



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

Committee Draft 01 / Public Review 01

19 July 2010

## Specification URIs:

### This Version:

<http://docs.oasis-open.org/opencsa/sca-j/sca-j-caa-1.1-test-assertions-cd01.html>  
<http://docs.oasis-open.org/opencsa/sca-j/sca-j-caa-1.1-test-assertions-cd01.odt>  
<http://docs.oasis-open.org/opencsa/sca-j/sca-j-caa-1.1-test-assertions-cd01.pdf> (Authoritative)

### Previous Version:

N/A

### Latest Version:

<http://docs.oasis-open.org/opencsa/sca-j/sca-j-caa-1.1-test-assertions.html>  
<http://docs.oasis-open.org/opencsa/sca-j/sca-j-caa-1.1-test-assertions.odt>  
<http://docs.oasis-open.org/opencsa/sca-j/sca-j-caa-1.1-test-assertions.pdf> (Authoritative)

## Technical Committee:

OASIS Service Component Architecture / J (SCA-J) TC  
[http://www.oasis-open.org/committees/tc\\_home.php?wg\\_abbrev=sca-j](http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=sca-j)

## Chair(s):

Mark Combellack	Avaya
David Booz	IBM

## Editor(s):

Mike Edwards,	IBM
---------------	-----

## Related Work:

This document is related to:

- Service Component Architecture Java Common Annotations and APIs Specification Version 1.1  
<http://docs.oasis-open.org/opencsa/sca-j/sca-javacaa-1.1-spec-cd04.pdf>

## Declared XML Namespace(s):

None

**Abstract:**

This document defines the Test Assertions for the SCA J CAA specification.

The Test Assertions represent the testable items relating to the normative statements made in the SCA Java Common Annotations and APIs specification. The Test Assertions provide a bridge between the normative statements in the specification and the conformance TestCases which are designed to check that an SCA runtime conforms to the requirements of the 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.

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-j/>.

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

The non-normative errata page for this specification is located at <http://www.oasis-open.org/committees/sca-j/j/>

---

# Notices

Copyright © OASIS® 2009, 2010. All Rights Reserved.

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

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

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

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

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

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

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

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

# Table of Contents

2	1 Introduction.....	5
3	1.1 Example Test Assertion.....	5
4	1.2 Terminology.....	5
5	1.3 Normative References.....	6
6	1.4 Non-Normative References.....	6
7	2 Test Assertions.....	7
8	2.1 Section 2.....	7
9	2.2 Section 3.....	10
10	2.3 Section 4.....	13
11	2.4 Section 7.....	19
12	2.5 Section 8.....	21
13	2.6 Section 9.....	24
14	2.7 Section 10.....	42
15	2.8 Section 11.....	58
16	3 Cross Mapping of Conformance Statements to Assertions.....	64
17	4 Conformance.....	71
18	Appendix A.Acknowledgments.....	72
19	Appendix B.Revision History.....	73
20		

# 1 Introduction

This document defines the Test Assertions for the SCA Java Common Annotations and APIs Specification Version 1.1.

The test assertions in this document follow the format defined in the OASIS Test Assertion Guidelines specification [TA-GUIDE].

## 1.1 Example Test Assertion

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

Assertion ID	JCA-TA-xxxx
Source	[JCAx00yy]
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

**Assertion ID:** Is a unique ID for the test assertion. Its format starts with a 3 letter string that identifies the specification to which it relates - "JCA" is for the SCA Java Common Annotations and APIs specification. This is followed by "-TA-" to indicate that this identifier is for a test assertion. This is then followed by a unique 4 digit number.

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

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

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

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

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

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

## 1.2 Terminology

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this specification are to be interpreted as described in [IETF RFC 2119 \[RFC 2119\]](#)

50

## 1.3 Normative References

51

[RFC 2119]

S. Bradner. *Key words for use in RFCs to Indicate Requirement Levels*. IETF RFC 2119, March 1997.

52

<http://www.ietf.org/rfc/rfc2119.txt>.

53

54

[TA-GUIDE]

OASIS Committee Draft 04, *Test Assertion Guidelines*, February 2010.

55

<http://docs.oasis-open.org/tag/guidelines/v1.0/cd04/testassertionsguidelines-cd-04.pdf>

56

57

[JAVACAA]

OASIS Committee Draft 04, "Service Component Architecture SCA-J Common Annotations and APIs Specification Version 1.1", July 2010

58

<http://docs.oasis-open.org/opencsa/sca-j/sca-javacaa-1.1-spec-cd04.pdf>

59

60

## 1.4 Non-Normative References

61

N/A

## 2 Test Assertions

### 2.1 Section 2

Assertion ID	JCA-TA-2001
Source	[JCA20001]
Target	Java service marked remotable
Prerequisites	
Predicate	Service does not use method overloading
Prescription Level	mandatory
Tags	"remotable" "overloading"

Assertion ID	JCA-TA-2002
Source	[JCA20002]
Target	Stateless scoped Java implementation instance
Prerequisites	
Predicate	Implementation instance is dispatched on a single thread at one time
Prescription Level	mandatory
Tags	"stateless scope" "single thread"

Assertion ID	JCA-TA-2003
Source	[JCA20003]
Target	Stateless scoped Java implementation instance
Prerequisites	
Predicate	Implementation instance is invoked once through one business method during the lifetime of the implementation instance
Prescription Level	mandatory
Tags	"stateless scope" "lifetime" "invocation"

Assertion ID	JCA-TA-2004
Source	[JCA20004]
Target	Domain level component implemented by a Java class marked "composite"

	scope"
Prerequisites	
Predicate	All clients of the component appear to interact with a single runtime instance of the implementation class
Prescription Level	mandatory
Tags	"composite scope" "invocation"

72

73

Assertion ID	JCA-TA-2005
Source	[JCA20005]
Target	Java implementation class marked with "composite scope" and with "eager initialization"
Prerequisites	Containing component is started
Predicate	The Java implementation class instance is created and initialized
Prescription Level	mandatory
Tags	"composite scope" "lifetime" "eager initialization"

74

75

Assertion ID	JCA-TA-2006
Source	[JCA20006]
Target	Method of Java implementation class with marked with @Init annotation
Prerequisites	Implementation instance is created
Predicate	Method is called
Prescription Level	mandatory
Tags	"composite scope" "lifetime" "initialization" "@Init"

76

77

Assertion ID	JCA-TA-2007
Source	[JCA20007]
Target	Instance of a Java implementation class marked "composite scope"
Prerequisites	Implementation class is used as a component implementation Multiple invocations of services offered by the component are made, which overlap in time
Predicate	Multiple threads run in the single instance of the implementation class
Prescription Level	optional
Tags	"composite scope" "lifetime" "eager initialization"



78

Assertion ID	JCA-TA-2008
Source	[JCA20008]
Target	Java implementation class marked with "composite scope"
Prerequisites	Implementation class is used to implement a component nested inside a composite used to implement a domain level component Component offers at least one service Component has one or more clients for its service(s)
Predicate	Clients of the component appear to interact with a single instance of the implementation class
Prescription Level	mandatory
Tags	"composite scope" "nested component" "instance"

79

80

Assertion ID	JCA-TA-2009
Source	[JCA20009]
Target	Client invocation of a method of a service implementation
Prerequisites	Service method implementation marked "allows pass by reference" Client reference proxy marked "allows pass by reference" Client and service implementation run in the same JVM
Predicate	The invocation uses pass-by-reference call semantics for the input and response parameters
Prescription Level	optional
Tags	"allows pass by reference" "pass by reference" "local"

81

82

Assertion ID	JCA-TA-2010
Source	[JCA20010]
Target	Client invocation of a service implementation
Prerequisites	Service implementation method not marked "allows pass by reference" Client and service implementation run in the same JVM
Predicate	The invocation uses pass-by-value semantics for the input and response parameters
Prescription Level	mandatory
Tags	"allows pass by reference" "pass by value" "local"

83

84

Assertion ID	JCA-TA-2011
Source	[JCA20010]
Target	Client invocation of a service implementation
Prerequisites	Client reference is not marked "allows pass by reference" Client and service implementation run in the same JVM
Predicate	The invocation uses pass-by-value semantics for the input and response parameters
Prescription Level	mandatory
Tags	"allows pass by reference" "pass by value "local"

85

86

87

## 2.2 Section 3

88

89

Assertion ID	JCA-TA-3001
Source	[JCA30001]
Target	@interface attribute of a <interface.java/> element
Prerequisites	
Predicate	Value of @interface attribute is the fully qualified name of a Java interface class
Prescription Level	mandatory
Tags	"interface element" "interface attribute" "Java interface class"

90

91

Assertion ID	JCA-TA-3002
Source	[JCA30002]
Target	@callbackInterface attribute of <interface.java/> element
Prerequisites	interface.java element has a @callbackInterface attribute
Predicate	Value of @callbackInterface is the fully qualified name of a Java interface class
Prescription Level	mandatory
Tags	"interface element" "callbackInterface attribute" "Java interface class"

92

93

Assertion ID	JCA-TA-3003
--------------	-------------

Source	[JCA30003]
Target	@callbackInterface attribute of a <interface.java/> element
Prerequisites	interface.java element has a @callbackInterface attribute Java interface class referenced by the @interface attribute contains a @Callback annotation which references a Java interface class
Predicate	Value of @callbackInterface attribute is the same Java interface class as the one referenced by the @Callback annotation of the Java interface class referenced by the @interface attribute
Prescription Level	mandatory
Tags	"interface element" "callbackInterface attribute" "Java interface class" "@Callback"

94

95

Assertion ID	JCA-TA-3004
Source	[JCA30004]
Target	<interface.java/> element
Prerequisites	
Predicate	Conforms to the sca-interface-java.xsd schema
Prescription Level	mandatory
Tags	"interface element" "schema"

96

97

Assertion ID	JCA-TA-3005
Source	[JCA30005]
Target	@remotable attribute on <interface.java/> element
Prerequisites	Java interface class referenced by @interface attribute of interface.java element contains a @Remotable annotation
Predicate	@remotable attribute has the value "true"
Prescription Level	mandatory
Tags	"interface element" "remotable attribute" "Java interface class" "@Remotable"

98

99

Assertion ID	JCA-TA-3006
Source	[JCA30006]
Target	Java interface class referenced by @interface attribute of a <interface.java/> element
Prerequisites	

Predicate	Java interface class does not contain any of the annotations: @AllowsPassByReference, @ComponentName, @Constructor, @Context, @Destroy, @EagerInit, @Init, @Intent, @Property, @Qualifier, @Reference, @Scope, @Service.
Prescription Level	mandatory
Tags	"interface element" "SCA annotations" "Java interface class"

100

101

Assertion ID	JCA-TA-3007
Source	[JCA30007]
Target	Java interface class referenced by @callbackInterface attribute of a <interface.java/> element
Prerequisites	
Predicate	Java interface class does not contain any of the annotations: @AllowsPassByReference, @Callback, @ComponentName, @Constructor, @Context, @Destroy, @EagerInit, @Init, @Intent, @Property, @Qualifier, @Reference, @Scope, @Service.
Prescription Level	mandatory
Tags	"interface element" "SCA annotations" "Java interface class"

102

103

Assertion ID	JCA-TA-3008
Source	[JCA30009]
Target	2 java interface classes, A and B
Prerequisites	a) Interface classes A is compatible with interface class B, or is a compatible superset of B or is a compatible subset of B  b) One or more of the methods contained in A or in B is annotated with @OneWay
Predicate	Every method which is present in both interface A and in interface B and which is annotated with @OneWay in either interface class is also annotated with @OneWay in the other interface class.
Prescription Level	mandatory
Tags	"interface classes" "@OneWay" "compatible"

104

Assertion ID	JCA-TA-3009
Source	[JCA30010]
Target	<interface.java/> element within a composite
Prerequisites	a) element references a Java class which contains a @WebService annotation or a @WebServiceProvider annotation  b) the annotation contains a non-empty wsdlLocation property pointing at a

	WSDL document
Predicate	<interface.java/> element is treated as if it were an <interface.wsdl/> element with an @interface attribute identifying the portType in the WSDL document mapped from the Java interface class and containing @requires and @policySets attributes equal to the @requires and @policySets attributes of the <interface.java/> element
Prescription Level	mandatory
Tags	"interface.java element" "@WebService" "@WebServiceProvider" "interface.wsdl element"

105

106

## 107 2.3 Section 4

108

Assertion ID	JCA-TA-4001
Source	[JCA40001]
Target	Constructor of Java component implementation class
Prerequisites	Component is at the start of the Constructing state of its lifecycle
Predicate	Constructor is invoked by the SCA runtime
Prescription Level	mandatory
Tags	"lifecycle" "constructing" "constructor"

109

110

Assertion ID	JCA-TA-4002
Source	[JCA40002]
Target	Constructor of Java component implementation class
Prerequisites	Constructor is invoked by the SCA runtime at the start of the Constructing state of its lifecycle
Predicate	Constructor references and properties are injected when the constructor is invoked
Prescription Level	mandatory
Tags	"lifecycle" "constructing" "constructor" "injection" "reference" "property"

111

112

Assertion ID	JCA-TA-4003
Source	[JCA40003]
Target	Java component implementation class in Constructing state
Prerequisites	Constructor method completes successfully

Predicate	Component implementation transitions to the Injecting state
Prescription Level	mandatory
Tags	"lifecycle" "constructing" "injecting" "transition"

113

Assertion ID	JCA-TA-4004
Source	[JCA40004]
Target	Java component implementation class in Constructing state
Prerequisites	Constructor method throws an exception
Predicate	Component implementation class is transitioned to the Terminating state
Prescription Level	mandatory
Tags	"lifecycle" "constructor" "exception" "terminating"

114

Assertion ID	JCA-TA-4005
Source	[JCA40005]
Target	Java component implementation class in Injecting state
Prerequisites	Implementation has one or more properties
Predicate	Properties are injected (via field or setter injection) before any other actions occur
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "property"

115

Assertion ID	JCA-TA-4006
Source	[JCA40006]
Target	Java component implementation class in Injecting state
Prerequisites	Implementation has one or more references Implementation has one or more properties
Predicate	References are injected (via field or setter injection) after properties have been injected
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "reference"

116

117

Assertion ID	JCA-TA-4007
Source	[JCA40007]
Target	Java component implementation with one or more injected property / reference

Prerequisites	Implementation code does not use synchronization
Predicate	Injected properties and references are visible to the component implementation
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "synchronization" "property" "reference"

118

Assertion ID	JCA-TA-4008
Source	[JCA40008]
Target	Java component implementation in injecting state
Prerequisites	Implementation has 1 or more service methods
Predicate	Service methods are not invoked
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "service methods"

119

Assertion ID	JCA-TA-4009
Source	[JCA40009]
Target	Java component implementation in injecting state
Prerequisites	All properties and references have been injected
Predicate	Component implementation transitions to the Initializing state
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "transition" "initializing"

120

Assertion ID	JCA-TA-4010
Source	[JCA40010]
Target	Java component implementation in injecting state
Prerequisites	Exception is thrown while a property or a reference is being injected
Predicate	Component implementation transitions to the Destroying state
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "exception" "transition" "destroying"

121

Assertion ID	JCA-TA-4011
Source	[JCA40011]
Target	Java component implementation entering initializing state
Prerequisites	Implementation has a method annotated with @Init
Predicate	Method annotated with @Init is invoked
Prescription	mandatory

Level	
Tags	"lifecycle" "initializing" "@Init"

122

123

Assertion ID	JCA-TA-4012
Source	[JCA40012]
Target	Java component implementation in initializing state
Prerequisites	Implementation has an injected reference Target of injected reference has not been initialized Implementation invokes a method on the reference
Predicate	Implementation receives a ServiceUnavailableException
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "exception" "reference" "uninitialized"

124

Assertion ID	JCA-TA-4013
Source	[JCA40013]
Target	Java component implementation in initializing state
Prerequisites	Implementation has 1 or more service methods
Predicate	Service methods are not invoked
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "service" "invocation"

125

Assertion ID	JCA-TA-4014
Source	[JCA40014]
Target	Java component implementation in initializing state
Prerequisites	Invocation of method annotated with @Init completes successfully
Predicate	Component implementation transitions to the Running state
Prescription Level	mandatory
Tags	"lifecycle" "initializing" "transition" "running"

126

Assertion ID	JCA-TA-4015
Source	[JCA40015]
Target	Java component implementation in initializing state
Prerequisites	Exception is thrown by the component implementation
Predicate	Component implementation transitions to the Destroying state
Prescription	mandatory



Level	
Tags	"lifecycle" "initializing" "exception" "transition" "destroying"

127

Assertion ID	JCA-TA-4016
Source	[JCA40016]
Target	Java component implementation in running state
Prerequisites	Component has one or more service Client component invokes one of the service operations
Predicate	Implementation service method corresponding to the operation is invoked
Prescription Level	mandatory
Tags	"lifecycle" "running" "service" "invocation" "method"

128

129

Assertion ID	JCA-TA-4017
Source	[JCA40017]
Target	Java component implementation in running state
Prerequisites	Implementation scope ends
Predicate	Component implementation transitions to the Destroying state
Prescription Level	mandatory
Tags	"lifecycle" "running" "scope ends" "transition" "destroying"

130

Assertion ID	JCA-TA-4018
Source	[JCA40018]
Target	Java component implementation entering Destroying state
Prerequisites	Implementation has a method annotated with @Destroy
Predicate	Method annotated with @Destroy is invoked
Prescription Level	mandatory
Tags	"lifecycle" "destroying" "@Destroy" "transition"

131

Assertion ID	JCA-TA-4019
Source	[JCA40019]
Target	Java component implementation in destroying state
Prerequisites	Implementation has an injected reference Implementation invokes a method on the reference Target of reference has already been destroyed
Predicate	Implementation receives an InvalidServiceException

Prescription Level	mandatory
Tags	"lifecycle" "destroying" "exception" "reference"

132

Assertion ID	JCA-TA-4020
Source	[JCA40020]
Target	Java component implementation in destroying state
Prerequisites	Implementation has one or more services Client component invokes service operations
Predicate	Implementation service methods are not invoked
Prescription Level	mandatory
Tags	"lifecycle" "destroying" "service" "method" "invocation"

133

134

Assertion ID	JCA-TA-4021
Source	[JCA40021]
Target	Java component implementation in Destroying state
Prerequisites	Method with @Destroy annotation completes
Predicate	Component implementation transitions to terminated state
Prescription Level	mandatory
Tags	"lifecycle" "destroying" "@Destroy" "transition" "terminated"

135

Assertion ID	JCA-TA-4022
Source	[JCA40022]
Target	Java component implementation in Destroying state
Prerequisites	Method with @Destroy annotation throws an exception
Predicate	Component implementation transitions to the terminated state
Prescription Level	mandatory
Tags	"lifecycle" "destroying" "exception" "transition" "terminated" "@Destroy"

136

Assertion ID	JCA-TA-4023
Source	[JCA40023]
Target	Java component implementation is in Terminated state
Prerequisites	Component implementation has service Client component invokes operations on a service
Predicate	Implementation service methods are not invoked

Prescription Level	mandatory
Tags	"lifecycle" "terminated" "service" "invocation"

137

Assertion ID	JCA-TA-4024
Source	[JCA40024]
Target	Java component implementation in Injecting state
Prerequisites	A property or a reference is unable to be injected
Predicate	Component implementation transitions to the Destroying state
Prescription Level	mandatory
Tags	"lifecycle" "injecting" "property" "reference" "destroying"

138

139

## 2.4 Section 7

140

141

Assertion ID	JCA-TA-7001
Source	[JCA60001]
Target	fields and/or setter methods annotated with @Callback of a component implementation class which has a bidirectional service
Prerequisites	The bidirectional service is invoked
Predicate	A Callback reference object for the invoked service is injected into all fields and setter methods which have the type of the interface for the callback and null is injected into all fields and setter methods which have a different type
Prescription Level	mandatory
Tags	"@Callback" "field" "setter method" "injection" "callback reference"

142

Assertion ID	JCA-TA-7002
Source	[JCA60002]
Target	fields and/or setter methods annotated with @Callback of a component implementation class which has a bidirectional service
Prerequisites	Component implementation also has one or more non-bidirectional services One of the non-bidirectional services is invoked
Predicate	null is injected into all of the fields and setter methods annotated with @C-allback
Prescription Level	mandatory

Tags	"@Callback" "field" "setter method" "injection"
------	-------------------------------------------------

143

Assertion ID	JCA-TA-7003
Source	[JCA60003]
Target	Java interface class which is an asynchronous mapping of WSDL portType with request/response operations
Prerequisites	
Predicate	Class is annotated with the "asyncInvocation" intent
Prescription Level	mandatory
Tags	

144

Assertion ID	JCA-TA-7004
Source	[JCA60003]
Target	Java interface class which is an SCA asynchronous service mapping of WSDL portType with request/response operations
Prerequisites	WSDL portType contains an operation with a name
Predicate	Class contains a method with a name that is the JAX-WS mapping of the portType operation name, with the added suffix "Async", which has: <ul style="list-style-type: none"> <li>- a void return type</li> <li>- a set of parameters which match the JAX-WS mapping of the input parameters of the WSDL operation</li> <li>- an additional final parameter which is a ResponseDispatch object typed by the JAX-WS Response Bean mapping of the output parameter(s) of the WSDL operation</li> </ul>
Prescription Level	mandatory
Tags	"SCA asynchronous service" "WSDL mapping"

145

Assertion ID	JCA-TA-7005
Source	[JCA60004]
Target	Interface of an SCA service is declared using an SCA asynchronous service interface
Prerequisites	
Predicate	The service is supported by the SCA runtime and is invocable.
Prescription Level	mandatory
Tags	"SCA asynchronous service"

146

Assertion ID	JCA-TA-7006
Source	[JCA60005]

Target	ResponseDispatch object passed to SCA service implementation when operation of an SCA asynchronous service interface is invoked
Prerequisites	Either the sendReponse method or the sendFault method of the ResponseDispatch object has already been called once
Predicate	An IllegalStateException is thrown when either the sendResponse method or the sendFault method is invoked
Prescription Level	mandatory
Tags	"ResponseDispatch" "sendResponse" "sendFault"

147

Assertion ID	JCA-TA-7007
Source	[JCA60006]
Target	Java interface of a service or of a reference
Prerequisites	Interface contains one or more methods characterized as "Asynchronous service methods"
Predicate	Java interface is treated for matching purposes as if the asynchronous service methods are mapped to the equivalent synchronous methods
Prescription Level	mandatory
Tags	"asynchronous service interface" "interface matching" "synchronous methods"

148

149

## 2.5 Section 8

150

Assertion ID	JCA-TA-8001
Source	[JCA70001]
Target	Declaration of a Java annotation that corresponds to an SCA intent
Prerequisites	
Predicate	Declaration includes <a href="#">the @Intent</a> annotation
Prescription Level	mandatory
Tags	"annotation" "declaration" "@Intent" "intent"

151

152

Assertion ID	JCA-TA-8002
Source	[JCA70002]
Target	Method of Java implementation class
Prerequisites	Method is annotated with an Intent annotation
Predicate	Method is a setter method for an SCA reference, either through explicit marking with @Reference or through introspection as defined in component implementation specification

Prescription Level	mandatory
Tags	"annotation" "method" "intent"

153

154

Assertion ID	JCA-TA-8003
Source	[JCA70002]
Target	Field of a Java implementation class
Prerequisites	Field is annotated with an Intent annotation
Predicate	Field is an SCA reference field, either through explicit marking with @Reference or through introspection as defined in the component implementation specification
Prescription Level	mandatory
Tags	"annotation" "field" "intent"

155

Assertion ID	JCA-TA-8004
Source	[JCA70002]
Target	Constructor parameter of a Java implementation class
Prerequisites	Constructor parameter is annotated with an Intent annotation
Predicate	Constructor parameter is marked as an SCA reference using the @Reference annotation
Prescription Level	mandatory
Tags	"annotation" "constructor" "parameter" "intent"

156

Assertion ID	JCA-TA-8005
Source	[JCA70003]
Target	Java element annotated with multiple intent annotations
Prerequisites	
Predicate	The set of intents which apply to the Java element are the combination of all the separate intents declared by the annotations, following the combination rules defined in the SCA Policy Framework spec
Prescription Level	mandatory
Tags	"annotation" "multiple" "intent" "combination"

157

158

Assertion ID	JCA-TA-8006
Source	[JCA70004]
Target	Method of a Java interface

Prerequisites	One set of Intent annotations are specified on the Java interface A second set of Intent annotations are specified on the method
Predicate	The set of intents which apply to the method are the combination of the set of intents on the interface with the set of intents on the method, following the merging rules for a structural hierarchy defined in the SCA Policy Framework specification
Prescription Level	mandatory
Tags	"annotation" "multiple" "intent" "combination" "interface" "method"

159

160

Assertion ID	JCA-TA-8007
Source	[JCA70005]
Target	Method of Java implementation class
Prerequisites	Method is annotated with a PolicySets annotation
Predicate	Method is a setter method for an SCA reference, either through explicit marking with @Reference or through introspection as defined in component implementation specification
Prescription Level	mandatory
Tags	"annotation" "reference" "@PolicySets" "method"

161

162

Assertion ID	JCA-TA-8008
Source	[JCA70005]
Target	Field of a Java implementation class
Prerequisites	Field is annotated with a PolicySets annotation
Predicate	Field is an SCA reference field, either through explicit marking with @Reference or through introspection as defined in the component implementation specification
Prescription Level	mandatory
Tags	"annotation" "reference" "@PolicySets" "field"

163

164

Assertion ID	JCA-TA-8009
Source	[JCA70005]
Target	Constructor parameter of a Java implementation class
Prerequisites	Constructor parameter is annotated with a PolicySets annotation
Predicate	Constructor parameter is marked as an SCA reference using the @Reference annotation

Prescription Level	mandatory
Tags	"annotation" "constructor" "@PolicySets" "reference"

165

166

Assertion ID	JCA-TA-8010
Source	[JCA70006]
Target	Method of a Java interface
Prerequisites	Java interface is annotated with @PolicySets annotation Method is annotated with a second @PolicySets annotation
Predicate	The set of intents which apply to the method is the union of the policy sets specified by the two @PolicySets annotations.
Prescription Level	mandatory
Tags	"annotation" "@PolicySets" "interface" "method" "combination"

167

## 2.6 Section 9

168

169

Assertion ID	JCA-TA-9001
Source	[JCA80001]
Target	invocation of getService(...) method of ComponentContext API
Prerequisites	referenceName parameter of the method identifies a reference of multiplicity 0..n or multiplicity 1..n
Predicate	getService(...) method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getService" "0..n" "1..n" "IllegalArgumentException"

170

171

Assertion ID	JCA-TA-9002
Source	[JCA80002]
Target	invocation of getRequestContext(...) method of ComponentContext API
Prerequisites	invocation takes place during the execution of a Java business method of a service operation invocation take place on the same Java thread used by the SCA runtime to invoke the business method
Predicate	invocation returns a non-null value for the RequestContext
Prescription Level	mandatory
Tags	"ComponentContext" "getRequestContext" "business method" "service"



172

173

Assertion ID	JCA-TA-9003
Source	[JCA80003]
Target	invocation of <code>getServiceReference()</code> method of RequestContext API
Prerequisites	invocation takes place during the execution of a Java business method of a service operation
Predicate	<code>getServiceReference()</code> method returns a <code>ServiceReference</code> object that represents the service that was invoked
Prescription Level	mandatory
Tags	"RequestContext" "service operation" " <code>getServiceReference</code> "

174

Assertion ID	JCA-TA-9004
Source	[JCA80003]
Target	invocation of <code>getServiceReference()</code> method of RequestContext API
Prerequisites	invocation takes place during the execution of a Java business method of a callback operation
Predicate	<code>getServiceReference()</code> method returns a <code>ServiceReference</code> object that represents the callback that was invoked
Prescription Level	mandatory
Tags	"RequestContext" "callback operation" " <code>getServiceReference</code> "

175

176

Assertion ID	JCA-TA-9005
Source	[JCA80002]
Target	invocation of <code>getRequestContext(...)</code> method of ComponentContext API
Prerequisites	invocation takes place during the execution of a Java business method of a callback operation invocation take place on the same Java thread use by the SCA runtime to invoke the business method
Predicate	invocation returns a non-null value for the RequestContext
Prescription Level	mandatory
Tags	"ComponentContext" " <code>getRequestContext</code> " "business method" "callback"

177

178

Assertion ID	JCA-TA-9006
Source	[JCA80005]
Target	invocation of <code>ComponentContext.getServiceReference()</code> method

Prerequisites	reference named by referenceName parameter does not have an interface of the type defined by the businessInterface parameter
Predicate	getServiceReference() method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReference()" "IllegalArgumentException" "interface type" "businessInterface"

179

Assertion ID	JCA-TA-9007
Source	[JCA80006]
Target	invocation of ComponentContext.getServiceReference() method
Prerequisites	component which is invoking the method does not have a reference with the name provided in the referenceName parameter
Predicate	getServiceReference() method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReference()" "IllegalArgumentException" "referenceName"

180

Assertion ID	JCA-TA-9008
Source	[JCA80007]
Target	invocation of ComponentContext.getServiceReference() method
Prerequisites	a) multiplicity of the reference named by the referenceName parameter is 0..1 b) reference has no target service configured
Predicate	getServiceReference() method returns null
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReference()" "IllegalArgumentException" "multiplicity" "target service"

181

Assertion ID	JCA-TA-9009
Source	[JCA80008]
Target	invocation of ComponentContext.getURI method
Prerequisites	
Predicate	returns the absolute URI of the component in the SCA Domain
Prescription Level	mandatory
Tags	"ComponentContext" "getURI"

182

Assertion ID	JCA-TA-9010
--------------	-------------

Source	[JCA80009]
Target	invocation of ComponentContext.getService method
Prerequisites	reference named by the referenceName parameter has a target service configured
Predicate	method returns a proxy object with the interface passed in the businessInterface parameter for the reference named in the referenceName parameter
Prescription Level	mandatory
Tags	"ComponentContext" "getService" "proxy"

183

Assertion ID	JCA-TA-9011
Source	[JCA80010]
Target	invocation of ComponentContext.getService method
Prerequisites	multiplicity of the reference named by the referenceName parameter is 0..1 reference has no target service configured
Predicate	method returns null
Prescription Level	mandatory
Tags	"ComponentContext" "getService" "0..1" "no target"

184

Assertion ID	JCA-TA-9012
Source	[JCA80011]
Target	invocation of ComponentContext.getService method
Prerequisites	the component does not have a reference with the name in the referenceName parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getService" "referenceName" "IllegalArgumentException"

185

Assertion ID	JCA-TA-9013
Source	[JCA80012]
Target	invocation of ComponentContext.getService method
Prerequisites	reference named by the referenceName parameter does not have an interface compatible with the interface supplied in the businessInterface parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getService" "businessInterface"

	"IllegalArgumentException"
--	----------------------------

186

Assertion ID	JCA-TA-9014
Source	[JCA80013]
Target	invocation of ComponentContext.getServiceReference method
Prerequisites	reference named by the referenceName parameter has a target service configured
Predicate	method returns a ServiceReference object with the interface passed in the businessInterface parameter for the reference named in the referenceName parameter
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReference" "ServiceReference"

187

Assertion ID	JCA-TA-9015
Source	[JCA80014]
Target	invocation of ComponentContext.getServices method
Prerequisites	reference identified by the referenceName parameter exists and is configured with one or more target services  identified reference has the interface supplied in the businessInterface parameter
Predicate	returns a Collection containing one proxy object for each target service of the reference, each implementing the interface supplied in the businessInterface parameter
Prescription Level	mandatory
Tags	"ComponentContext" "getServices" "collection" "proxy"

188

Assertion ID	JCA-TA-9016
Source	[JCA80015]
Target	invocation of ComponentContext.getServices method
Prerequisites	reference identified by the referenceName parameter exists but is configured with zero target services
Predicate	returns an empty Collection
Prescription Level	mandatory
Tags	"ComponentContext" "getServices" "collection" "empty"

189

Assertion ID	JCA-TA-9017
Source	[JCA80016]
Target	invocation of ComponentContext.getServices method
Prerequisites	reference identified by the referenceName parameter has a multiplicity of

	either 0..1 or 1..1
Predicate	method throws an <code>IllegalArgumentException</code>
Prescription Level	mandatory
Tags	"ComponentContext" "getServices" "multiplicity" "0..1" "1..1" "IllegalArgumentException"

190

Assertion ID	JCA-TA-9018
Source	[JCA80017]
Target	invocation of <code>ComponentContext.getServices</code> method
Prerequisites	component does not have a reference with the name identified by the <code>referenceName</code> parameter
Predicate	method throws an <code>IllegalArgumentException</code>
Prescription Level	mandatory
Tags	"ComponentContext" "getServices" "reference" "referenceName" "IllegalArgumentException"

191

Assertion ID	JCA-TA-9019
Source	[JCA80018]
Target	invocation of <code>ComponentContext.getServices</code> method
Prerequisites	reference identified by the <code>referenceName</code> parameter does not have an interface compatible with the interface supplied in the <code>businessInterface</code> parameter
Predicate	method throws an <code>IllegalArgumentException</code>
Prescription Level	mandatory
Tags	"ComponentContext" "getServices" "reference" "businessInterface" "IllegalArgumentException"

192

Assertion ID	JCA-TA-9020
Source	[JCA80019]
Target	invocation of <code>ComponentContext.getServiceReferences</code> method
Prerequisites	reference identified by the <code>referenceName</code> parameter exists and is configured with one or more target services  identified reference has the interface supplied in the <code>businessInterface</code> parameter
Predicate	returns a <code>Collection</code> containing one <code>ServiceReference</code> object for each target service of the reference, each implementing the interface supplied in the <code>businessInterface</code> parameter
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReferences" "collection"

	"ServiceReference"
--	--------------------

193

Assertion ID	JCA-TA-9021
Source	[JCA80020]
Target	invocation of ComponentContext.getServiceReferencess method
Prerequisites	reference identified by the referenceName parameter exists and is configured with zero target services
Predicate	returns an empty Collection
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReferences" "collection" "ServiceReference" "unwired"

194

Assertion ID	JCA-TA-9022
Source	[JCA80021]
Target	invocation of ComponentContext.getServiceReferencess method
Prerequisites	reference identified by the referenceName parameter has multiplicity of 0..1 or 1..1
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReferences" "0..1" "1..1" "IllegalArgumentException"

195

Assertion ID	JCA-TA-9023
Source	[JCA80022]
Target	invocation of ComponentContext.getServiceReferencess method
Prerequisites	component does not have a reference with the name contained in the referenceName parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	ComponentContext" "getServiceReferences" "referenceName" "IllegalArgumentException"

196

Assertion ID	JCA-TA-9024
Source	[JCA80023]
Target	invocation of ComponentContext.getServiceReferencess method
Prerequisites	reference identified by the referenceName parameter does not have an interface compatible with the interface supplied in the businessInterface parameter
Predicate	method throws an IllegalArgumentException

Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReferences" "businessInterface" "IllegalArgumentException"

197

Assertion ID	JCA-TA-9025
Source	[JCA80024]
Target	invocation of ComponentContext.createSelfReference(businessInterface) method
Prerequisites	invoking component has one or more services with the interface specified in the businessInterface parameter
Predicate	returns a ServiceReference object typed by the interface defined by the businessInterface parameter for one of the services of the invoking component which has that interface
Prescription Level	mandatory
Tags	"ComponentContext" "createSelfReference" "ServiceReference" "businessInterface"

198

Assertion ID	JCA-TA-9026
Source	[JCA80025]
Target	invocation of ComponentContext.createSelfReference(businessInterface) method
Prerequisites	invoking component has no service with the interface specified in the businessInterface parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "createSelfReference" "IllegalArgumentException" "businessInterface"

199

Assertion ID	JCA-TA-9027
Source	[JCA80026]
Target	invocation of ComponentContext.createSelfReference(businessInterface, serviceName) method
Prerequisites	invoking component has a service with the name specified in the serviceName parameter service with the name specified in serviceName has an interface
Predicate	returns a ServiceReference object typed by the interface defined by the businessInterface parameter for one of the services of the invoking component which has that interface
Prescription Level	mandatory
Tags	"ComponentContext" "createSelfReference" "serviceName"

	"ServiceReference" "businessInterface"
--	----------------------------------------

200

Assertion ID	JCA-TA-9028
Source	[JCA80027]
Target	invocation of ComponentContext.createSelfReference(businessInterface, serviceName) method
Prerequisites	invoking component has no service with the name specified in the serviceName parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "createSelfReference" "serviceName" "IllegalArgumentException"

201

Assertion ID	JCA-TA-9029
Source	[JCA80028]
Target	invocation of ComponentContext.createSelfReference(businessInterface, serviceName) method
Prerequisites	the service with the name specified in the serviceName parameter does not have the interface defined in the businessInterface parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "createSelfReference" "serviceName" "IllegalArgumentException" "businessInterface"

202

Assertion ID	JCA-TA-9030
Source	[JCA80029]
Target	invocation of ComponentContext.getProperty method
Prerequisites	component configuration contains a value for the property with name supplied in the propertyName parameter
Predicate	method returns an object of the type identified by the type parameter containing the value in the component configuration for the property with the name in the propertyName parameter
Prescription Level	mandatory
Tags	"ComponentContext" "getProperty" "property value" "propertyName"

203

Assertion ID	JCA-TA-9031
Source	[JCA80029]
Target	invocation of ComponentContext.getProperty method
Prerequisites	component configuration contains no value for the property with name supplied in the propertyName parameter



Predicate	method returns null
Prescription Level	mandatory
Tags	"ComponentContext" "getProperty" "property value" "propertyName" "null"

204

Assertion ID	JCA-TA-9032
Source	[JCA80030]
Target	invocation of ComponentContext.getProperty method
Prerequisites	component does not have a property with name supplied in the propertyName parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getProperty" "propertyName" "IllegalArgumentException"

205

Assertion ID	JCA-TA-9033
Source	[JCA80031]
Target	invocation of ComponentContext.getProperty method
Prerequisites	component property with the name supplied in the propertyName parameter does not have a type compatible with the supplied type parameter
Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "getProperty" "type" "IllegalArgumentException"

206

Assertion ID	JCA-TA-9034
Source	[JCA80032]
Target	invocation of ComponentContext.cast method
Prerequisites	
Predicate	method returns a ServiceReference object typed by the same interface as specified by the reference proxy object supplied in the target parameter
Prescription Level	mandatory
Tags	"ComponentContext" "cast" "ServiceReference"

207

Assertion ID	JCA-TA-9035
Source	[JCA80033]
Target	invocation of ComponentContext.cast method
Prerequisites	supplied target parameter is not an SCA reference proxy object

Predicate	method throws an IllegalArgumentException
Prescription Level	mandatory
Tags	"ComponentContext" "cast" "IllegalArgumentException"

208

Assertion ID	JCA-TA-9036
Source	[JCA80034]
Target	invocation of RequestContext.getSecuritySubject method
Prerequisites	current request has a JAAS subject method is invoked from code processing a service request or a callback request
Predicate	method returns the JAAS subject of the request
Prescription Level	mandatory
Tags	"RequestContext" "getSecuritySubject" "JAAS subject"

209

Assertion ID	JCA-TA-9037
Source	[JCA80034]
Target	invocation of RequestContext.getSecuritySubject method
Prerequisites	current request has no JAAS subject
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getSecuritySubject" "JAAS subject" "null"

210

Assertion ID	JCA-TA-9038
Source	[JCA80034]
Target	invocation of RequestContext.getSecuritySubject method
Prerequisites	method is invoked from code not processing a service request or a callback request
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getSecuritySubject" "JAAS subject" "null"

211

Assertion ID	JCA-TA-9039
Source	[JCA80035]
Target	invocation of RequestContext.getServiceName method
Prerequisites	invocation is from thread processing service operation or callback operation

Predicate	method returns the name of the service for which operation is being processed
Prescription Level	mandatory
Tags	"RequestContext" "getServiceName" "operation"

212

Assertion ID	JCA-TA-9040
Source	[JCA80035]
Target	invocation of RequestContext.getServiceName method
Prerequisites	invocation is not from thread processing service operation or callback operation
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getServiceName" "null"

213

Assertion ID	JCA-TA-9041
Source	[JCA80036]
Target	invocation of RequestContext.getCallbackReference method
Prerequisites	method invoked from a thread processing an operation of a bidirectional service
Predicate	method returns a ServiceReference typed by the interface of the callback
Prescription Level	mandatory
Tags	"RequestContext" "getCallbackReference" "bidirectional service"

214

Assertion ID	JCA-TA-9042
Source	[JCA80036]
Target	invocation of RequestContext.getCallbackReference method
Prerequisites	method invoked from a thread processing an operation of a service which is not bidirectional
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getCallbackReference" "not bidirectional service"

215

Assertion ID	JCA-TA-9043
Source	[JCA80036]
Target	invocation of RequestContext.getCallbackReference method
Prerequisites	method invoked from a thread not processing an operation of a service
Predicate	method returns null

Prescription Level	mandatory
Tags	"RequestContext" "getCallbackReference" "null service"

216

Assertion ID	JCA-TA-9044
Source	[JCA80037]
Target	invocation of RequestContext.getCallback method
Prerequisites	method invoked from a thread processing an operation of a bidirectional service
Predicate	method returns a reference proxy object typed by the interface of the callback
Prescription Level	mandatory
Tags	"RequestContext" "getCallback" "bidirectional service"

217

Assertion ID	JCA-TA-9045
Source	[JCA80037]
Target	invocation of RequestContext.getCallback method
Prerequisites	method invoked from a thread processing an operation of a service which is not bidirectional
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getCallback" "not bidirectional service"

218

Assertion ID	JCA-TA-9046
Source	[JCA80037]
Target	invocation of RequestContext.getCallback method
Prerequisites	method invoked from a thread not processing an operation of a service
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getCallback" "null service"

219

Assertion ID	JCA-TA-9047
Source	[JCA80038]
Target	invocation of RequestContext.getServiceReference method
Prerequisites	method is invoked by a thread processing a callback operation
Predicate	method returns a ServiceReference that represents the callback service
Prescription Level	mandatory

Tags	"RequestContext" "getServiceReference" "callback operation" "ServiceReference"
------	--------------------------------------------------------------------------------

220

Assertion ID	JCA-TA-9048
Source	[JCA80039]
Target	invocation of RequestContext.getServiceReference method
Prerequisites	method is invoked by a thread not involved in processing either a service operation or a callback operation
Predicate	method returns null
Prescription Level	mandatory
Tags	"RequestContext" "getServiceReference" "null"

221

Assertion ID	JCA-TA-9049
Source	[JCA80040]
Target	invocation of ServiceReference.getService method
Prerequisites	
Predicate	method returns a reference proxy object typed by the business interface of the reference and which can be used to invoke operations on the target service of the reference
Prescription Level	mandatory
Tags	"ServiceReference" "getService" "reference proxy"

222

Assertion ID	JCA-TA-9050
Source	[JCA80041]
Target	invocation of ServiceReference.getBusinessInterface method
Prerequisites	
Predicate	method returns a Class object representing the business interface of the reference
Prescription Level	mandatory
Tags	"ServiceReference" "getBusinessInterface" "reference" "interface"

223

Assertion ID	JCA-TA-9051
Source	[JCA80042]
Target	invocation of SCAClientFactory.newInstance( URI ) method
Prerequisites	domainURI parameter identifies a valid SCA Domain
Predicate	method returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter
Prescription Level	mandatory

224

Tags	"SCAClientFactory" "domainURI" "SCAClientFactory"
------	---------------------------------------------------

Assertion ID	JCA-TA-9052
Source	[JCA80043]
Target	invocation of SCAClientFactory.newInstance( URI ) method
Prerequisites	domainURI parameter does not identify a valid SCA Domain
Predicate	method throws a NoSuchDomainException
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "SCAClientFactory" "NoSuchDomainException"

225

Assertion ID	JCA-TA-9053
Source	[JCA80044]
Target	invocation of SCAClientFactory.newInstance( Properties, URI ) method
Prerequisites	domainURI parameter identifies a valid SCA Domain
Predicate	method returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "Properties" "SCAClientFactory"

226

Assertion ID	JCA-TA-9054
Source	[JCA80045]
Target	invocation of SCAClientFactory.newInstance( Properties, URI ) method
Prerequisites	domainURI parameter does not identify a valid SCA Domain
Predicate	method throws a NoSuchDomainException
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "Properties" "SCAClientFactory" "NoSuchDomainException"

227

Assertion ID	JCA-TA-9055
Source	[JCA80046]
Target	invocation of SCAClientFactory.newInstance( Classloader, URI ) method
Prerequisites	domainURI parameter identifies a valid SCA Domain
Predicate	method returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "Classloader" "SCAClientFactory"

228

Assertion ID	JCA-TA-9056
Source	[JCA80047]
Target	invocation of SCAClientFactory.newInstance( Classloader, URI ) method
Prerequisites	domainURI parameter does not identify a valid SCA Domain
Predicate	method throws a NoSuchDomainException
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "Classloader" "SCAClientFactory" "NoSuchDomainException"

229

Assertion ID	JCA-TA-9057
Source	[JCA80048]
Target	invocation of SCAClientFactory.newInstance( Properties, Classloader, URI ) method
Prerequisites	domainURI parameter identifies a valid SCA Domain
Predicate	method returns an object which implements the SCAClientFactory class for the SCA Domain identified by the domainURI parameter
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "Properties" "Classloader" "SCAClientFactory"

230

Assertion ID	JCA-TA-9058
Source	[JCA80049]
Target	invocation of SCAClientFactory.newInstance( Properties, Classloader, URI ) method
Prerequisites	domainURI parameter does not identify a valid SCA Domain
Predicate	method throws a NoSuchDomainException
Prescription Level	mandatory
Tags	"SCAClientFactory" "domainURI" "Properties" "Classloader" "SCAClientFactory" "NoSuchDomainException"

231

Assertion ID	JCA-TA-9059
Source	[JCA80050]
Target	invocation of SCAClientFactory.getService method
Prerequisites	service identified by the serviceURI parameter exists service has a service interface compatible with the interface supplied in the interfaze parameter
Predicate	method returns a proxy object which implements the business interface supplied by the interfaze parameter which can be used to invoke

	operations on the service identified by the serviceURI parameter
Prescription Level	mandatory
Tags	"SCAClientFactory" "getService" "proxy"

232

Assertion ID	JCA-TA-9060
Source	[JCA80051]
Target	invocation of SCAClientFactory.getService method
Prerequisites	service identified by the serviceURI parameter does not exist OR service does not have a service interface compatible with the interface supplied in the interface parameter
Predicate	method throws a NoSuchServiceException
Prescription Level	mandatory
Tags	"SCAClientFactory" "getService" "NoSuchServiceException"

233

Assertion ID	JCA-TA-9061
Source	[JCA80052]
Target	invocation of SCAClientFactory.getService method
Prerequisites	domain URI associated with SCAClientFactory does not identify a valid SCA Domain
Predicate	method throws a NoSuchServiceException
Prescription Level	mandatory
Tags	"SCAClientFactory" "getService" "NoSuchServiceException"

234

Assertion ID	JCA-TA-9062
Source	[JCA80053]
Target	invocation of SCAClientFactory.getDomainURI method
Prerequisites	
Predicate	returns the SCA Domain URI of the Domain associated with the SCAClientFactory object
Prescription Level	mandatory
Tags	"SCAClientFactory" "getDomainURI" "Domain URI"

235

Assertion ID	JCA-TA-9063
Source	[JCA80054]
Target	invocation of SCAClientFactory.getDomainURI method



Prerequisites	domain URI associated with SCAClientFactory does not identify a valid SCA Domain
Predicate	method throws a NoSuchServiceException
Prescription Level	mandatory
Tags	"SCAClientFactory" "getDomainURI" "NoSuchServiceException"

236

Assertion ID	JCA-TA-9064
Source	[JCA80055]
Target	invocation of SCAClientFactoryFinder.find method
Prerequisites	SCAClientFactory implementation exists and can be found
Predicate	returns an object which implements the SCAClientFactory interface for the SCA Domain represented by the domainURI parameter
Prescription Level	mandatory
Tags	"SCAClientFactoryFinder" "find" "SCAClientFactory"

237

Assertion ID	JCA-TA-9065
Source	[JCA80056]
Target	invocation of SCAClientFactoryFinder.find method
Prerequisites	SCAClientFactory implementation cannot be found
Predicate	method throws a ServiceRuntimeException
Prescription Level	mandatory
Tags	"SCAClientFactoryFinder" "find" "ServiceRuntimeException"

238

Assertion ID	JCA-TA-9066
Source	[JCA80057]
Target	invocation of ResponseDispatch.sendResponse() method
Prerequisites	sendResponse() and sendFault() methods of the ResponseDispatch object have not been called previously
Predicate	method sends the supplied response message to the client of the asynchronous service
Prescription Level	mandatory
Tags	"ResponseDispatch" "sendResponse"

239

Assertion ID	JCA-TA-9067
Source	[JCA80058]
Target	invocation of ResponseDispatch.sendResponse() method
Prerequisites	one of sendResponse() or sendFault() methods of the ResponseDispatch

	object have been called previously
Predicate	method throws an <code>InvalidStateException</code>
Prescription Level	mandatory
Tags	"ResponseDispatch" "sendResponse" "InvalidStateException"

240

Assertion ID	JCA-TA-9068
Source	[JCA80059]
Target	invocation of <code>ResponseDispatch.sendFault()</code> method
Prerequisites	<code>sendResponse()</code> and <code>sendFault()</code> methods of the <code>ResponseDispatch</code> object have not been called previously
Predicate	method sends the supplied fault to the client of the asynchronous service
Prescription Level	mandatory
Tags	"ResponseDispatch" "sendFault"

241

Assertion ID	JCA-TA-9069
Source	[JCA80060]
Target	invocation of <code>ResponseDispatch.sendFault()</code> method
Prerequisites	one of <code>sendResponse()</code> or <code>sendFault()</code> methods of the <code>ResponseDispatch</code> object have been called previously
Predicate	method throws an <code>InvalidStateException</code>
Prescription Level	mandatory
Tags	"ResponseDispatch" "sendFault" "InvalidStateException"

242

Assertion ID	JCA-TA-9070
Source	[JCA80004]
Target	invocation of <code>ComponentContext.getServiceReference()</code> method
Prerequisites	reference named by <code>referenceName</code> parameter has a multiplicity > 1
Predicate	<code>getServiceReference()</code> method throws an <code>IllegalArgumentException</code>
Prescription Level	mandatory
Tags	"ComponentContext" "getServiceReference()" "multiplicity" "IllegalArgumentException"

243

244

## 2.7 Section 10

245

Assertion ID	JCA-TA-10001
--------------	--------------

Source	[JCA90001]
Target	Component implementation contains an SCA annotation that is improperly used
Prerequisites	
Predicate	The component which uses the implementation does not run
Prescription Level	mandatory
Tags	"implementation" "invalid annotation"

246

Assertion ID	JCA-TA-10002
Source	[JCA90002]
Target	Component implementation class
Prerequisites	Class has static method Class has an SCA annotation
Predicate	Class does not have SCA annotation applied to static method
Prescription Level	mandatory
Tags	"SCA annotation" "static method"

247

248

Assertion ID	JCA-TA-10003
Source	[JCA90002]
Target	Component implementation class
Prerequisites	Class has static field Class has an SCA annotation
Predicate	Class does not have SCA annotation applied to static field
Prescription Level	mandatory
Tags	"SCA annotation" "static field"

249

250

Assertion ID	JCA-TA-10004
Source	[JCA90052]
Target	Java class containing @AllowsPassByReference annotation
Prerequisites	
Predicate	@AllowsPassByReference annotation is attached to: - the Java class itself - or a method of a remotable service offered by the class

	- or an SCA reference of the class, in which case it is attached to the reference in a place where a @Reference annotation is valid
Prescription Level	mandatory
Tags	"@AllowsPassByReference" "Java class" "attachment"

251

Assertion ID	JCA-TA-10031
Source	[JCA90046]
Target	@Callback annotation on a setter method or on a field of an implementation class, for injection of a callback object
Prerequisites	
Predicate	@Callback annotation does not specify any attributes
Prescription Level	mandatory
Tags	"annotation" "Callback" "implementation" "injection"

252

Assertion ID	JCA-TA-10005
Source	[JCA90003]
Target	Constructor of an implementation class
Prerequisites	Constructor has parameters Constructor is annotated with the @Constructor annotation
Predicate	Each parameter of the Constructor is annotated with either @Reference or with @Property
Prescription Level	mandatory
Tags	"annotation" "constructor" "parameters" "@Reference" "@Property"

253

Assertion ID	JCA-TA-10006
Source	[JCA90004]
Target	Method of Java implementation class annotated with @Destroy
Prerequisites	
Predicate	Method has void return type and no arguments
Prescription Level	mandatory
Tags	"annotation" "@Destroy" "return type" "arguments"

254

Assertion ID	JCA-TA-10007
Source	[JCA90005]
Target	Java implementation class with a method annotated with @Destroy
Prerequisites	Scope of the implementation class ends

Predicate	Method annotated with @Destroy is invoked.
Prescription Level	mandatory
Tags	"annotation" "@Destroy" "invoke" "scope"

255

Assertion ID	JCA-TA-10008
Source	[JCA90007]
Target	Java implementation class annotated with @EagerInit
Prerequisites	Implementation class is Composite scoped Component using the implementation is started
Predicate	Java implementation class is started
Prescription Level	mandatory
Tags	"annotation" "@EagerInit" "composite scope" "started"

256

Assertion ID	JCA-TA-10009
Source	[JCA90008]
Target	Method annotated with @Init in a Java implementation class
Prerequisites	
Predicate	Method has void return type and no arguments
Prescription Level	mandatory
Tags	"anotation" "method" "@Init" "return type" "arguments"

257

Assertion ID	JCA-TA-10010
Source	[JCA90009]
Target	Method annotated with @Init
Prerequisites	Java class is started Property and Reference injection is complete
Predicate	Method is invoked
Prescription Level	mandatory
Tags	"annotation" "@Init" "started" "invoked"

258

Assertion ID	JCA-TA-10011
Source	[JCA90011]
Target	Java implementation class field annotated with @Property
Prerequisites	
Predicate	Class field is not declared as final

Prescription Level	mandatory
Tags	"annotation" "@Property" "field" "final"

259

Assertion ID	JCA-TA-10012
Source	[JCA90013]
Target	@Property annotation of a constructor parameter
Prerequisites	
Predicate	@Property annotation has a @name attribute present
Prescription Level	mandatory
Tags	"annotation" "@Property" "@name" "constructor" "parameter"

260

261

Assertion ID	JCA-TA-10013
Source	[JCA90014]
Target	@Property annotation of a constructor parameter
Prerequisites	
Predicate	@Property annotation has @required=true
Prescription Level	mandatory
Tags	"annotation" "@Property" "@required" "constructor" "parameter"

262

Assertion ID	JCA-TA-10014
Source	[JCA90047]
Target	Introspected component type of Java implementation class
Prerequisites	@Property annotation is applied to a class field or to the input parameter of a setter method or of a constructor  Type of the element to which @Property is applied is an array or is a type that implements or extends java.util.Collection
Predicate	Component type contains a <property/> element corresponding to the @Property annotation, with @many attribute set to "true"
Prescription Level	mandatory
Tags	"annotation" "@Property" "componentType" "@many" "array" "collection"

263

Assertion ID	JCA-TA-10015
Source	[JCA90047]
Target	Introspected component type of Java implementation class
Prerequisites	@Property annotation is applied to a class field or to the input parameter of a setter method or of a constructor

	Type of the element to which @Property is applied is not an array and is not a type that implements or extends java.util.Collection
Predicate	Component type contains a <property/> element corresponding to the @Property annotation, with @many attribute set to "false"
Prescription Level	mandatory
Tags	"annotation" "@Property" "componentType" "@many" "array" "collection"

264

Assertion ID	JCA-TA-10016
Source	[JCA90015]
Target	Definition of an Intent annotation
Prerequisites	The SCA intent has qualifiers
Predicate	The Intent annotation definition contains the @Qualifier annotation
Prescription Level	mandatory
Tags	"annotation" "defintion" "intent" "qualifiers" "@Qualifier"

265

Assertion ID	JCA-TA-10017
Source	[JCA90016]
Target	Java implementation class field annotated with @Reference
Prerequisites	
Predicate	Class field is not declared as final
Prescription Level	mandatory
Tags	"annotation" "@Reference" "field" "final"

266

Assertion ID	JCA-TA-10018
Source	[JCA90018]
Target	@Reference annotation of a constructor method parameter
Prerequisites	
Predicate	@Reference annotation has a @name attribute present
Prescription Level	mandatory
Tags	"annotation" "constructor" "parameter" "@Reference" "@name"

267

Assertion ID	JCA-TA-10019
Source	[JCA0019]
Target	@Reference annotation of a constructor method parameter
Prerequisites	
Predicate	@Reference annotation has its @required attribute with the value "true"

Prescription Level	mandatory
Tags	"annotation" "constructor" "parameter" "@Reference" "@required"

268

Assertion ID	JCA-TA-10020
Source	[JCA90020]
Target	Introspected component type of Java implementation class
Prerequisites	@Reference annotation is applied to a class field or to the input parameter of a setter method or of a constructor  Type of the element to which @Reference is applied is not an array and is not a type that implements or extends java.util.Collection  @Reference @required attribute has the value "false"
Predicate	Component type contains a <reference/> element corresponding to the @Reference annotation, with @multiplicity attribute set to "0..1"
Prescription Level	mandatory
Tags	"annotation" "@Reference" "componentType" "@multiplicity" "array" "collection"

269

Assertion ID	JCA-TA-10021
Source	[JCA90020]
Target	Introspected component type of Java implementation class
Prerequisites	@Reference annotation is applied to a class field or to the input parameter of a setter method or of a constructor  Type of the element to which @Reference is applied is not an array and is not a type that implements or extends java.util.Collection  @Reference @required attribute has the value "true"
Predicate	Component type contains a <reference/> element corresponding to the @Reference annotation, with @multiplicity attribute set to "1..1"
Prescription Level	mandatory
Tags	"annotation" "@Reference" "componentType" "@multiplicity" "array" "collection"

270

Assertion ID	JCA-TA-10022
Source	[JCA90021]
Target	Introspected component type of Java implementation class
Prerequisites	@Reference annotation is applied to a class field or to the input parameter of a setter method or of a constructor  Type of the element to which @Reference is applied is an array or is a type that implements or extends java.util.Collection  @Reference @required attribute has the value "false"



Predicate	Component type contains a <reference/> element corresponding to the @Reference annotation, with @multiplicity attribute set to "0..n"
Prescription Level	mandatory
Tags	"annotation" "@Reference" "componentType" "@multiplicity" "array" "collection"

271

Assertion ID	JCA-TA-10023
Source	[JCA90021]
Target	Inspected component type of Java implementation class
Prerequisites	@Reference annotation is applied to a class field or to the input parameter of a setter method or of a constructor  Type of the element to which @Reference is applied is an array or is a type that implements or extends java.util.Collection  @Reference @required attribute has the value "true"
Predicate	Component type contains a <reference/> element corresponding to the @Reference annotation, with @multiplicity attribute set to "1..n"
Prescription Level	mandatory
Tags	"annotation" "@Reference" "componentType" "@multiplicity" "array" "collection"

272

Assertion ID	JCA-TA-10024
Source	[JCA90022]
Target	Reference obtained by the Java implementation either via injection or via the ComponentContext getService(...) method
Prerequisites	Reference has multiplicity of 0..1 Component reference is unwired
Predicate	Reference is null
Prescription Level	mandatory
Tags	"reference" "unwired" "null" "0..1" "multiplicity"

273

Assertion ID	JCA-TA-10025
Source	[JCA90023]
Target	Reference obtained by the Java implementation either via injection or via the ComponentContext getService(...) method
Prerequisites	Reference has multiplicity of 0..n Component reference is unwired
Predicate	Reference is an empty array/collection
Prescription Level	mandatory

274

Tags	"reference" "unwired" "empty" "0..n" "multiplicity"
------	-----------------------------------------------------

Assertion ID	JCA-TA-10026
Source	[JCA90024]
Target	Component reference is rewired during lifetime of an implementation instance
Prerequisites	
Predicate	Reference object is reinjected into the implementation instance
Prescription Level	optional
Tags	"reinjection" "reference" "rewire" "implementation" "instance"

275

Assertion ID	JCA-TA-10027
Source	[JCA90025]
Target	Implementation class which has a reference reinjected due to wiring changes
Prerequisites	SCA Runtime supports reinjection.
Predicate	Implementation is not STATELESS scope
Prescription Level	mandatory
Tags	"reinjection" "reference" "implementation" "stateless" "scope"

276

Assertion ID	JCA-TA-10028
Source	[JCA90025]
Target	Implementation class which has a reference reinjected due to wiring changes
Prerequisites	
Predicate	Implementation does not use constructor based injection for that reference
Prescription Level	mandatory
Tags	"reinjection" "reference" "implementation" "constructor"

277

Assertion ID	JCA-TA-10029
Source	[JCA90026]
Target	Reference object of an implementation instance
Prerequisites	Reference wiring changes so that reference target is changed Reference is not reinjected
Predicate	Reference object continues to work as if the reference target is not changed
Prescription Level	mandatory

Tags	"reference" "rewire" "reinjection"
------	------------------------------------

278

279

Assertion ID	JCA-TA-10030
Source	[JCA90027]
Target	Operation invocation on a reference of an implementation instance
Prerequisites	Target of the reference has been undeployed since the reference was injected
Predicate	Operation throws InvalidServiceException
Prescription Level	recommended
Tags	"reference" "target" "undeployed" "invocation" "InvalidServiceException"

280

Assertion ID	JCA-TA-10032
Source	[JCA90028]
Target	Operation invocation on a reference of an implementation instance
Prerequisites	Target of the reference has become unavailable for some reason
Predicate	Operation throws ServiceUnavailableException
Prescription Level	recommended
Tags	"reference" "target" "unavailable" "invocation" "ServiceUnavailableException"

281

Assertion ID	JCA-TA-10033
Source	[JCA90029]
Target	Operation invocation on a reference of an implementation instance
Prerequisites	Target of the reference has been changed since the reference was injected
Predicate	Operation either works or throws InvalidServiceException
Prescription Level	mandatory
Tags	"reference" "target" "changed" "invocation" "InvalidServiceException"

282

Assertion ID	JCA-TA-10034
Source	[JCA90030]
Target	ServiceReference obtained from a reference object via the ComponentContext.cast() method
Prerequisites	Reference is reinjected
Predicate	ServiceReference object continues to work as if the reference target were not changed
Prescription Level	mandatory

283

Tags	"ServiceReference" "reference" "re injection" "cast(...)"
------	-----------------------------------------------------------

Assertion ID	JCA-TA-10035
Source	[JCA90031]
Target	Operation invocation on ServiceReference object
Prerequisites	Target of the ServiceReference is undeployed
Predicate	Operation throws an InvalidServiceException
Prescription Level	recommended
Tags	"ServiceReference" "target" "undeployed" "InvalidServiceException" "invocation"

284

Assertion ID	JCA-TA-10036
Source	[JCA90032]
Target	Operation invocation on ServiceReference object
Prerequisites	Target of the ServiceReference becomes unavailable
Predicate	Operation throws a ServiceUnavailableException
Prescription Level	recommended
Tags	"ServiceReference" "target" "unavailable" "ServiceUnavailableException" "invocation"

285

Assertion ID	JCA-TA-10037
Source	[JCA90033]
Target	Operation invocation on a ServiceReference object
Prerequisites	Target of the ServiceReference has been changed since the ServiceReference was obtained
Predicate	Operation either works or throws InvalidServiceException
Prescription Level	mandatory
Tags	"ServiceReference" "target" "changed" "InvalidServiceException" "invocation"

286

Assertion ID	JCA-TA-10038
Source	[JCA90034]
Target	Reference obtained from getService() method of ComponentContext
Prerequisites	Domain configuration has changed since the component was started Configuration changes affect the reference
Predicate	Reference configuration reflects the Domain configuration at the time the getService() method was called
Prescription	mandatory

Level	
Tags	"reference" "getService()" "domain" "configuration" "changed"

287

Assertion ID	JCA-TA-10039
Source	[JCA90034]
Target	ServiceReference obtained from getServiceReference() method of ComponentContext
Prerequisites	Domain configuration has changed since the component was started Configuration changes affect the reference
Predicate	ServiceReference configuration reflects the Domain configuration at the time the getServiceReference() method was called
Prescription Level	mandatory
Tags	"ServiceReference" "getServiceReference()" "domain" "configuration" "changed"

288

289

Assertion ID	JCA-TA-10056
Source	[JCA90035]
Target	Business method of a reference obtained through the component context getService() method or of a ServiceReference obtained through the component context getServiceReference() method
Prerequisites	Target of reference/ServiceReference has been undeployed or has become unavailable
Predicate	Invocation of the business method throws InvalidServiceException or ServiceUnavailableException
Prescription Level	mandatory
Tags	"reference" "getService()" "ServiceReference" "getServiceReference()" "target" "undeployed" "unavailable"

290

Assertion ID	JCA-TA-10040
Source	[JCA90036]
Target	Reference obtained from getService() method of ComponentContext
Prerequisites	Target service of the component reference has changed since the component was started
Predicate	Reference target is the new target for the component reference
Prescription Level	recommended
Tags	"reference" "getService()" "target" "changed"

291

Assertion ID	JCA-TA-10041
--------------	--------------

Source	[JCA90036]
Target	ServiceReference obtained from getServiceReference() method of ComponentContext
Prerequisites	Target service of the component reference has changed since the component was started
Predicate	ServiceReference target is the new target for the reference
Prescription Level	recommended
Tags	"ServiceReference" "getServiceReference()" "target" "changed"

292

Assertion ID	JCA-TA-10042
Source	[JCA90037]
Target	Array or Collection object for a reference of multiplicity 0..n or 1..n
Prerequisites	Changes occur to the wiring of the reference or to the target(s) of the wiring Reference reinjection is not allowed
Predicate	Contents of the Array / Collection do not change
Prescription Level	mandatory
Tags	"reference" "multiplicity" "0..n" "1..n" "wiring" "target" "change" "injection"

293

294

Assertion ID	JCA-TA-10043
Source	[JCA90038]
Target	Reference with multiplicity 0..n or 1..n with a setter method for injection
Prerequisites	Changes occur to the wiring of the reference or to the target(s) of the wiring Reference was originally injected with an array or a collection object Runtime supports reference reinjection.
Predicate	Setter method is invoked with an array / collection object containing the new targets of the component reference
Prescription Level	mandatory
Tags	"reference" "multiplicity" "0..n" "1..n" "wiring" "target" "change" "injection"

295

Assertion ID	JCA-TA-10044
Source	[JCA90039]
Target	Array or Collection object for a reference, where reinjection takes place
Prerequisites	Reference of multiplicity 0..n or 1..n Changes occur to the wiring of the reference or to the target(s) of the wiring Runtime supports reinjection

Predicate	Array or Collection object is not the same object that was originally injected for this reference
Prescription Level	mandatory
Tags	"reference" "multiplicity" "0..n" "1..n" "wiring" "target" "change" "injection"

296

Assertion ID	JCA-TA-10045
Source	[JCA90040]
Target	Interface of a service marked remotable by the @Remotable annotation
Prerequisites	
Predicate	The interface is translatable into a WSDL portType
Prescription Level	mandatory
Tags	"interface" "service" "remotable" "WSDL" "portType" "translatable"

297

Assertion ID	JCA-TA-10046
Source	[JCA90046]
Target	@Scope annotation
Prerequisites	
Predicate	Annotation is applied to a component implementation class
Prescription Level	mandatory
Tags	"annotation" "@Scope" "implementation class"

298

Assertion ID	JCA-TA-10047
Source	[JCA90042]
Target	Implementation class annotated with @Service annotation
Prerequisites	@Service annotation declares a set of services which implies a set of service interfaces
Predicate	Implementation class implements all of the methods of all the declared service interfaces
Prescription Level	mandatory
Tags	"annotation" "@Service" "methods" "interface" "implementation"

299

Assertion ID	JCA-TA-10050
Source	[JCA90050]
Target	@names attribute of @Service annotation
Prerequisites	
Predicate	Number of strings in the @names attribute array is the same as the number of elements in the @value attribute array

Prescription Level	mandatory
Tags	"annotation" "@Service" "@names" "@interfaces" "number"

300

Assertion ID	JCA-TA-10055
Source	[JCA90045]
Target	Implementation class declaring 2 or more services
Prerequisites	
Predicate	Each service has a distinct Java simple name
Prescription Level	mandatory
Tags	"annotation" "@Service" "service" "name"

301

Assertion ID	JCA-TA-10058
Source	[JCA90060]
Target	@names attribute array of a @Service annotation
Prerequisites	@names attribute array has more than 1 entry
Predicate	Each entry in the @names attribute array is a unique string
Prescription Level	mandatory
Tags	"annotation" "@Service" "service" "names"

302

Assertion ID	JCA-TA-10059
Source	[JCA90053]
Target	@Remotable annotation
Prerequisites	
Predicate	Annotation applies to an interface class, a Java implementation class, a field, a setter method or a constructor parameter
Prescription Level	mandatory
Tags	"annotation" "@Remotable" "interface" "implementation" "field" "setter method" "constructor"

303

Assertion ID	JCA-TA-10060
Source	[JCA90054]
Target	Field or method of an implementation class annotated with @Callback
Prerequisites	Implementation class offers at least one bidirectional service
Predicate	Type of the field or of the method is the callback interface of one of the bidirectional services offered by the class
Prescription Level	mandatory



Tags	"annotation" "@Callback" "implementation" "field" "method"
------	------------------------------------------------------------

304

Assertion ID	JCA-TA-10061
Source	[JCA90055]
Target	Method annotated with @OneWay
Prerequisites	
Predicate	Method has void return type and does not declare checked exceptions
Prescription Level	mandatory
Tags	"annotation" "@OneWay" "void return" "exceptions"

305

Assertion ID	JCA-TA-10062
Source	[JCA90056]
Target	Method of Java interface annotated with @OneWay
Prerequisites	
Predicate	All invocations of the method are executed in a non-blocking fashion
Prescription Level	mandatory
Tags	"annotation" "@OneWay" "invocation" "non blocking"

306

Assertion ID	JCA-TA-10063
Source	[JCA90057]
Target	Setter method or field of an implementation class with COMPOSITE scope
Prerequisites	
Predicate	Setter method or field is not annotated with @Callback
Prescription Level	mandatory
Tags	"annotation" "@Callback" "setter method" "field" "COMPOSITE"

307

Assertion ID	JCA-TA-10064
Source	[JCA90058]
Target	Setter method or field of implementation class, annotated with @Callback
Prerequisites	Component is invoked via a bidirectional service  Setter method or field has a type which corresponds to the callback interface of the bidirectional service
Predicate	SCA runtime injects a callback reference proxy into the setter method or field, when the Java class is initialized
Prescription Level	mandatory
Tags	"annotation" "@Callback" "invocation" "setter method" "field" "callback"

	reference proxy"
--	------------------

308

Assertion ID	JCA-TA-10065
Source	[JCA90061]
Target	Field, setter method or constructor parameter annotated with @Property
Prerequisites	Java type of the field, setter method or constructor parameter is a primitive type or is a JAXB annotated class Component configuration contains a value for the property corresponding to the field, setter method or constructor parameter
Predicate	Component property value is converted into an instance of the Java type as defined by the XML to Java mapping in the JAXB specification, with XML schema validation enabled
Prescription Level	mandatory
Tags	"annotation" "@Property" "value" "JAXB" "mapping"

309

## 310 2.8 Section 11

311

Assertion ID	JCA-TA-11001
Source	[JCA100001]
Target	Java interface which is mapped to WSDL by SCA runtime
Prerequisites	Java interface does not have a @WebService annotation
Predicate	Interface is mapped to WSDL as if it did have @WebService annotation
Prescription Level	mandatory
Tags	"interface" "Java" "WSDL" "mapping" "@WebService"

312

Assertion ID	JCA-TA-11002
Source	[JCA100002]
Target	Java interface containing @org.oasisopen.sca.annotation.OneWay annotation, mapped to WSDL by SCA runtime
Prerequisites	
Predicate	Interface is mapped to WSDL as if it contained a @javax.jws.OneWay annotation
Prescription Level	mandatory
Tags	"interface" "Java" "WSDL" "mapping" "@OneWay"

313

Assertion ID	JCA-TA-11003
Source	[JCA100003]

Target	WSDL interface mapped to a Java interface by SCA runtime
Prerequisites	
Predicate	Generated @WebService annotation in Java interface is taken to mean that the service interface is Remotable
Prescription Level	mandatory
Tags	"interface" "Java" "WSDL" "mapping" "@WebService" "remotable"

314

Assertion ID	JCA-TA-11004
Source	[JCA100004]
Target	Java interface used for service interface
Prerequisites	Interface contains JAXB 2.1 data types and annotations
Predicate	SCA runtime is able to map the interface to WSDL
Prescription Level	mandatory
Tags	"interface" "WSDL" "mapping" "JAXB" "2.1"

315

Assertion ID	JCA-TA-11005
Source	[JCA100005]
Target	Java interface used for service interface
Prerequisites	Interface contains SDO 2.1 data types and annotations
Predicate	SCA runtime is able to map the interface to WSDL
Prescription Level	optional
Tags	"interface" "WSDL" "mapping" "SDO" "2.1"

316

Assertion ID	JCA-TA-11006
Source	[JCA100006]
Target	Java interface used to declare SCA service interface in <interface.java/> element
Prerequisites	
Predicate	Java interface does not contain additional client side asynchronous polling and callback methods defined by JAX-WS
Prescription Level	mandatory
Tags	"interface" "service" "asynchronous" "polling" "callback" "methods"

317

Assertion ID	JCA-TA-11007
Source	[JCA100007]
Target	Java interface used to declare SCA reference interface in a Java implementation class

Prerequisites	Java interface contains the additional client side asynchronous polling and callback methods defined by JAX-WS
Predicate	Java interface is treated as valid and is used
Prescription Level	optional
Tags	"interface" "reference" "asynchronous" "polling" "callback" "methods"

318

Assertion ID	JCA-TA-11008
Source	[JCA100008]
Target	SCA reference interface in the component type of a Java implementation class
Prerequisites	Reference is declared in the implementation class using a Java interface which contains the additional client side asynchronous polling and callback methods defined by JAX-WS
Predicate	Reference interface in the component type does not contain the additional client side asynchronous polling and callback methods defined by JAX-WS
Prescription Level	mandatory
Tags	"interface" "reference" "componentType" "asynchronous" "polling" "callback" "methods"

319

Assertion ID	JCA-TA-11009
Source	[JCA100009]
Target	Java interface used to declare SCA reference interface in a Java implementation class
Prerequisites	Java interface contains the additional client side asynchronous polling and callback methods defined by JAX-WS
Predicate	The implementation class is able to use the client side asynchronous polling and callback methods, with the semantics as described in the JAX-WS 2.1 specification
Prescription Level	mandatory
Tags	"interface" "reference" "asynchronous" "polling" "callback" "methods"

320

Assertion ID	JCA-TA-11010
Source	[JCA100010]
Target	interface of a service
Prerequisites	interface contains SCA defined service-side asynchronous methods
Predicate	SCA runtime supports the interface
Prescription Level	mandatory
Tags	"interface" "servicer-side" "service" "asynchronous methods"

321

Assertion ID	JCA-TA-11011
Source	[JCA100012]
Target	Java interface or Java class annotated with @WebService
Prerequisites	
Predicate	SCA runtime treats the interface or class as if it was annotated with @Remotable
Prescription Level	mandatory
Tags	"interface" "class" "@WebService" "@Remotable"

322

Assertion ID	JCA-TA-11012
Source	[JCA100013]
Target	Java class annotated with @WebService
Prerequisites	@wsdlLocation attribute of the @WebService annotation is set, referencing a WSDL document
Predicate	The interface of the Java class is defined by the referenced WSDL definition
Prescription Level	mandatory
Tags	"interface" "@WebService" "wsdlLocation" "class"

323

Assertion ID	JCA-TA-11013
Source	[JCA100014]
Target	Java class annotated with @WebService
Prerequisites	@endpointInterface attribute of the @WebService annotation is set, referencing an interface
Predicate	The interface of the Java class is defined by the referenced interface
Prescription Level	mandatory
Tags	"interface" "@WebService" "endpointInterface" "class"

324

Assertion ID	JCA-TA-11014
Source	[JCA100015]
Target	Java class or interface containing @WebParam annotation
Prerequisites	@WebParam annotation has @header attribute set to "true"
Predicate	Java class or interface is treated as if has the SOAP intent applied
Prescription Level	mandatory
Tags	"interface" "@WebParam" "@header" "SOAP"

325

Assertion ID	JCA-TA-11015
--------------	--------------

Source	[JCA100016]
Target	Java class or interface containing @WebResult annotation
Prerequisites	@WebResult annotation has @header attribute set to "true"
Predicate	Java class or interface is treated as if has the SOAP intent applied
Prescription Level	mandatory
Tags	"interface" "@WebResult" "@header" "SOAP"

326

Assertion ID	JCA-TA-11016
Source	[JCA100017]
Target	Java class containing @ServiceMode annotation
Prerequisites	
Predicate	Java class is treated as if has the SOAP intent applied
Prescription Level	mandatory
Tags	"interface" "@ServiceMode" "SOAP"

327

Assertion ID	JCA-TA-11017
Source	[JCA100018]
Target	Java interface or class used to define an SCA interface
Prerequisites	
Predicate	Interface or class does not contain a @WebServiceClient annotation
Prescription Level	mandatory
Tags	"interface" "class" "@WebServiceClient"

328

Assertion ID	JCA-TA-11018
Source	[JCA100019]
Target	Java class annotated with @WebServiceProvider
Prerequisites	
Predicate	Class is treated as if annotated with SCA @Remotable
Prescription Level	mandatory
Tags	"class" "WebServiceProvider" "@Remotable"

329

Assertion ID	JCA-TA-11019
Source	[JCA100020]
Target	Java class annotated with @WebServiceProvider
Prerequisites	@wsdlLocation attribute of @WebServiceProvider is declared, referencing a WSDL document

Predicate	Java class is treated as if its interface is defined by the referenced WSDL
Prescription Level	mandatory
Tags	"class" "interface" "@WebServiceProvider" "@wsdlLocation"

330

Assertion ID	JCA-TA-11020
Source	[JCA100021]
Target	Java class or interface annotated with @SOAPBinding
Prerequisites	
Predicate	Class or interface is treated as if SOAP intent is applied
Prescription Level	mandatory
Tags	"interface" "class" "@SOAPBinding" "SOAP"

331

Assertion ID	JCA-TA-11021
Source	[JCA100022]
Target	Mappings from WSDL to Java and from Java to WSDL
Prerequisites	
Predicate	JAX-WS 2.1 mappings are supported
Prescription Level	mandatory
Tags	"interface"

332

333  
334  
335

### 3 Cross Mapping of Conformance Statements to Assertions

Conformance statement	Test Assertion
JCA20001	JCA-TA-2001
JCA20002	JCA-TA-2002
JCA20003	JCA-TA-2003
JCA20004	JCA-TA-2004
JCA20005	JCA-TA-2005
JCA20006	JCA-TA-2006
JCA20007	JCA-TA-2007
JCA20008	JCA-TA-2008
JCA20009	JCA-TA-2009
JCA20010	JCA-TA-2010 JCA-TA-2011

336  
337

Conformance statement	Test Assertion
JCA30001	JCA-TA-3001
JCA30002	JCA-TA-3002
JCA30003	JCA-TA-3003
JCA30004	JCA-TA-3004
JCA30005	JCA-TA-3005
JCA30006	JCA-TA-3006
JCA30007	JCA-TA-3007
JCA30009	JCA-TA-3008
JCA30010	JCA-TA-3009

338  
339

Conformance statement	Test Assertion
JCA40001	JCA-TA-4001
JCA40002	JCA-TA-4002
JCA40003	JCA-TA-4003
JCA40004	JCA-TA-4004
JCA40005	JCA-TA-4005
JCA40006	JCA-TA-4006
JCA40007	JCA-TA-4007
JCA40008	JCA-TA-4008
JCA40009	JCA-TA-4009
JCA40010	JCA-TA-4010
JCA40011	JCA-TA-4011



Conformance statement	Test Assertion
JCA40012	JCA-TA-4012
JCA40013	JCA-TA-4013
JCA40014	JCA-TA-4014
JCA40015	JCA-TA-4015
JCA40016	JCA-TA-4016
JCA40017	JCA-TA-4017
JCA40018	JCA-TA-4018
JCA40019	JCA-TA-4019
JCA40020	JCA-TA-4020
JCA40021	JCA-TA-4021
JCA40022	JCA-TA-4022
JCA40023	JCA-TA-4023
JCA40024	JCA-TA-4024

340

Conformance statement	Test Assertion
JCA60001	JCA-TA-7001
JCA60002	JCA-TA-7002
JCA60003	JCA-TA-7003 JCA-TA-7004
JCA60004	JCA-TA-7005
JCA60005	JCA-TA-7006
JCA60006	JCA-TA-7007

341

Conformance statement	Test Assertion
JCA70001	JCA-TA-8001
JCA70002	JCA-TA-8002 JCA-TA-8003 JCA-TA-8004
JCA70003	JCA-TA-8005
JCA70004	JCA-TA-8006
JCA70005	JCA-TA-8007 JCA-TA-8008 JCA-TA-8009
JCA70006	JCA-TA-8010

342

Conformance statement	Test Assertion
JCA80001	JCA-TA-9001
JCA80002	JCA-TA-9002 JCA-TA-9005
JCA80003	JCA-TA-9003 JCA-TA-9004
JCA80004	JCA-TA-9070

Conformance statement	Test Assertion
JCA80005	JCA-TA-9006
JCA80006	JCA-TA-9007
JCA80007	JCA-TA-9008
JCA80008	JCA-TA-9009
JCA80009	JCA-TA-9010
JCA80010	JCA-TA-9011
JCA80011	JCA-TA-9012
JCA80012	JCA-TA-9013
JCA80013	JCA-TA-9014
JCA80014	JCA-TA-9015
JCA80015	JCA-TA-9016
JCA80016	JCA-TA-9017
JCA80017	JCA-TA-9018
JCA80018	JCA-TA-9019
JCA80019	JCA-TA-9020
JCA80020	JCA-TA-9021
JCA80021	JCA-TA-9022
JCA80022	JCA-TA-9023
JCA80023	JCA-TA-9024
JCA80024	JCA-TA-9025
JCA80025	JCA-TA-9026
JCA80026	JCA-TA-9027
JCA80027	JCA-TA-9028
JCA80028	JCA-TA-9029
JCA80029	JCA-TA-9030 JCA-TA-9031
JCA80030	JCA-TA-9032
JCA80031	JCA-TA-9033
JCA80032	JCA-TA-9034
JCA80033	JCA-TA-9035
JCA80034	JCA-TA-9036 JCA-TA-9037 JCA-TA-9038
JCA80035	JCA-TA-9039 JCA-TA-9040
JCA80036	JCA-TA-9041

Conformance statement	Test Assertion
	JCA-TA-9042 JCA-TA-9043
JCA80037	JCA-TA-9044 JCA-TA-9045 JCA-TA-9046
JCA80038	JCA-TA-9047
JCA80039	JCA-TA-9048
JCA80040	JCA-TA-9049
JCA80041	JCA-TA-9050
JCA80042	JCA-TA-9051
JCA80043	JCA-TA-9052
JCA80044	JCA-TA-9053
JCA80045	JCA-TA-9054
JCA80046	JCA-TA-9055
JCA80047	JCA-TA-9056
JCA80048	JCA-TA-9057
JCA80049	JCA-TA-9058
JCA80050	JCA-TA-9059
JCA80051	JCA-TA-9060
JCA80052	JCA-TA-9061
JCA80053	JCA-TA-9062
JCA80054	JCA-TA-9063
JCA80055	JCA-TA-9064
JCA80056	JCA-TA-9065
JCA80057	JCA-TA-9066
JCA80058	JCA-TA-9067
JCA80059	JCA-TA-9068
JCA80060	JCA-TA-9069

343

Conformance statement	Test Assertion
JCA90001	JCA-TA-10001
JCA90002	JCA-TA-10002 JCA-TA-10003
JCA90003	JCA-TA-10005
JCA90004	JCA-TA-10006

Conformance statement	Test Assertion
JCA90005	JCA-TA-10007
JCA90007	JCA-TA-10008
JCA90008	JCA-TA-10009
JCA90009	JCA-TA-10010
JCA90011	JCA-TA-10011
JCA90013	JCA-TA-10012
JCA90014	JCA-TA-10013
JCA90015	JCA-TA-10016
JCA90016	JCA-TA-10017
JCA90018	JCA-TA-10018
JCA90019	JCA-TA-10019
JCA90020	JCA-TA-10020 JCA-TA-10021
JCA90021	JCA-TA-10022 JCA-TA-10023
JCA90022	JCA-TA-10024
JCA90023	JCA-TA-10025
JCA90024	JCA-TA-10026
JCA90025	JCA-TA-10027 JCA-TA-10028
JCA90026	JCA-TA-10029
JCA90027	JCA-TA-10030
JCA90028	JCA-TA-10032
JCA90029	JCA-TA-10033
JCA90030	JCA-TA-10034
JCA90031	JCA-TA-10035
JCA90032	JCA-TA-10036
JCA90033	JCA-TA-10037
JCA90034	JCA-TA-10038 JCA-TA-10039
JCA90035	JCA-TA-10056
JCA90036	JCA-TA-10040 JCA-TA-10041
JCA90037	JCA-TA-10042
JCA90038	JCA-TA-10043
JCA90039	JCA-TA-10044

Conformance statement	Test Assertion
JCA90040	JCA-TA-10045
JCA90041	JCA-TA-10046
JCA90042	JCA-TA-10047
JCA90045	JCA-TA-10055
JCA90046	JCA-TA-10031
JCA90047	JCA-TA-10014 JCA-TA-10015
JCA90050	JCA-TA-10050
JCA90052	JCA-TA-10004
JCA90053	JCA-TA-10059
JCA90054	JCA-TA-10060
JCA90055	JCA-TA-10061
JCA90056	JCA-TA-10062
JCA90057	JCA-TA-10063
JCA90058	JCA-TA-10064
JCA90060	JCA-TA-10058
JCA90061	JCA-TA-10065

344

345

Conformance statement	Test Assertion
JCA10001	JCA-TA-11001
JCA10002	JCA-TA-11002
JCA10003	JCA-TA-11003
JCA10004	JCA-TA-11004
JCA10005	JCA-TA-11005
JCA10006	JCA-TA-11006
JCA10007	JCA-TA-11007
JCA10008	JCA-TA-11008

<b>Conformance statement</b>	<b>Test Assertion</b>
JCA10009	JCA-TA-11009
JCA10010	JCA-TA-11010
JCA10011	No meaningful assertion
JCA10012	JCA-TA-11011
JCA10013	JCA-TA-11012
JCA10014	JCA-TA-11013
JCA10015	JCA-TA-11014
JCA10016	JCA-TA-11015
JCA10017	JCA-TA-11016
JCA10018	JCA-TA-11017
JCA10019	JCA-TA-11018
JCA10020	JCA-TA-11019
JCA10021	JCA-TA-11020
JCA10022	JCA-TA-11021

347

---

## 4 Conformance

348

There are no conformance statements relating to the Test Assertions.

349

350

---

## Appendix A. Acknowledgments

351

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

352

353

### Participants:

354

Participant Name	Affiliation
Dave Booz	IBM
Mike Edwards	IBM

355



356

## Appendix B. Revision History

357

358

Revision	Date	Editor	Changes Made
1	08/06/09	Mike Edwards	Initial version
2	09/06/09	Mike Edwards	Added TAs for Section 3
3	11/06/09	Mike Edwards	Added TAs for Section 4
4	14/06/09	Mike Edwards	Added TAs for Section 8
5	15/06/09	Mike Edwards	Added TAs for Section 9 Added TAs for Section 10 Added TAs for Section 11
8	02/10/09	Dave Booz	Deleted useless TA-3008,
9	08/10/09	Mike Edwards	Minor cleanup and corrections Change TAs relating to @Service annotation following Issue 161 updates to CAA specification: Deleted 10048, 10049, 10051, 10052, 10053, 10054 Changed 10050 Added 10057, 10058
10	12/06/10	Mike Edwards	Bringing test assertions into line with CD04 of the Java CAA specification  - few TAs deleted  - major additions of new TAs , especially in 70xx, 90xx and 100xx ranges
11	21/06/10	Mike Edwards	Editorial corrections
cd01	19/07/10	Mike Edwards	CD01 - all changes accepted  Frontmatter updated to OASIS requirements

359