that callback interfaces don't contain forbidden annotations
Artifacts	JCA_3012_TestCase.java Test_JCA_3012.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service3WithCallback.java Service1.java service1CallbackImpl.java Service3Callback.java JCA3012Service3WithCallback.java

	JCA3012Service3Callback.java JCA3012service3Impl1.java
Expected output	Negative test: "exception"

210

211

## 212 2.3 Section 4

### 213 JCA\_4001\_TestCase

214

Testcase ID	JCA_4001_TestCase
Test Assertion	JCA-TA-4001, JCA-TA-10005, JCA-TA-10006
Description	Tests that for a stateless Java implementation, that all lifecycle stages are performed in the correct sequence and that no stage occurs out of sequence.
Artifacts	JCA_4001_TestCase.java Test_JCA_4001.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1StatelessLifecycleImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4001 request Constructing property1 injected reference1 injected property2 injected reference2 injected Init invoked Init completed serviceLifecycle operation1 invoked service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked prop1 prop2 prop3 Destroy invoked"

215

### 216 JCA\_4002\_TestCase

217

Testcase ID	JCA_4002_TestCase
Test Assertion	JCA-TA-4004

Description	Tests that where a stateless Java implementation throws an exception from its Constructor method, that the implementation transitions to the Terminating state
Artifacts	JCA_4002_TestCase.java Test_JCA_4002.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1LifecycleExceptionsImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4002 request Constructing exception thrown"

218

## 219 **JCA\_4003\_TestCase**

220

Testcase ID	JCA_4003_TestCase
Test Assertion	JCA-TA-4010
Description	Tests that when a stateless Java implementation throws an exception when a property is injected, that the implementation transitions to the Destroying state
Artifacts	JCA_4003_TestCase.java Test_JCA_4003.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1LifecycleExceptionsImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4003 request Constructing property1 injected reference1 injected property2 injected exception thrown Destroy invoked"

221

222 **JCA\_4004\_TestCase**

223

Testcase ID	JCA_4004_TestCase
Test Assertion	JCA-TA-4012
Description	Tests that where a Java implementation invokes an injected reference while in the initializing phase and the target of the reference has not been initialized, that the implementation receives a ServiceUnavailableException
Artifacts	JCA_4004_TestCase.java Test_JCA_4004.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1LifecycleExceptionsImpl.java service1UninitImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4004 request Constructing property1 injected reference1 injected property2 injected reference2 injected Init invoked calling uninitialized service ServiceUnavailable exception received Init completed serviceLifecycle operation1 invoked service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked prop1 prop2 prop3 Destroy invoked"

224

225 **JCA\_4005\_TestCase**

226

Testcase ID	JCA_4005_TestCase
Test Assertion	JCA-TA-4015
Description	Tests that where a Java implementation throws an exception from the method marked with the @Init annotation, that the implementation transitions to the Destroying state
Artifacts	JCA_4005_TestCase.java Test_JCA_4005.composite TestInvocation.wsdl

	TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1LifecycleExceptionsImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4005 request Constructing property1 injected reference1 injected property2 injected reference2 injected Init invoked exception thrown Destroy invoked"

227

228 **JCA\_4006\_TestCase**

229

Testcase ID	JCA_4006_TestCase
Test Assertion	JCA-TA-4019
Description	Tests that a Java implementation in the Destroying state which invokes a method on a reference whose target service has already been destroyed receives an InvalidServiceException
Artifacts	JCA_4006_TestCase.java Test_JCA_4006.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1StatelessLifecycleImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4006 request Constructing property1 injected reference1 injected property2 injected reference2 injected Init invoked Init completed serviceLifecycle operation1 invoked service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked prop1 prop2 prop3 Destroy invoked"

230

231 **JCA\_4007\_TestCase**

232

Testcase ID	JCA_4007_TestCase
Test Assertion	JCA-TA-4022
Description	Tests that where a Java implementation throws an exception from its method marked with the @Destroy annotation, that the implementation transitions to the terminated state
Artifacts	JCA_4007_TestCase.java Test_JCA_4007.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl DataStore.java lifecycleControllerImpl.java service1LifecycleExceptionsImpl.java service1Impl.java dataStoreCompositeImpl.java
Expected output	"JCA_4007 request Constructing property1 injected reference1 injected property2 injected reference2 injected Init invoked Init completed serviceLifecycle operation1 invoked service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked prop1 prop2 prop3 Destroy invoked exception thrown"

233

234 **JCA\_4008\_TestCase**

235

Testcase ID	JCA_4008_TestCase
Test Assertion	JCA-TA-4024
Description	Tests that when a stateless Java implementation throws an exception when a property reference is injected, that the implementation transitions to the Destroying state
Artifacts	JCA_4008_TestCase.java Test_JCA_4008.composite TestInvocation.wsdl TestClient_0002.composite JCA_0002_Client.java Service1.wsdl



	<a href="#">DataStore.java</a> <a href="#">lifecycleControllerImpl.java</a> <a href="#">service1LifecycleExceptionsImpl.java</a> <a href="#">service1Impl.java</a> <a href="#">dataStoreCompositeImpl.java</a>
Expected output	"JCA_4008 request Constructing property1 injected reference1 injected property2 injected reference2 injected exception thrown Destroy invoked"

236

## 237 2.4 Section 5

### 238 JCA\_7001\_TestCase

239

Testcase ID	JCA_7001_TestCase
Test Assertion	JCA-TA-7001 JCA-TA-7002
Description	Tests that where a Java implementation offers a bidirectional service and has fields and setter methods annotated with @Callback, when the bidirectional service is invoked, a callback reference object is injected into those fields and setter methods which have a type which is the interface for the callback service but null is injected into fields and setter methods which have a different type.
Artifacts	JCA_7001_TestCase.java Test_JCA_7001.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service3WithCallback.java Service3Callback.java Service7WithCallback.java Service7Callback.java service1CallbackImpl.java MultipleCallbacksImpl.java
Expected output	"JCA_7001 request service1 operation1 invoked service2 operation1 invoked callback1 invoked other callbacks null";

240

241 | **JCA\_7002\_TestCase**

242 |

Testcase ID	JCA_7002_TestCase
Test Assertion	JCA-TA-7002
Description	Tests that where a Java implementation offers a bidirectional service and also has one non-bidirectional service and has fields and setter methods annotated with @Callback, when the non-bidirectional service is invoked, null is injected into all the fields and setter methods annotated with @Callback
Artifacts	<a href="#">JCA_7002_TestCase.java</a> <a href="#">Test_JCA_7002.composite</a> <a href="#">TestInvocation.wsdl</a> <a href="#">TestClient_0002.composite</a> <a href="#">Service1.java</a> <a href="#">Service3WithCallback.java</a> <a href="#">Service3Callback.java</a> <a href="#">Service7WithCallback.java</a> <a href="#">Service7Callback.java</a> <a href="#">service1CallbackImpl.java</a> <a href="#">MultipleCallbacksImpl.java</a>
Expected output	"JCA_7002 request service1 operation1 invoked service2 operation1 invoked callback1 invoked other callbacks null";

243 |

244 | **JCA\_7003\_TestCase**

245 |

Testcase ID	JCA_7003_TestCase
Test Assertion	JCA-TA-7003
Description	Tests that where a Java interface class is an asynchronous service mapping of a WSDL portType containing request/response operations that the class is annotated with the "asyncInvocation" intent
Artifacts	<a href="#">JCA_7003_TestCase.java</a> <a href="#">Test_JCA_7003.composite</a> <a href="#">TestInvocation.wsdl</a> <a href="#">TestClient_0002.composite</a> <a href="#">Service1AsyncServer.java</a> <a href="#">Service1AsyncServerImpl.java</a>
Expected output	"JCA_7003 request service1 operation1 invoked asynchronously"

246 |

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248

## 249 2.5 Section 8

### 250 JCA\_8001\_TestCase

251

Testcase ID	JCA_8001_TestCase
Test Assertion	JCA-TA-8001
Description	Tests that intent annotations use the @Intent annotation in the definition of the annotation. In this testcase, two mutually exclusive intents are defined in the domain. One of them is also defined as a Java annotation using the @Intent definition. TEST_JCA_8001Component1 requires both mutually exclusive intents (one in the SCDL, one in the Java implementation class) and should flag an error that mutually exclusive intents are not allowed.
Artifacts	JCA_8001_TestCase.java Test_JCA_8001.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java Service1Intent.java TestIntent2.java definitions.xml
Expected output	Negative test: "exception"

252

### 253 JCA\_8002\_TestCase

254

Testcase ID	JCA_8002_TestCase
Test Assertion	JCA-TA-8002
Description	Tests that intent annotations cannot be used on methods which are not reference setter methods.
Artifacts	JCA_8002_TestCase.java Test_JCA_8002.composite

	TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java TestIntent2.java service1BadIntent.java
Expected output	Negative test: "exception"

255

256 **JCA\_8003\_TestCase**

257

Testcase ID	JCA_8003_TestCase
Test Assertion	JCA-TA-8003
Description	Tests that intent annotations cannot be used on fields which are not references.
Artifacts	JCA_8003_TestCase.java Test_JCA_8003.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java TestIntent2.java service1BadIntent.java
Expected output	Negative test: "exception"

258

259 **JCA\_8004\_TestCase**

260

Testcase ID	JCA_8004_TestCase
Test Assertion	JCA-TA-8004
Description	Tests that intent annotations cannot be used on constructor parameters which are not references.
Artifacts	JCA_8004_TestCase.java Test_JCA_8004.composite

	TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java TestIntent2.java service1BadIntent.java
Expected output	Negative test: "exception"

261

262 **JCA\_8005\_TestCase**

263

Testcase ID	JCA_8005_TestCase
Test Assertion	JCA-TA-8002, JCA-TA-8003, JCA-TA-8004
Description	Tests that intent annotations can be used to annotate every place that a reference is allowed (setter method, field, or constructor parameter).
Artifacts	JCA_8005_TestCase.java Test_JCA_8005.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java TestIntent2.java service1GoodIntent.java
Expected output	Positive test: "JCA_8005 request service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked service4 operation1 invoked"

264

265 **JCA\_8006\_TestCase**

266

Testcase ID	JCA_8006_TestCase
Test Assertion	JCA-TA-8005
Description	Tests that intent annotations are merged together (unioned) when present on the same Java element. In this testcase, two mutually exclusive intents are placed on the same Java element. When the runtime correctly merges them, an error should result.

Artifacts	JCA_8006_TestCase.java Test_JCA_8006.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java TestIntent1.java TestIntent2.java service1BadIntent.java definitions.xml
Expected output	Negative test: "exception"

267

268 **JCA\_8007\_TestCase**

269

Testcase ID	JCA_8007_TestCase
Test Assertion	JCA-TA-8006
Description	Tests that intent annotations are correctly merged when they appear at different levels in a Java interface class. PolicySet1 satisfies testIntent3 which is the only intent that should be applicable to the service after the intents in Service5Intents are normalized.
Artifacts	JCA_8007_TestCase.java Test_JCA_8007.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java TestIntent3.java TestIntent4.java service5Impl2.java service5Impl.java Service5Intents.java definitions.xml
Expected output	Positive test: "JCA_8007 request service1 operation1 invoked service2 operation1"

	invoked"
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270

271 **JCA\_8008\_TestCase**

272

Testcase ID	JCA_8008_TestCase
Test Assertion	JCA-TA-8007
Description	Tests that policySets cannot be used on methods which are not reference setter methods.
Artifacts	JCA_8008_TestCase.java Test_JCA_8008.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1BadPolicySet.java definitions.xml
Expected output	Negative test: "exception"

273

274 **JCA\_8009\_TestCase**

275

Testcase ID	JCA_8009_TestCase
Test Assertion	JCA-TA-8008
Description	Tests that policySets cannot be used on fields which are not references.
Artifacts	JCA_8009_TestCase.java Test_JCA_8009.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1BadPolicySet.java definitions.xml
Expected output	Negative test: "exception"

276

277

Testcase ID	JCA_8010_TestCase
Test Assertion	JCA-TA-8009
Description	Tests that policySets cannot be used on constructor parameters which are not references.
Artifacts	JCA_8010_TestCase.java Test_JCA_8010.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service1BadPolicySet.java definitions.xml
Expected output	Negative test: "exception"

278

### 279 **JCA\_8011\_TestCase**

280

Testcase ID	JCA_8011_TestCase
Test Assertion	JCA-TA-8010
Description	Tests that policySet annotations are correctly merged when they appear at different levels in a Java interface class. PolicySet1 satisfies testIntent3 and PolicySet2 satisfies testIntent5.
Artifacts	JCA_8010_TestCase.java Test_JCA_8010.composite TestInvocation.wsdl TestClient_0002.composite ASM_0002_Client.java Service1.java service6Impl.java service6Impl2.java Service6PolicySets.java TestIntent3.java



	TestIntent4.java definitions.xml
Expected output	Positive test: "JCA_8011 request service1 operation1 invoked service2 operation1 invoked"

281

282

## 283 2.6 Section 9

### 284 JCA\_9001\_TestCase

285

Testcase ID	JCA_9001_TestCase
Test Assertion	JCA-TA-9001
Description	Tests that if an invocation of the getService() method of the ComponentContext API is made for a reference that is 0..n or 1..n multiplicity, that the caller receives an IllegalArgumentException
Artifacts	JCA_9001_TestCase.java Test_JCA_9001.composite TestInvocation.wsdl TestClient_0002.composite  Service1.java service1ContextImpl1.java service1Impl.java
Expected output	Positive test: "JCA_9001 request invokerService operation1 invoked IllegalArgumentException received"

286

### 287 JCA\_9002\_TestCase

288

Testcase ID	JCA_9002_TestCase
Test Assertion	JCA-TA-9002
Description	Tests that if an invocation of the getRequestContext() method of the ComponentContext API is made during the execution of a Java business method of a service operation on the same Java thread used to invoke the business method, then a non-null value is returned for the RequestContext

Artifacts	JCA_9002_TestCase.java Test_JCA_9002.composite TestInvocation.wsdl TestClient_0002.composite Service1.java service1ContextImpl1.java service1Impl.java
Expected output	Positive test: "JCA_9002 request service1 operation1 invoked RequestContext - serviceName: Service1"

289

## 290 JCA\_9003\_TestCase

291

Testcase ID	JCA_9003_TestCase
Test Assertion	JCA-TA-9003
Description	Tests that if an invocation of the getServiceReference() method of the RequestContext API is made during the execution of a Java business method, then the method returns a ServiceReference object that represents the service that was invoked
Artifacts	JCA_9003_TestCase.java Test_JCA_9003.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1Superset.java service1RequestContextImpl2.java
Expected output	Positive test: "JCA_9003 request service1 operation1 invoked ServiceReference obtained: service1 checkService operation2 invoked"

292

## 293 JCA\_9004\_TestCase

294

Testcase ID	JCA_9004_TestCase
Test Assertion	JCA-TA-9004
Description	Tests that if an invocation of the getServiceReference() method of the RequestContext API is made during the execution of a Java business

	method of a callback, then the method returns a ServiceReference object that represents the callback that was invoked
Artifacts	JCA_9004_TestCase.java Test_JCA_9004.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service3WithCallback.java Service3Callback.java service1CallbackContextImpl1.java service3Impl1.java
Expected output	Positive test: "JCA_9004 request serviceComposite1 operation1 invoked callbackService operation1 invokedserviceComposite1 callback1 invoked ServiceReference obtained: serviceComposite1 check callback1 invoked"

295

296 **JCA\_9005\_TestCase**

297

Testcase ID	JCA_9005_TestCase
Test Assertion	JCA-TA-9005
Description	Tests that if an invocation of the getRequestContext() method of the ComponentContext API is made during the execution of a Java business method of a callback operation on the same Java thread used to invoke the business method, then a non-null value is returned for the RequestContext
Artifacts	JCA_9005_TestCase.java Test_JCA_9005.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service3WithCallback.java Service3Callback.java service1CallbackContextImpl2.java service3Impl1.java
Expected output	Positive test: "JCA_9005 request serviceComposite1 operation1 invoked callbackService operation1 invoked serviceComposite1 callback1 invoked"

	RequestContext - serviceName: reference1"
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298

299 **JCA\_9006\_TestCase**

300

<u>Testcase ID</u>	JCA_9006_TestCase
<u>Test Assertion</u>	JCA-TA-9070 JCA-TA-9006 JCA-TA-9007 JCA-TA-9008 JCA-TA-9014
<u>Description</u>	Tests invocations of the ComponentContext.getServiceReference() method  o invoked with a referenceName parameter for a reference of multiplicity 0..n  o invoked for a reference which does not have the interface of the type in the businessInterface parameter  o invoked with a referenceName value that does not match the name of any of the references of the component  o invoked for a reference with multiplicity 0..1 which has no target service configured  o invoked for a valid reference with a target service configured
<u>Artifacts</u>	JCA_9006_TestCase.java  Test_JCA_9006.composite  TestInvocation.wsdl  TestClient_0002.composite  Service1.java  Service1Impl.java  Service1CCgetServiceReferenceImpl.java
<u>Expected output</u>	"JCA_9006 request service1 operation1 invoked getServiceReference expected IllegalArgumentException received for 0..n ref expected IllegalArgumentException received for invalid businessInterface expected IllegalArgumentException received for invalid reference name expected null ServiceReference for unwired 0..1 reference expected non-null ServiceReference for wired 1..1 reference service2 operation1 invoked" ;

301

302 **JCA\_9007\_TestCase**

303

<u>Testcase ID</u>	JCA_9007_TestCase
<u>Test Assertion</u>	JCA-TA-9009

<u>Description</u>	Tests invocations of the <code>ComponentContext.getURI()</code> method: <ul style="list-style-type: none"> <li>o invocation returns a <code>String</code> containing the absolute URI of the component in the SCA Domain</li> </ul>
<u>Artifacts</u>	<a href="#">JCA_9007_TestCase.java</a> <a href="#">Test_JCA_9007.composite</a> <a href="#">TestInvocation.wsdl</a> <a href="#">TestClient_0002.composite</a> <a href="#">Service1.java</a> <a href="#">Service1CCgetURIImpl.java</a>
<u>Expected output</u>	"JCA_9007 request service1 operation1 invoked getURI getURI() returned URI = TEST_JCA_9007Component1"

304

305 **JCA\_9008\_TestCase**

306

<u>Testcase ID</u>	JCA_9008_TestCase
<u>Test Assertion</u>	<a href="#">JCA-TA-9001</a> <a href="#">JCA-TA-9010</a> <a href="#">JCA-TA-9011</a> <a href="#">JCA-TA-9012</a> <a href="#">JCA-TA-9013</a>
<u>Description</u>	Tests invocations of the <code>ComponentContext.getService()</code> method: <ul style="list-style-type: none"> <li>o method throws an <code>IllegalArgumentException</code> if the <code>referenceName</code> reference has multiplicity <code>0..n</code></li> <li>o method returns a proxy object with the <code>businessInterface</code> for the reference <code>referenceName</code>, where that reference has a target service configured</li> <li>o method returns null for a <code>0..1</code> reference with no target service configured</li> <li>o method throws an <code>IllegalArgumentException</code> where the component does not have a reference with the name <code>referenceName</code></li> <li>o method throws an <code>IllegalArgumentException</code> where the the <code>referenceName</code> reference does not have the interface defined in the <code>businessInterface</code> parameter</li> </ul>
<u>Artifacts</u>	<a href="#">JCA_9008_TestCase.java</a> <a href="#">Test_JCA_9008.composite</a> <a href="#">TestInvocation.wsdl</a> <a href="#">TestClient_0002.composite</a> <a href="#">Service1.java</a> <a href="#">Service1CCgetServiceImpl.java</a>
<u>Expected output</u>	"JCA_9006 xxxx"JCA_9008 request service1 operation1 invoked

getService expected IllegalArgumentException received for 0..n ref  
 expected IllegalArgumentException received for invalid businessInterface  
 expected IllegalArgumentException received for invalid reference name  
 expected null Service for unwired 0..1 reference expected non-null Service  
 for wired 1..1 reference service2 operation1 invoked"

307

**JCA\_9009\_TestCase**

308

309

<u>Testcase ID</u>	JCA_9009_TestCase
<u>Test Assertion</u>	JCA-TA-9015 JCA-TA-9016 JCA-TA-9017 JCA-TA-9018 JCA-TA-9019
<u>Description</u>	Tests invocations of the ComponentContext.getServices() method: o invocation returns a Collection containing a proxy object for each target service of the reference each implementing the interface supplied in the businessInterface parameter o invocation returns an empty Collection where the reference named by referenceName exists but has no target services configured o invocation throws an IllegalArgumentException when the named reference exists and has a multiplicity of 0..1 or 1..1 o invocation throws an IllegalArgumentException when the named reference does not exist o invocation throws an IllegalArgumentException when the named reference does not have an interface compatible with the interface in the businessInterface parameter
<u>Artifacts</u>	JCA_9009_TestCase.java Test_JCA_9009.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1CCgetServicesImpl.java
<u>Expected output</u>	"JCA_9009 request service1 operation1 invoked getServices expected IllegalArgumentException received for 1..1 ref expected IllegalArgumentException received for invalid businessInterface expected IllegalArgumentException received for invalid reference name expected empty Collection for unwired 0..n reference expected non-empty Collection for wired 0..n reference service2 operation1 invoked service3 operation1 invoked"

310

311 | **JCA\_9010\_TestCase**

312 |

<u>Testcase ID</u>	JCA_9010_TestCase
<u>Test Assertion</u>	JCA-TA-9020 JCA-TA-9021 JCA-TA-9022 JCA-TA-9023 JCA-TA-9024
<u>Description</u>	<p>Tests invocations of the <code>ComponentContext.getServiceReferences()</code> method:</p> <ul style="list-style-type: none"> <li>o invocation returns a <code>Collection</code> containing a <code>proxyServiceReference</code> object for each target service of the reference each implementing the interface supplied in the <code>businessInterface</code> parameter</li> <li>o invocation returns an empty <code>Collection</code> where the reference named by <code>referenceName</code> exists but has no target services configured</li> <li>o invocation throws an <code>IllegalArgumentException</code> when the named reference exists and has a multiplicity of <code>0..1</code> or <code>1..1</code></li> <li>o invocation throws an <code>IllegalArgumentException</code> when the named reference does not exist</li> <li>o invocation throws an <code>IllegalArgumentException</code> when the named reference does not have an interface compatible with the interface in the <code>businessInterface</code> parameter</li> </ul>
<u>Artifacts</u>	<p>JCA_9010_TestCase.java</p> <p>Test_JCA_9010.composite</p> <p>TestInvocation.wsdl</p> <p>TestClient_0002.composite</p> <p>Service1.java</p> <p>Service1CCgetServiceReferencesImpl.java</p>
<u>Expected output</u>	"JCA_9010 request service1 operation1 invoked getServiceReferences expected IllegalArgumentException received for 1..1 ref expected IllegalArgumentException received for invalid businessInterface expected IllegalArgumentException received for invalid reference name expected empty Collection for unwired 0..n reference expected non-empty Collection for wired 0..n reference service2 operation1 invoked service3 operation1 invoked"

313 |

314 | **JCA\_9011\_TestCase**

315 |

<u>Testcase ID</u>	JCA_9011_TestCase
<u>Test Assertion</u>	JCA-TA-9025 JCA-TA-9026

<u>Description</u>	<p>Tests invocations of the <u>ComponentContext.createSelfReference(businessInterface)</u> method:</p> <ul style="list-style-type: none"> <li>o invocation returns a <u>ServiceReference</u> typed by the interface of the <u>businessInterface</u> parameter for one of the services offered by the component that has that interface</li> <li>o method throws an <u>IllegalArgumentException</u> if the component has no service which has the interface specified by the <u>businessInterface</u> parameter</li> </ul>
<u>Artifacts</u>	<p><u>JCA_9011_TestCase.java</u></p> <p><u>Test_JCA_9011.composite</u></p> <p><u>TestInvocation.wsdl</u></p> <p><u>TestClient_0002.composite</u></p> <p><u>Service1.java</u></p> <p><u>Service1CCcreateSelfReferenceImpl.java</u></p>
<u>Expected output</u>	<p>"JCA_9011 request service1 operation1 invoked createSelfReference expected <u>IllegalArgumentException</u> received for invalid <u>businessInterface</u>"</p> <p>expected non-null <u>ServiceReference</u> service1 operation2 invoked"</p>

316

317 **JCA\_9012\_TestCase**

318

<u>Testcase ID</u>	<u>JCA_9012_TestCase</u>
<u>Test Assertion</u>	<p><u>JCA-TA-9027</u></p> <p><u>JCA-TA-9028</u></p> <p><u>JCA-TA-9029</u></p>
<u>Description</u>	<p>Tests invocations of the <u>ComponentContext.createSelfReference(businessInterface, serviceName)</u> method:</p> <ul style="list-style-type: none"> <li>o invocation returns a <u>ServiceReference</u> typed by the interface of the <u>businessInterface</u> parameter for the service offered by the component that has that interface and has the name specified by <u>serviceName</u></li> <li>o method throws an <u>IllegalArgumentException</u> if the service named in the <u>serviceName</u> parameter does not have the interface specified by the <u>businessInterface</u> parameter</li> <li>o method throws an <u>IllegalArgumentException</u> if the component does not have a service with the name specified in the <u>serviceName</u> parameter</li> </ul>
<u>Artifacts</u>	<p><u>JCA_9012_TestCase.java</u></p> <p><u>Test_JCA_9012.composite</u></p> <p><u>TestInvocation.wsdl</u></p> <p><u>TestClient_0002.composite</u></p> <p><u>Service1.java</u></p>



	<a href="#">Service1CCcreateSelfReferenceBImpl.java</a>
<a href="#">Expected output</a>	"JCA_9012 request service1 operation1 invoked createSelfReference expected IllegalArgumentException received for invalid businessInterface expected IllegalArgumentException received for invalid service name expected non-null ServiceReference service1 operation2 invoked"

319

320 **[JCA\\_9013\\_TestCase](#)**

321

<a href="#">Testcase ID</a>	<a href="#">JCA_9013_TestCase</a>
<a href="#">Test Assertion</a>	<a href="#">JCA-TA-9030</a> <a href="#">JCA-TA-9031</a> <a href="#">JCA-TA-9032</a> <a href="#">JCA-TA-9033</a>
<a href="#">Description</a>	<p>Tests invocations of the <a href="#">ComponentContext.getProperty</a> method:</p> <ul style="list-style-type: none"> <li>o invocation returns an object of the type specified by the type parameter containing the value in the component configuration for the property named by the <a href="#">propertyName</a> parameter</li> <li>o method returns null for a property which has no value specified in the component configuration</li> <li>o method throws an <a href="#">IllegalArgumentException</a> if the component does not have a property with the name specified in the <a href="#">propertyName</a> parameter</li> <li>o method throws an <a href="#">IllegalArgumentException</a> if the property named in the <a href="#">propertyName</a> parameter does not have a type compatible with the supplied type parameter</li> </ul>
<a href="#">Artifacts</a>	<a href="#">JCA_9013_TestCase.java</a> <a href="#">Test_JCA_9013.composite</a> <a href="#">TestInvocation.wsdl</a> <a href="#">TestClient_0002.composite</a> <a href="#">Service1.java</a> <a href="#">Service1CCgetPropertyImpl.java</a>
<a href="#">Expected output</a>	"JCA_9013 request service1 operation1 invoked getProperty expected IllegalArgumentException received for invalid property type" expected IllegalArgumentException received for invalid property name expected null value for unconfigured optional property expected non-null property value for required property: 2.456"

322

323 **[JCA\\_9014\\_TestCase](#)**

324

<a href="#">Testcase ID</a>	<a href="#">JCA_9014_TestCase</a>
<a href="#">Test Assertion</a>	<a href="#">JCA-TA-9034</a>

	JCA-TA-9035
Description	<p>Tests invocations of the ComponentContext.cast method:</p> <ul style="list-style-type: none"> <li>o invocation returns a ServiceReference object typed by the same interface as specified by the reference proxy object supplied in the target parameter</li> <li>o method throws an IllegalArgumentException if the supplied target parameter is not an SCA reference proxy object</li> </ul>
Artifacts	<p>JCA_9014_TestCase.java</p> <p>Test_JCA_9014.composite</p> <p>TestInvocation.wsdl</p> <p>TestClient_0002.composite</p> <p>Service1.java</p> <p>Service1CCcastImpl.java</p>
Expected output	"JCA_9014 request service1 operation1 invoked cast expected. IllegalArgumentException received for invalid reference proxy expected non-null ServiceReference ServiceReference has correct business interface"

325

326 **JCA\_9015\_TestCase**

327

Testcase ID	JCA_9015_TestCase
Test Assertion	<p>JCA-TA-9039</p> <p>JCA-TA-9040</p> <p>JCA-TA-9041</p> <p>JCA-TA-9042</p> <p>JCA-TA-9043</p> <p>JCA-TA-9044</p> <p>JCA-TA-9045</p> <p>JCA-TA-9046</p> <p>JCA-TA-9047</p> <p>JCA-TA-9048</p>
Description	<p>Tests invocations of the RequestContext.method:</p> <ul style="list-style-type: none"> <li>o getServiceName invocation returns the name of the service for which the operation is being processed when called from a thread processing a service operation</li> <li>o getServiceName method returns null when called from a thread not processing a service operation or callback operation</li> <li>o getCallbackReference returns a ServiceReference typed by the interface of the callback when invoked by a thread processing an operation of a bidirectional service</li> <li>o getCallbackReference returns null when invoked by a thread processing an operation of a service which is not bidirectional</li> <li>o getCallbackReference returns null when invoked by a thread not</li> </ul>

	<p><u>processing an operation of a service</u></p> <p><u>o getCallback returns a reference proxy typed by the interface of the callback when invoked by a thread processing an operation of a bidirectional service</u></p> <p><u>o getCallback returns null when invoked by a thread processing an operation of a service which is not bidirectional</u></p> <p><u>o getCallback returns null when invoked by a thread not processing an operation of a service</u></p> <p><u>o getServiceReference method returns a ServiceReference representing the callback service when invoked from a thread processing a callback operation</u></p> <p><u>o getServiceReference method returns null when called from a thread not involved in processing either a service operation or a callback operation</u></p>
<u>Artifacts</u>	<p><u>JCA_9015_TestCase.java</u></p> <p><u>Test_JCA_9015.composite</u></p> <p><u>TestInvocation.wsdl</u></p> <p><u>TestClient_0002.composite</u></p> <p><u>Service1.java</u></p> <p><u>Service1RCgetServiceNameImpl.java</u></p>
<u>Expected output</u>	

328

329 **JCA\_9016\_TestCase**

330

<u>Testcase ID</u>	<u>JCA_9016_TestCase</u>
<u>Test Assertion</u>	<p><u>JCA-TA-9051</u></p> <p><u>JCA-TA-9052</u></p> <p><u>JCA-TA-9053</u></p> <p><u>JCA-TA-9054</u></p> <p><u>JCA-TA-9055</u></p> <p><u>JCA-TA-9056</u></p> <p><u>JCA-TA-9057</u></p> <p><u>JCA-TA-9058</u></p> <p><u>JCA-TA-9059</u></p> <p><u>JCA-TA-9060</u></p>
<u>Description</u>	<p><u>Tests invocations of the SCAClientFactory API class:</u></p> <p><u>o invocation of newInstance( URI ) with a valid URI value returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter</u></p> <p><u>o invocation of newInstance( URI ) with an invalid URI value causes a NoSuchDomainException to be thrown</u></p> <p><u>o invocation of newInstance( Properties, URI ) with a valid URI value returns an object which implements the SCAClientFactory class for the</u></p>

	<p><u>SCA Domain identified by the domainURI parameter</u></p> <p><u>o invocation of newInstance( Properties, URI ) with an invalid URI value causes a NoSuchDomainException to be thrown</u></p> <p><u>o invocation of newInstance( Classloader, URI ) with a valid URI value returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter</u></p> <p><u>o invocation of newInstance( Classloader, URI ) with an invalid URI value causes a NoSuchDomainException to be thrown</u></p> <p><u>o invocation of newInstance( Properties, Classloader, URI ) with a valid URI value returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter</u></p> <p><u>o invocation of newInstance( Properties, Classloader, URI ) with an invalid URI value causes a NoSuchDomainException to be thrown</u></p> <p><u>o invocation of getService with a serviceURI that identifies a service in the Domain which has the business interface identified bby the interfaze parameter returns a reference proxy object which can be used to invoke operations on the identified service</u></p> <p><u>o invocation of getService with a serviceURI for which there is no service in the domain throws a NoSuchServiceException</u></p>
<u>Artifacts</u>	<p><u>JCA_9016_TestCase.java</u></p> <p><u>Test_JCA_9016.composite</u></p> <p><u>TestInvocation.wsdl</u></p> <p><u>TestClient_0002.composite</u></p> <p><u>Service1.java</u></p> <p><u>Service1SCAClientImpl.java</u></p>
<u>Expected output</u>	<p><u>"JCA_9016 request service1 operation1 invoked SCAClient expected non-null client factory expected exception received for invalid URI: NoSuchDomainException expected non-null client factory expected exception received for invalid URI: NoSuchDomainException expected non-null client factory expected exception received for invalid URI: NoSuchDomainException expected non-null client factory expected exception received for invalid URI: NoSuchDomainException expected non-null reference proxyservice2 operation1 invoked expected NoSuchServiceException exception received for getService()"</u></p>

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332

## 333 2.7 Section 10

### 334 JCA\_10001\_TestCase

335

Testcase ID	JCA_10001_TestCase
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Test Assertion	JCA-TA-10001
Description	Tests that Java annotations are not used in improper locations. This testcase has an @Property annotation on a method parameter where the method is not a constructor.
Artifacts	JCA_10001_TestCase.java Test_JCA_10001.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl service1BadAnnotation.java Service1.java
Expected output	

336

### 337 **JCA\_10002\_TestCase**

338

Testcase ID	JCA_10002_TestCase
Test Assertion	JCA-TA-10002
Description	Tests that Java annotations are not used on static methods. This testcase has an @Property annotation on a static setter method.
Artifacts	JCA_10002_TestCase.java Test_JCA_10002.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl service1StaticAnnotation.java Service1.java
Expected output	

339

### 340 **JCA\_10003\_TestCase**

341

Testcase ID	JCA_10003_TestCase
Test Assertion	JCA-TA-10003
Description	Tests that Java annotations are not used on static fields. This testcase has an @Property annotation on a static field.
Artifacts	JCA_10003_TestCase.java

	Test_JCA_10003.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl service1StaticAnnotation.java Service1.java
Expected output	

342

### 343 **JCA\_10004\_TestCase**

344

Testcase ID	JCA_10004_TestCase
Test Assertion	JCA-TA-10031
Description	Tests that the @Callback annotation has to be specified with any parameters when used as the injection point of a callback reference.
Artifacts	JCA_10004_TestCase.java Test_JCA_10004.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1CallbackImpl.java service3BadCallbackImpl.java Service3Callback.java Service3WithCallback.java
Expected output	

345

### 346 **JCA\_10005\_TestCase**

347

Testcase ID	JCA_10005_TestCase
Test Assertion	JCA-TA-10005
Description	Tests that @Constructor works correctly with annotated parameters.
Artifacts	JCA_10005_TestCase.java Test_JCA_10005.composite TestInvocation.wsdl

	TestClient_0002.composite Service1.wsdl Service1.java service1ConstrImpl.java
Expected output	Positive:

348

### 349 **JCA\_10006\_TestCase**

350

Testcase ID	JCA_10006_TestCase
Test Assertion	JCA-TA-10005
Description	Tests that the runtime raises an error when an @Constructor annotated constructor does not have all of it's parameters annotated.
Artifacts	JCA_10006_TestCase.java Test_JCA_10006.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1BadConstrImpl.java
Expected output	

351

### 352 **JCA\_10007\_TestCase**

353

Testcase ID	JCA_10007_TestCase
Test Assertion	JCA-TA-10006
Description	Tests that the runtime raises an error when an @Destroy method has a non-void return and parameters.
Artifacts	JCA_10007_TestCase.java Test_JCA_10007.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java

	service1BadDestroyImpl.java
Expected output	

354

### 355 **JCA\_10008\_TestCase**

356

Testcase ID	JCA_10008_TestCase
Test Assertion	JCA-TA-10009
Description	Tests that the runtime raises an error when an @Init method has a non-void return and parameters.
Artifacts	JCA_10008_TestCase.java Test_JCA_10008.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1BadInitImpl.java
Expected output	

357

### 358 **JCA\_10009\_TestCase**

359

Testcase ID	JCA_10009_TestCase
Test Assertion	JCA-TA-10011
Description	Tests that the runtime raises an error when an @Property annotated field is marked as final.
Artifacts	JCA_10009_TestCase.java Test_JCA_10009.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1BadPropImpl.java
Expected output	

360



361 **JCA\_10010\_TestCase**

362

Testcase ID	JCA_10010_TestCase
Test Assertion	JCA-TA-10012
Description	Tests that @Property specifies a name when used with @Constructor.
Artifacts	JCA_10010_TestCase.java Test_JCA_10010.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1ConstrBadPropImpl.java
Expected output	

363

364 **JCA\_10011\_TestCase**

365

Testcase ID	JCA_10011_TestCase
Test Assertion	JCA-TA-10013
Description	Tests that @Property is not required=true when used with @Constructor.
Artifacts	JCA_10011_TestCase.java Test_JCA_10011.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1ConstrBadPropImpl.java
Expected output	

366

367 **JCA\_10012\_TestCase**

368

Testcase ID	JCA_10012_TestCase
Test Assertion	JCA-TA-10014
Description	Tests that multi valued properties are introspected correctly.
Artifacts	JCA_10012_TestCase.java

	Test_JCA_10012.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1MultiPropImpl.java
Expected output	Positive:

369

370 **JCA\_10013\_TestCase**

371

Testcase ID	JCA_10013_TestCase
Test Assertion	JCA-TA-10016
Description	Tests that intent annotations can have qualifiers.
Artifacts	JCA_10013_TestCase.java Test_JCA_10013.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1IntentQualifier.java
Expected output	Positive:

372

373 **JCA\_10014\_TestCase**

374

Testcase ID	JCA_10014_TestCase
Test Assertion	JCA-TA-10018
Description	Tests that @Reference has a name when used with @Constructor.
Artifacts	JCA_10014_TestCase.java Test_JCA_10014.composite TestInvocation.wsdl

	TestClient_0002.composite Service1.wsdl Service1.java service1ConstrBadRefImpl.java service1Impl.java
Expected output	Negative:

375

376 **JCA\_10015\_TestCase**

377

Testcase ID	JCA_10015_TestCase
Test Assertion	JCA-TA-10019
Description	Tests that @Reference has required=true when used with @Constructor.
Artifacts	JCA_10015_TestCase.java Test_JCA_10015.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl Service1.java service1ConstrBadRefImpl.java service1Impl.java
Expected output	Negative:

378

379 **JCA\_10016\_TestCase**

380

Testcase ID	JCA_10016_TestCase
Test Assertion	JCA-TA-10022
Description	Tests that @Reference(required=false) is introspected as multiplicity 0..n.
Artifacts	JCA_10016_TestCase.java Test_JCA_10016.composite TestInvocation.wsdl TestClient_0002.composite

	Service1.wsdl Service1.java service1OptMultiRef.java
Expected output	Positive:

381

382

### 384 **JCA\_10044\_TestCase**

385

Testcase ID	JCA_10044_TestCase
Test Assertion	JCA-TA-10024
Description	Tests that where a component reference with multiplicity of 0..1 is not wired, that the reference injected into the implementation is null
Artifacts	JCA_10044_TestCase.java Test_JCA_10044.composite TestInvocation.wsdl TestClient_0002.composite Service1.java service1Impl6.java
Expected output	Positive test: "JCA_10044 request service1 operation1 invoked reference is null"

### 386 **JCA\_10045\_TestCase**

387

Testcase ID	JCA_10045_TestCase
Test Assertion	JCA-TA-10025
Description	Tests that where a component reference with multiplicity of 0..n is not wired, that the reference injected into the implementation is an empty array or collection
Artifacts	JCA_10045_TestCase.java Test_JCA_10045.composite TestInvocation.wsdl TestClient_0002.composite Service1.java service1Impl4.java

Expected output	Positive test: "JCA_10045 request service1 operation1 invoked reference array is empty"
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388

### 389 **JCA\_10046\_TestCase**

390

Testcase ID	JCA_10046_TestCase
Test Assertion	JCA-TA-10045
Description	Tests that where the Java interface of a service is marked remotable, the interface is translatable into a WSDL portType
Artifacts	JCA_10046_TestCase.java Test_JCA_10046.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Unmappable.java unmappableServiceImpl.java
Expected output	Negative test: "exception"

391

### 392 **JCA\_10047\_TestCase**

393

Testcase ID	JCA_10047_TestCase
Test Assertion	JCA-TA-10046
Description	Tests that the @Scope annotation is only valid when applied to a component implementation class
Artifacts	JCA_10047_TestCase.java Test_JCA_10047.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

394

395 **JCA\_10048\_TestCase**

396

Testcase ID	JCA_10048_TestCase
Test Assertion	JCA-TA-10047
Description	Tests that where a class is annotated with a @Service annotation which declares a set of services, that the implementation class implements all of the methods of all the declared service interfaces
Artifacts	JCA_10048_TestCase.java Test_JCA_10048.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

397

398 **JCA\_10049\_TestCase**

399

Testcase ID	JCA_10049_TestCase
Test Assertion	JCA-TA-10050
Description	Tests that where a @Service annotation has a @names attribute, that the number of entries in the array of @names is the same as the number of entries in the array of the @value attribute
Artifacts	JCA_10049_TestCase.java Test_JCA_10049.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

400

401 **JCA\_10050\_TestCase**

402

Testcase ID	JCA_10050_TestCase
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Test Assertion	JCA-TA-10055
Description	Tests that where an implementation class declares 2 or more services, that each service interface class has a distinct Java simple name
Artifacts	JCA_10050_TestCase.java Test_JCA_10050.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

403

## 404 **JCA\_10051\_TestCase**

405

Testcase ID	JCA_10051_TestCase
Test Assertion	JCA-TA-10057
Description	Tests that a @Service annotation has at least one element in its @value array
Artifacts	JCA_10051_TestCase.java Test_JCA_10051.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

406

## 407 **JCA\_10052\_TestCase**

408

Testcase ID	JCA_10052_TestCase
Test Assertion	JCA-TA-10058
Description	Tests that all the entries in the @names array of a @Service annotation are unique
Artifacts	JCA_10052_TestCase.java Test_JCA_10052.composite

	TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: "exception"

409

410

## 411 2.8 Section 11

### 412 JCA\_11001\_TestCase

413

Testcase ID	JCA_11001_TestCase
Test Assertion	JCA-TA-11001
Description	Tests that a Java interface which does not have @WebService annotation which is mapped to WSDL by an SCA runtime is treated as if it did contain a @WebService annotation
Artifacts	JCA_11001_TestCase.java Test_JCA_11001.composite TestInvocation.wsdl TestClient_0002.composite TestComposite1.composite Service1.java Service1ImplWSService.wsdl service1Impl.java service1Impl2.java
Expected output	Positive test: "JCA_11001 request service1 operation1 invoked service2 operation1 invoked"

414

### 415 JCA\_11002\_TestCase

416

Testcase ID	JCA_11002_TestCase
Test Assertion	JCA-TA-11002



Description	Tests that a Java interface containing a <code>@org.oasisopen.sca.annotation.OneWay</code> annotation is mapped to WSDL as if it contained a <code>@javax.jws.OneWay</code> annotation
Artifacts	JCA_11002_TestCase.java Test_JCA_11002.composite TestInvocation.wsdl TestClient_0002.composite Service1.java ServiceOneWay.java service1OneWayCallerImpl.java serviceOneWayImpl.java
Expected output	Positive test: "JCA_11002 request service1 operation1 invoked service2 operation1 invoked OneWay method inonly previously called with testInvoke"

417 **JCA\_11003\_TestCase**

418

Testcase ID	JCA_11003_TestCase
Test Assertion	JCA-TA-11003
Description	Tests that if a Java interface mapped from a WSDL interface by an SCA runtime contains a <code>@WebService</code> annotation, the interface is treated as if it had a <code>@Remotable</code> annotation
Artifacts	JCA_11003_TestCase.java Test_JCA_11003.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1WS.java service1ImplWS.java
Expected output	Positive test: "JCA_11003 request service1 operation1 invoked"

419 **JCA\_11004\_TestCase**

420

Testcase ID	JCA_11004_TestCase
Test Assertion	JCA-TA-11004
Description	Tests that if a Java interface used as a service interface contains JAXB 2.1 datatypes and annotations, the SCA runtime is able to map the interface to

	WSDL.
Artifacts	JCA_11004_TestCase.java Test_JCA_11004.composite TestInvocation.wsdl TestClient_0002.composite Service1.wsdl ServiceJAXB.java service1JAXBCallerImpl.java serviceJAXBImpl.java
Expected output	Positive test: "JCA_11004 request service1 operation1 invoked service2 operation1 invoked JAXB parameters received"

421 **JCA\_11005\_TestCase**

422

Testcase ID	JCA_11005_TestCase
Test Assertion	JCA-TA-11006
Description	Tests that a Java interface used to declare an SCA service interface in an <interface.java/> element does not contain the additional client-side asynchronous polling and callback methods defined by JAX-WS.
Artifacts	JCA_11005_TestCase.java Test_JCA_11005.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1WithAsyncMethods.java service1Impl.java
Expected output	Negative test: "exception"

423 **JCA\_11006\_TestCase**

424

Testcase ID	JCA_11006_TestCase
Test Assertion	JCA-TA-11006
Description	Tests that where a Java interface used to declare an SCA reference interface contains the additional client side asynchronous polling and

	callback methods defined by JAX-WS, that the interface is treated as valid and is used for the reference.
Artifacts	JCA_11006_TestCase.java Test_JCA_11006.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1WithAsyncMethods.java service1AsyncReflImpl.java service1Impl.java
Expected output	Positive test: "JCA_11006 request service1 operation1 invoked service2 operation1 invoked"

425 **JCA\_11007\_TestCase**

426

Testcase ID	JCA_11007_TestCase
Test Assertion	JCA-TA-11008
Description	Tests that where a Java implementation class has an SCA reference which uses an interface which contains the additional client side asynchronous polling and callback methods defined by JAX-WS, that the introspected reference element in the component type for that implementation has an interface that does not contain the additional asynchronous polling and callback methods.
Artifacts	JCA_11007_TestCase.java Test_JCA_11007.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1WithAsyncMethods.java service1AsyncReflImpl.java service1Impl.java
Expected output	Positive test: "JCA_11007 request service1 operation1 invoked service2 operation1 invoked"

427 **JCA\_11008\_TestCase**

428

Testcase ID	JCA_11008_TestCase
Test Assertion	JCA-TA-11009
Description	Tests that where a Java implementation class has an SCA reference which uses an interface which contains the additional client side asynchronous polling and callback methods defined by JAX-WS, that the implementation class is able to use the asynchronous polling and callback methods with the semantics described in the JAX-WS 2.1 specification.
Artifacts	JCA_11008_TestCase.java Test_JCA_11008.composite TestInvocation.wsdl TestClient_0002.composite Service1.java Service1WithAsyncMethods.java service1AsyncReflImpl.java service1Impl.java
Expected output	Positive test: "JCA_11008 request service1 operation1 invoked service2 operation1 invoked service3 operation1 invoked"

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431

### 3 Cross Mapping of Test Assertions to TestCases

432

Test Assertion	Test Cases
JCA-TA-2001	JCA_2001_TestCase
JCA-TA-2002	JCA_2002_TestCase
JCA-TA-2003	JCA_2003_TestCase
JCA-TA-2004	JCA_2004_TestCase
JCA-TA-2005	JCA_2005_TestCase
JCA-TA-2006	JCA_2006_TestCase
JCA-TA-2007	JCA_2007_TestCase
JCA-TA-2008	JCA_2008_TestCase
JCA-TA-2009	Optional - not tested
JCA-TA-2010	JCA_2009_TestCase
JCA-TA-2011	JCA_2010_TestCase

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Test Assertion	Test Cases
JCA-TA-3001	JCA_3001_TestCase JCA_3002_TestCase
JCA-TA-3002	JCA_3003_TestCase JCA_3004_TestCase
JCA-TA-3003	JCA_3005_TestCase JCA_3006_TestCase JCA_3007_TestCase
JCA-TA-3004	JCA_3008_TestCase
JCA-TA-3005	JCA_3009_TestCase JCA_3010_TestCase
JCA-TA-3006	JCA_3011_TestCase
JCA-TA-3007	JCA_3012_TestCase
<u>JCA-TA-3008</u>	
<u>JCA-TA-3009</u>	

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Test Assertion	Test Cases
JCA-TA-4001	JCA_4001_TestCase
JCA-TA-4002	JCA_4001_TestCase
JCA-TA-4003	JCA_4001_TestCase
JCA-TA-4004	JCA_4002_TestCase

JCA-TA-4005	JCA_4001_TestCase
JCA-TA-4006	JCA_4001_TestCase
JCA-TA-4007	JCA_4001_TestCase
JCA-TA-4008	JCA_4001_TestCase
JCA-TA-4009	JCA_4001_TestCase
JCA-TA-4010	JCA_4003_TestCase
JCA-TA-4011	JCA_4001_TestCase
JCA-TA-4012	JCA_4004_TestCase
JCA-TA-4013	JCA_4001_TestCase
JCA-TA-4014	JCA_4001_TestCase
JCA-TA-4015	JCA_4005_TestCase
JCA-TA-4016	JCA_4001_TestCase
JCA-TA-4017	JCA_4001_TestCase
JCA-TA-4018	JCA_4001_TestCase
JCA-TA-4019	untestable
JCA-TA-4020	JCA_4001_TestCase
JCA-TA-4021	JCA_4001_TestCase
JCA-TA-4022	JCA_4007_TestCase
JCA-TA-4023	JCA_4001_TestCase
<u>JCA-TA-4024</u>	<u>JCA_4008_TestCase</u>

435

436

<u>Test Assertion</u>	<u>Test Cases</u>
<u>JCA-TA-7001</u>	<u>JCA_7001_TestCase</u>
<u>JCA-TA-7002</u>	<u>JCA_7002_TestCase</u>
<u>JCA-TA-7003</u>	<u>JCA_7003_TestCase</u>
<u>JCA-TA-7004</u>	
<u>JCA-TA-7005</u>	
<u>JCA-TA-7006</u>	
<u>JCA-TA-7007</u>	

437

<b>Test Assertion</b>	<b>Test Cases</b>
JCA-TA-8001	JCA_8001_TestCase
JCA-TA-8002	JCA_8002_TestCase JCA_8005_TestCase

JCA-TA-8003	JCA_8003_TestCase JCA_8005_TestCase
JCA-TA-8004	JCA_8004_TestCase JCA_8005_TestCase
JCA-TA-8005	JCA_8006_TestCase
JCA-TA-8006	JCA_8007_TestCase
JCA-TA-8007	JCA_8008_TestCase
JCA-TA-8008	JCA_8009_TestCase
JCA-TA-8009	JCA_8010_TestCase
JCA-TA-8010	JCA_8011_TestCase

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439

Test Assertion	Test Cases
JCA-TA-9001	JCA_9001_TestCase <a href="#">JCA_9008_TestCase</a>
JCA-TA-9002	JCA_9002_TestCase
JCA-TA-9003	JCA_9003_TestCase
JCA-TA-9004	JCA_9004_TestCase
JCA-TA-9005	JCA_9005_TestCase
<a href="#">JCA-TA-9006</a>	<a href="#">JCA_9006_TestCase</a>
<a href="#">JCA-TA-9007</a>	<a href="#">JCA_9006_TestCase</a>
<a href="#">JCA-TA-9008</a>	<a href="#">JCA_9006_TestCase</a>
<a href="#">JCA-TA-9009</a>	<a href="#">JCA_9007_TestCase</a>
<a href="#">JCA-TA-9010</a>	<a href="#">JCA_9008_TestCase</a>
<a href="#">JCA-TA-9011</a>	<a href="#">JCA_9008_TestCase</a>
<a href="#">JCA-TA-9012</a>	<a href="#">JCA_9008_TestCase</a>
<a href="#">JCA-TA-9013</a>	<a href="#">JCA_9008_TestCase</a>
<a href="#">JCA-TA-9014</a>	<a href="#">JCA_9006_TestCase</a>
<a href="#">JCA-TA-9015</a>	<a href="#">JCA_9009_TestCase</a>
<a href="#">JCA-TA-9016</a>	<a href="#">JCA_9009_TestCase</a>
<a href="#">JCA-TA-9017</a>	<a href="#">JCA_9009_TestCase</a>
<a href="#">JCA-TA-9018</a>	<a href="#">JCA_9009_TestCase</a>
<a href="#">JCA-TA-9019</a>	<a href="#">JCA_9009_TestCase</a>
<a href="#">JCA-TA-9020</a>	<a href="#">JCA_9010_TestCase</a>
<a href="#">JCA-TA-9021</a>	<a href="#">JCA_9010_TestCase</a>
<a href="#">JCA-TA-9022</a>	<a href="#">JCA_9010_TestCase</a>

<a href="#">JCA-TA-9023</a>	<a href="#">JCA_9010_TestCase</a>
<a href="#">JCA-TA-9024</a>	<a href="#">JCA_9010_TestCase</a>
<a href="#">JCA-TA-9025</a>	<a href="#">JCA_9011_TestCase</a>
<a href="#">JCA-TA-9026</a>	<a href="#">JCA_9011_TestCase</a>
<a href="#">JCA-TA-9027</a>	<a href="#">JCA_9012_TestCase</a>
<a href="#">JCA-TA-9028</a>	<a href="#">JCA_9012_TestCase</a>
<a href="#">JCA-TA-9029</a>	<a href="#">JCA_9012_TestCase</a>
<a href="#">JCA-TA-9030</a>	<a href="#">JCA_9013_TestCase</a>
<a href="#">JCA-TA-9031</a>	<a href="#">JCA_9013_TestCase</a>
<a href="#">JCA-TA-9032</a>	<a href="#">JCA_9013_TestCase</a>
<a href="#">JCA-TA-9033</a>	<a href="#">JCA_9013_TestCase</a>
<a href="#">JCA-TA-9034</a>	<a href="#">JCA_9014_TestCase</a>
<a href="#">JCA-TA-9035</a>	<a href="#">JCA_9014_TestCase</a>
<a href="#">JCA-TA-9036</a>	Untestable - no standard means of configuring a service to have a JAAS subject
<a href="#">JCA-TA-9037</a>	Untestable - no standard means of configuring a service to have a JAAS subject
<a href="#">JCA-TA-9038</a>	Untestable - no standard means of configuring a service to have a JAAS subject
<a href="#">JCA-TA-9039</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9040</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9041</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9042</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9043</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9044</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9045</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9046</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9047</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9048</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9049</a>	<a href="#">JCA_9015_TestCase</a>
<a href="#">JCA-TA-9050</a>	<a href="#">JCA_9014_TestCase</a>
<a href="#">JCA-TA-9051</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9052</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9053</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9054</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9055</a>	<a href="#">JCA_9016_TestCase</a>



<a href="#">JCA-TA-9056</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9057</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9058</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9059</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9060</a>	<a href="#">JCA_9016_TestCase</a>
<a href="#">JCA-TA-9061</a>	<a href="#">Impossible to obtain a SCAClientFactory instance with an invalid domainURI - untestable</a>
<a href="#">JCA-TA-9062</a>	<a href="#">Untestable since this is a protected method.</a>
<a href="#">JCA-TA-9063</a>	<a href="#">Impossible to obtain a SCAClientFactory instance with an invalid domainURI - untestable</a>
<a href="#">JCA-TA-9064</a>	<a href="#">Untestable unless we make the vendor implementation of SCAClientFactoryFinder a conformance target</a>
<a href="#">JCA-TA-9065</a>	<a href="#">Untestable unless we make the vendor implementation of SCAClientFactoryFinder a conformance target</a>
<a href="#">JCA-TA-9066</a>	
<a href="#">JCA-TA-9067</a>	
<a href="#">JCA-TA-9068</a>	
<a href="#">JCA-TA-9069</a>	
<a href="#">JCA-TA-9070</a>	<a href="#">JCA_9006_TestCase</a>

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Test Assertion	Test Cases
JCA-TA-10001	JCA_10001_TestCase
JCA-TA-10002	JCA_10002_TestCase
JCA-TA-10003	JCA_10003_TestCase
JCA-TA-10004	JCA_2009_TestCase JCA_2010_TestCase
JCA-TA-10031	JCA_10004_TestCase
JCA-TA-10005	JCA_4001_TestCase JCA_10005_TestCase JCA_10006_TestCase
JCA-TA-10006	JCA_4001_TestCase JCA_10007_TestCase
JCA-TA-10007	JCA_4001_TestCase
JCA-TA-10008	JCA_2005_TestCase
JCA-TA-10009	JCA_10008_TestCase

JCA-TA-10010	JCA_4001_TestCase
JCA-TA-10011	JCA_10009_TestCase
JCA-TA-10012	JCA_10005_TestCase JCA_10010_TestCase
JCA-TA-10013	JCA_10005_TestCase JCA_10011_TestCase
JCA-TA-10014	JCA_10012_TestCase
JCA-TA-10015	JCA_2001_TestCase
JCA-TA-10016	JCA_10013_TestCase
JCA-TA-10017	JCA_2001_TestCase
JCA-TA-10018	JCA_10014_TestCase
JCA-TA-10019	JCA_10015_TestCase
JCA-TA-10020	JCA_2001_TestCase
JCA-TA-10021	JCA_2001_TestCase
JCA-TA-10022	JCA_10016_TestCase
JCA-TA-10023	JCA_2008_TestCase
JCA-TA-10024	JCA_10044_TestCase
JCA-TA-10025	JCA_10045_TestCase
JCA-TA-10026	optional requirement - no test
JCA-TA-10027	optional requirement - no test
JCA-TA-10028	optional requirement - no test
JCA-TA-10029	optional requirement - no test
JCA-TA-10030	requires undeploy API - no test
JCA-TA-10031	no TA
JCA-TA-10032	no TA
JCA-TA-10033	requires redeploy API - no test
JCA-TA-10034	optional requirement - no test
JCA-TA-10035	requires undeploy API - no test
JCA-TA-10036	requires undeploy API - no test
JCA-TA-10037	requires redeploy API - no test
JCA-TA-10038	requires deploy/redeploy API - no test
JCA-TA-10039	requires deploy/redeploy API - no test
JCA-TA-10040	requires deploy/redeploy API - no test
JCA-TA-10041	requires deploy/redeploy API - no test
JCA-TA-10042	requires deploy/redeploy API - no test
JCA-TA-10043	requires deploy/redeploy API - no test

JCA-TA-10044	requires optional support for rewiring - no test
JCA-TA-10045	JCA_10046_TestCase
JCA-TA-10046	JCA_10047_TestCase
JCA-TA-10047	JCA_10048_TestCase
JCA-TA-10050	JCA_10049_TestCase
JCA-TA-10055	JCA_10050_TestCase
JCA-TA-10056	requires deploy/redeploy API - no test
JCA-TA-10057	JCA_10051_TestCase
JCA-TA-10058	JCA_10052_TestCase

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Test Assertion	Test Cases
JCA-TA-11001	JCA_11001_TestCase
JCA-TA-11002	JCA_11002_TestCase
JCA-TA-11003	JCA_11003_TestCase
JCA-TA-11004	JCA_11004_TestCase
JCA-TA-11005	JCA_11005_TestCase
JCA-TA-11006	JCA_11006_TestCase
JCA-TA-11007	optional - no test case
JCA-TA-11008	JCA_11007_TestCase
JCA-TA-11009	JCA_11008_TestCase

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445 **4 Catalog of Test Artifacts**

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447 **4.1 Composite Files - lower level**

Name	Valid	Description
Marked " <i>Impl Specific</i> " if it is implementation type specific		<i>Services and References use interface Service1 unless described otherwise</i>
TestComposite10.composite	Y	1 service 1 reference with binding and target




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449 **4.2 Java Interfaces**

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Name	Description
test.Service1Overload.java (JCA_2001 contribution)	2 operations: - overloaded, both named "operation1" #1 - 1 string input, 1 string output parameter #2 - 1 int input, 1 string output
test.Service2.java	Remotable service interface that is not compatible with Service1 interface


451 **4.3 Java Implementation Classes**

452

Name	Description
	Services and references use interface Service1 unless otherwise described
test.service1OverloadImpl.java (JCA_2001 contribution)	1 service implementing Service1Overload 0 references
test.service1Impl2.java	1 service 1 reference (1..1)


453 **4.4 WSDL Interface Files**

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Name	Description

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456 **5 Conformance**

457 There are no conformance statements relating to the TestCases.

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459 **Appendix A. Acknowledgments**

460 The following individuals have participated in the creation of this specification and are gratefully  
461 acknowledged

462 **Participants:**

463

<b>Participant Name</b>	<b>Affiliation</b>
Bryan Aupperle	IBM
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Mike Edwards	IBM
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Ashok Malhotra	Oracle Corporation
Plamen Pavlov	SAP AG*
Eric Wells	Hitachi, Ltd.

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467 **Appendix B. Non-Normative Text**

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## Appendix C. Revision History

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Revision	Date	Editor	Changes Made
1	25/09/09	Mike Edwards	Initial version
4	02/10/09	Dave Booz	Section 3 testcases
5	06/10/09	Dave Booz	Section 8, 8001-8005
7	07/10/09	Dave Booz	Complete Section 8
11	09/10/09	Mike Edwards	All sections complete

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