SCA POJO Component Implementation v1.1 Test Assertions Version 1.0

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Abstract:

This document defines the Test Assertions for the SCA POJO Component Implementation specification.

The Test Assertions represent the testable items relating to the normative statements made in the SCA POJO Component Implementation 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.

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1 Introduction

This document defines the Test Assertions for the SCA POJO Component Implementation 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	JCI-TA-xxxx
Source	[JCIx00yy]
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 - "JCI" is for the SCA POJO Component Implementation 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 artefact 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]

1.3 Normative References

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

[TA-GUIDE] OASIS Committee Draft 04, *Test Assertion Guidelines*, February 2010. http://docs.oasis-open.org/tag/guidelines/v1.0/cd04/testassertionsguidelines-cd-04.pdf

[JAVACI] OASIS Committee Specification Draft 03, *SCA-J POJO Component Implementation specification V1.1*, November 2010 http://docs.oasis-open.org/opencsa/sca-j/sca-javaci-1.1-spec-csd03.pdf

1.4 Non-normative References

None

58 # 2 Test Assertions

59 ## 2.1 Section 2

Assertion ID	JCI-TA-2001
Source	[JCI20001]
Target	Introspected service interface of an SCA POJO component implementation
Prerequisites	
Predicate	The introspected interface is one of: • Java Interface • Java Class • Java Interface generated from a WSDL document
Prescription Level	mandatory
Tags	“interface”

Assertion ID	JCI-TA-2002
Source	[JCI20002]
Target	SCA POJO component implementation class
Prerequisites	SCA component provides a service interface
Predicate	The implementation class implements all the methods in the service interface.
Prescription Level	mandatory
Tags	“implementation” “interface”

60 ## 2.2 Section 4

Assertion ID	JCI-TA-4001
Source	[JCI40001]
Target	SCA Runtime
Prerequisites	The implementation class with an unannotated field that is introspected as a property and the Java type of the field is a JAXB annotated class
Predicate	The SCA Runtime converts the property value into an instance of the property's Java type as defined by the XML to Java mappings in the JAXB specification with XML schema validation enabled.

Prescription Level	mandatory
Tags	“implementation” “property”

Assertion ID	JCI-TA-4002
Source	[JCI40001]
Target	SCA Runtime
Prerequisites	The implementation class with an unannotated setter method that is introspected as a property and the Java type of the field is a JAXB annotated class
Predicate	The SCA Runtime converts the property value into an instance of the property's Java type as defined by the XML to Java mappings in the JAXB specification with XML schema validation enabled.
Prescription Level	mandatory
Tags	“implementation” “property”

61 ## 2.3 Section 5

Assertion ID	JCI-TA-5001
Source	[JCI50001]
Target	SCA POJO component implementation class
Prerequisites	
Predicate	The implementation class has a public or protected constructor.
Prescription Level	mandatory
Tags	“implementation” “constructor”

Assertion ID	JCI-TA-5002
Source	[JCI50004]
Target	SCA POJO component implementation class constructor
Prerequisites	a) SCA Java component implementation class has a constructor annotated with @Constructor b) SCA Java component implementation class has a constructor which is not annotated with @Constructor but where all its parameters are annotated with either @Property or with @Reference c) SCA POJO implementation class has a no-arg constructor which is not annotated with @Constructor

	d) SCA POJO implementation has other constructors with arguments which are not annotated with @Constructor and which do not have all parameters marked with either @Reference or @Property e) An SCA component using the implementation class is instantiated
Predicate	The SCA Runtime invokes the constructor annotated with @Constructor
Prescription Level	mandatory
Tags	“implementation” “constructor”

Assertion ID	JCI-TA-5003
Source	[JCI50004]
Target	SCA POJO component implementation class constructor
Prerequisites	a) SCA Java component implementation class does not have a constructor annotated with @Constructor b) SCA Java component implementation class has a constructor which is not annotated with @Constructor but where all its parameters are annotated with either @Property or with @Reference c) SCA POJO implementation class has a no-arg constructor which is not annotated with @Constructor d) SCA POJO implementation has other constructors with arguments which are not annotated with @Constructor and which do not have all parameters marked with either @Reference or @Property e) An SCA component using the implementation class is instantiated
Predicate	The SCA Runtime invokes the constructor which is not marked with @Constructor but which has all of its parameters marked with @Property or with @Reference
Prescription Level	mandatory
Tags	“implementation” “constructor”

Assertion ID	JCI-TA-5004
Source	[JCI50004]
Target	SCA POJO component implementation class constructor
Prerequisites	a) SCA Java component implementation class does not have a constructor annotated with @Constructor b) SCA Java component implementation class does not have a constructor which is not annotated with @Constructor but where all its parameters are annotated with either @Property or with @Reference c) SCA POJO implementation class has a no-arg constructor which is not annotated with @Constructor

	d) SCA POJO implementation has other constructors with arguments which are not annotated with @Constructor and which do not have all parameters marked with either @Reference or @Property e) An SCA component using the implementation class is instantiated
Predicate	The SCA Runtime invokes the no-arg constructor
Prescription Level	mandatory
Tags	“implementation” “constructor”

Assertion ID	JCI-TA-5005
Source	[JCI50004]
Target	SCA POJO component implementation class constructor
Prerequisites	a) SCA Java component implementation class does not have a constructor annotated with @Constructor b) SCA Java component implementation class does not have a constructor which is not annotated with @Constructor but where all its parameters are annotated with either @Property or with @Reference c) SCA POJO implementation class does not have a no-arg constructor d) SCA POJO implementation has other constructors with arguments which are not annotated with @Constructor and which do not have all parameters marked with either @Reference or @Property e) An SCA component using the implementation class is instantiated
Predicate	The SCA Runtime does not invoke any constructor and an error is thrown
Prescription Level	mandatory
Tags	“implementation” “constructor”

Assertion ID	JCI-TA-5006
Source	[JCI50002]
Target	SCA POJO component implementation class constructor
Prerequisites	
Predicate	At most one constructor is annotated with the @Constructor annotation
Prescription Level	mandatory
Tags	“implementation” “constructor”

Assertion ID	JCI-TA-5007

Source	[JCI50005]
Target	SCA POJO component implementation class constructor
Prerequisites	a) The implementation class has no @Constructor annotations
Predicate	The implementation class has at most one constructor that has a non-empty parameter list and all parameters are annotated with either @Property or @Reference
Prescription Level	mandatory
Tags	“implementation” “constructor”

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2.4 Section 6

Assertion ID	JCI-TA-6001
Source	[JCI60001]
Target	SCA POJO implementation annotated with @Scope("STATELESS")
Prerequisites	
Predicate	POJO implementation is run and has the operational characteristics of a STATELESS scoped implementation
Prescription Level	mandatory
Tags	“implementation” “scope”

Assertion ID	JCI-TA-6002
Source	[JCI60001]
Target	SCA POJO implementation with @Scope("COMPOSITE")
Prerequisites	
Predicate	POJO implementation is run and has the operational characteristics of a COMPOSITE scoped implementation
Prescription Level	mandatory
Tags	“implementation” “scope”

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2.5 Section 8

Assertion ID	JCI-TA-8001
Source	[JCI80001]
Target	SCA POJO implementation class with a @Service annotation

Prerequisites	@Service annotation has a single interface class in its value attribute and no name attribute
Predicate	Introspected <componentType> has a <service> element with @name equal to the simple name of the interface class in the @Service annotation
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8002
Source	[JCI80001]
Target	SCA POJO implementation class with a @Service annotation
Prerequisites	@Service annotation has a single interface class in its value attribute and no name attribute The interface class contains the @Remotable annotation
Predicate	Introspected <componentType> has a <service> element with an <interface.java/> subelement with the @interface attribute set to the fully qualified name of the interface class in the value attribute of the @Service annotation
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8003
Source	[JCI80001]
Target	SCA POJO implementation class with a @Service annotation and a @Requires annotation with one or more intents declared
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with @requires attribute containing the set of intents in the @Requires annotation
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8004
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations
Prerequisites	Implementation class implements an Interface where the interface class is annotated with @Remotable

Predicate	Introspected <componentType> has a <service> element with a) @name set to the simple name of the interface class b) an <interface.java/> subelement with @interface attribute set to the fully qualified name of the interface class
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8005
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations
Prerequisites	Implementation class does not implement any interfaces where the interface class is annotated with @Remotable
Predicate	Introspected <componentType> has a <service> element with a) @name set to the simple name of the implementation class b) an <interface.java/> subelement with @interface attribute set to the fully qualified name of the implementation class
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8006
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	@Reference annotation has a @name parameter
Predicate	Introspected <componentType> has a <reference> element with @name attribute set to the value of the @name parameter of the @Reference annotation
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8007
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	1) @Reference annotation annotates a field which is an array type

	2) @Reference annotation has @required=true
Predicate	Introspected <componentType> has a <reference> element with @multiplicity set to 1..n
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8008
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	1) @Reference annotation has a @required=false 2) @Reference annotation annotates a field with an interface type
Predicate	Introspected <componentType> has a <reference> element with @multiplicity set to 0..1
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8009
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	@Reference annotation annotates a field which is also annotated with a @Requires annotation
Predicate	Introspected <componentType> has a <reference> element with @requires set to the value of the @Requires annotation
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8010
Source	[JCI80001]
Target	SCA POJO implementation class with a @Property annotation
Prerequisites	1) @Property annotation annotates a setter method 2) Setter method parameter has a type which is not an array or collection type
Predicate	Introspected <componentType> has a <property> element with a) @name set to the JavaBeans property name derived from the setter

	method name b) @type set to the JAXB mapping of the type of the parameter of the setter method
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8011
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations
Prerequisites	Class has a public setter method which is not part of a service interface and which has a parameter typed by an interface class which is annotated with @Remotable
Predicate	Introspected <componentType> has a <reference> element with a) @name set to the JavaBeans property name derived from the setter method name b) @multiplicity is 1..1 c) <interface.java/> subelement referencing the fully qualified name of the interface class
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8012
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations
Prerequisites	Class has a public field or setter with a type which is not a Java interface, array or parameterized java.util.Collection
Predicate	Introspected <componentType> has a <property> element with: a) @name set to the name of the public field or setter method b) @type set to the JAXB mapping of the type of the field or setter c) @many set to “false:
Prescription Level	mandatory
Tags	“componentType” “property”

Assertion ID	JCI-TA-8013
Source	[JCI80001]
Target	SCA POJO implementation class
Prerequisites	Implementation class has a @Requires attribute
Predicate	Introspected <componentType> has an <implementation.java/> subelement with @requires attribute present with a value equal to the value of the @Requires annotation
Prescription Level	mandatory
Tags	“componentType” “implementation”

Assertion ID	JCI-TA-8014
Source	[JCI80002]
Target	SCA POJO implementation class with 2 or more setter methods annotated with @Property
Prerequisites	
Predicate	The JavaBeans property name for each property setter method is unique.
Prescription Level	mandatory
Tags	“implementation” “property”

Assertion ID	JCI-TA-8015
Source	[JCI80002]
Target	SCA POJO implementation class with 2 or more setter methods annotated with @Reference
Prerequisites	
Predicate	The JavaBeans property name for each reference setter method is unique.
Prescription Level	mandatory
Tags	“implementation” “reference”

Assertion ID	JCI-TA-8016
Source	[JCI80001]
Target	SCA POJO implementation class with a @Service annotation and @Remotable annotation
Prerequisites	@Service annotation has a single interface class in its value attribute and no name attribute

	The interface class does not contain the @Remotable annotation
Predicate	Introspected <componentType> has a <service> element with an <interface.java/> subelement where: – the @interface attribute set to the fully qualified name of the interface class in the value attribute of the @Service annotation – the @remotable attribute set to “true”.
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8017
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	1) @Reference annotation annotates a field, setter or constructor parameter with an interface type 2) Interface type has no @Remotable annotation 3) @Remotable annotation on the same field, setter or constructor parameter as the @Reference annotation
Predicate	Introspected <componentType> has a <reference> element with @multiplicity set to 0..1 and a child <interface.java> element with – @interface attribute set to the fully qualified name of the interface type – @remotable attribute set to true
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8018
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	@Reference annotation annotates a setter which takes an interface type parameter
Predicate	Introspected <componentType> has a <reference> element with a child <interface.java> element with @interface attribute set to the fully qualified name of the interface type
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8019
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation
Prerequisites	@Reference annotation annotates a constructor parameter which is an interface type
Predicate	Introspected <componentType> has a <reference> element with a child <interface.java> element with @interface attribute set to the fully qualified name of the interface type
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8020
Source	[JCI80001]
Target	SCA POJO implementation class with a @Service annotation and a @PolicySets annotation with one or more policySets declared
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with @policySets attribute containing the set of policySets in the @PolicySets annotation
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8021
Source	[JCI80001]
Target	SCA POJO implementation class with a @Reference annotation and a @PolicySets annotation with one or more policySets declared
Prerequisites	
Predicate	Introspected <componentType> has a <reference> element with @policySets attribute containing the set of policySets in the @PolicySets annotation
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8022
Source	[JCI80001]

Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations, zero @Property annotations, and a @PolicySets annotation on the class itself with one or more policySets declared
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with @policySets attribute containing the set of policySets in the @PolicySets annotation
Prescription Level	mandatory
Tags	“componentType” “service”

Assertion ID	JCI-TA-8023
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations, zero @Property annotations, and a @PolicySets annotation on a public field, typed by an interface annotated with @Remotable, with one or more policySets declared
Prerequisites	
Predicate	Introspected <componentType> has a <reference> element with @policySets attribute containing the set of policySets in the @PolicySets annotation
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8024
Source	[JCI80001]
Target	SCA POJO implementation class
Prerequisites	Implementation class has a @PolicySets attribute
Predicate	Introspected <componentType> has an <implementation.java/> subelement with @policySets attribute present with a value equal to the value of the @PolicySets annotation
Prescription Level	mandatory
Tags	“componentType” “implementation”

Assertion ID	JCI-TA-8025
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations

Prerequisites	Class has a public setter method which is not part of a service interface and which has a parameter typed by an array of interface classes which are annotated with @Remotable
Predicate	Introspected <componentType> has a <reference> element with a) @name set to the JavaBeans property name derived from the setter method name b) @multiplicity is 1..n c) <interface.java/> subelement referencing the fully qualified name of the interface class
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8026
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations
Prerequisites	Class has a public setter method which is not part of a service interface and which has a parameter typed by a java.util.Collection which is parameterized by an interface class which is annotated with @Remotable
Predicate	Introspected <componentType> has a <reference> element with a) @name set to the JavaBeans property name derived from the setter method name b) @multiplicity is 1..n c) <interface.java/> subelement referencing the fully qualified name of the interface class
Prescription Level	mandatory
Tags	“componentType” “reference”

Assertion ID	JCI-TA-8027
Source	[JCI80001]
Target	SCA POJO implementation class with zero @Service annotations, zero @Reference annotations and zero @Property annotations
Prerequisites	Class has a public field or setter with a type which is not a Java interface, but is an array or parameterized (non-interface) java.util.Collection
Predicate	Introspected <componentType> has a <property> element with: a) @name set to the name of the public field b) @type set to the JAXB mapping of the type of the field or setter

	c) @many set to “true”
Prescription Level	mandatory
Tags	“componentType” “property”

Assertion ID	JCI-TA-8028
Source	[JCI80001]
Target	SCA POJO implementation class with javax.jws.WebService annotation
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with: a) @name set to the value of the name property on the @WebService annotation b) <interface.java> child element with the @interface attribute set to the fully qualified name of the implementation class
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8029
Source	[JCI80001]
Target	SCA POJO implementation class with javax.jws.WebService annotation
Prerequisites	EndpointInterface annotation property is set to a Java interface class
Predicate	Introspected <componentType> has a <service> element with: a) @name set to the value of the name property on the @WebService annotation b) <interface.java> child element with the @interface attribute set to the value of the endpointInterface property
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8030
Source	[JCI80001]
Target	SCA POJO implementation class with javax.jws.WebService annotation
Prerequisites	WsdlLocation property is set and points to a WSDL document
Predicate	Introspected <componentType> has a <service> element with:

	a) @name set to the value of the name property on the @WebService annotation b) <interface.wsdl> child element with the @interface attribute set to the portType referenced by the value of the wsdlLocation property
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8031
Source	[JCI80001]
Target	SCA POJO implementation class with javax.jws.WebParam annotation that has the header property set to “true”
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with a @requires attribute set to “SOAP”.
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8032
Source	[JCI80001]
Target	SCA POJO implementation class with javax.jws.WebResult annotation that has the header property set to “true”
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with a @requires attribute set to “SOAP”.
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8033
Source	[JCI80001]
Target	SCA POJO implementation class with javax.jws.soap.SOAPBinding annotation
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with a @requires attribute set to “SOAP”.
Prescription	mandatory

Level	
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8034
Source	[JCI80001]
Target	SCA POJO implementation class with javax.xml.ws.WebServiceProvider annotation
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with an <interface.java> child element with the @interface attribute set to the fully qualified name of the implementation class
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8035
Source	[JCI80001]
Target	SCA POJO implementation class with javax.xml.ws.WebServiceProvider annotation
Prerequisites	WsdlLocation property is set and points to a WSDL document
Predicate	Introspected <componentType> has a <service> element with an <interface.wsdl> child element with the @interface attribute set to the portType referenced by the value of the wsdlLocation property
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8036
Source	[JCI80001]
Target	SCA POJO implementation class with any JAX-WS annotation
Prerequisites	
Predicate	Introspected <componentType> has a <service> element with a <binding.ws> child element with the @wsdlElement attribute set to point to a WSDL document that uses the SOAP/HTTP binding (http://schemas.xmlsoap.org/wsdl/soap/http)
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

Assertion ID	JCI-TA-8037
Source	[JCI80001]
Target	SCA POJO implementation class with javax.xml.ws.BindingType annotation
Prerequisites	The value of the @BindingType annotation is http://www.w3.org/2003/05/soap/bindings/HTTP/
Predicate	Introspected <componentType> has a <service> element with a <binding.ws> child element with the @requires attribute set to “SOAP.v1_2”
Prescription Level	mandatory
Tags	“componentType” “service” “jax-ws”

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2.6 Section 9

Assertion ID	JCI-TA-9001
Source	[JCI90001]
Target	SCA <component> using <implementation.java/>
Prerequisites	
Predicate	The <implementation.java/> element conforms to the sca-implementation-java.xsd schema
Prescription Level	mandatory
Tags	“implementation” “schema”

Assertion ID	JCI-TA-9002
Source	[JCI90002, JCI100008]
Target	SCA POJO component implementation class
Prerequisites	a) An SCA component that uses the @class attribute to specify its Java implementation class b) The Java implementation class is contained within the same contribution as the component c) The SCA component is instantiated
Predicate	The Java class specified on the @class attribute is found
Prescription Level	mandatory
Tags	“implementation” “resolution”

Assertion ID	JCI-TA-9003
Source	[JCI90002, JCI100008]
Target	SCA POJO component implementation class
Prerequisites	a) An SCA component that uses the @class attribute to specify its Java implementation class b) The Java implementation class is exported by a contribution (Contribution B) in the SCA Domain c) The Java implementation class is also contained within the same contribution (Contribution A) as the component d) Contribution A imports the Java package of the implementation class e) The SCA component is instantiated
Predicate	The Java class specified on the @class attribute is loaded from Contribution B
Prescription Level	mandatory
Tags	“implementation” “resolution”

Assertion ID	JCI-TA-9004
Source	[JCI90002, JCI100008]
Target	SCA POJO component implementation class
Prerequisites	a) An SCA component that uses the @class attribute to specify its Java implementation class b) The Java implementation class is contained within another contribution (Contribution C) in the SCA Domain c) The Java implementation class is exported by another contribution (Contribution B) in the SCA Domain d) The Java implementation class is also contained within the same contribution (Contribution A) as the component e) Contribution A imports the Java package of the implementation class and uses the @location attribute of <import.java/> to specify Contribution C f) The SCA component is instantiated
Predicate	The Java class specified on the @class attribute is loaded from Contribution C
Prescription Level	mandatory
Tags	“implementation” “resolution”

Assertion ID	JCI-TA-9005
Source	[JCI90002, JCI100008]
Target	SCA POJO component implementation class
Prerequisites	a) An SCA component that uses the @class attribute to specify its Java implementation class b) The Java implementation class is contained within another contribution (Contribution C) in the SCA Domain c) The Java implementation class is exported by another contribution (Contribution B) in the SCA Domain d) The Java implementation class is also contained within the same contribution (Contribution A) as the component e) Contribution A uses a Java language specific mechanism to specify the location of the implementation class f) The SCA component is instantiated
Predicate	The Java class specified on the @class attribute is loaded by the Java language specific mechanism
Prescription Level	mandatory
Tags	“implementation” “resolution”

Assertion ID	JCI-TA-9006
Source	[JCI90003]
Target	Java class referenced by @class attribute of <implementation.java/>
Prerequisites	
Predicate	The Java class conforms to Java SE 5.0
Prescription Level	mandatory
Tags	“implementation” “Java”

2.7 Section 10

Assertion ID	JCI-TA-10001
Source	[JCI100001]
Target	<import.java/> element of sca-contribution.xml
Prerequisites	
Predicate	The value of the @package attribute on the <import.java/> element is unique across all other <import.java/> elements within the contribution.
Prescription	mandatory

Level	
Tags	“import”

Assertion ID	JCI-TA-10002
Source	[JCI100002]
Target	Java package with version referenced by <import.java/>
Prerequisites	a) An SCA component and implementation that uses the Java package specified in the <import.java/> element contained with Contribution A b) The Java implementation class is exported by another contribution (Contribution B) in the SCA Domain c) The SCA component is instantiated
Predicate	The Java classes in the package that is loaded, satisfy the <import.java/>
Prescription Level	mandatory
Tags	“import” “resolution”

Assertion ID	JCI-TA-10003
Source	[JCI100002]
Target	Java package with version referenced by <import.java/>
Prerequisites	a) An SCA component and implementation that uses the Java package specified in the <import.java/> element contained with Contribution A b) The Java implementation class is contained within contribution (Contribution B) in the SCA Domain c) The @location attribute on <import.java/> points to Contribution B c) The SCA component is instantiated
Predicate	The Java classes in the package that is loaded from contribution B, satisfy the <import.java/>
Prescription Level	mandatory
Tags	“import” “resolution”

Assertion ID	JCI-TA-10004
Source	[JCI100003]
Target	<export.java> with @package that uses the “uses” directive
Prerequisites	a) An SCA component and implementation contained within Contribution A that imports the Java packages specified in the <import.java/> element

	b) Contribution A also imports one or more of the packages specified in the uses directive of <import.java/> c) Another contribution (Contribution B) contains the <export.java/> element d) A third contribution (Contribution C) also exports the the same Java package as Contribution B, but it does not contain the “uses” directive e) The SCA component is instantiated
Predicate	The Java classes required by Contribution A are all loaded from Contribution B
Prescription Level	mandatory
Tags	“export” “resolution”

Assertion ID	JCI-TA-10005
Source	[JCI100004]
Target	<export.java/> element of a contribution
Prerequisites	
Predicate	The value of the @package attribute on the <export.java/> element is unique across all other <export.java/> elements within the contribution.
Prescription Level	mandatory
Tags	“export”

Assertion ID	JCI-TA-10006
Source	[JCI100007]
Target	@package attribute of <export.java/>
Prerequisites	
Predicate	The Java package specified on the @package attribute is contained with the same contribution as the <export.java/>
Prescription Level	mandatory
Tags	“export” “resolution”

Assertion ID	JCI-TA-10007
Source	[JCI100010]
Target	SCA Runtime
Prerequisites	

Predicate	All classes loaded from a contribution are loaded by a contribution unique class loader.
Prescription Level	mandatory
Tags	“class-loader”

Assertion ID	JCI-TA-10008
Source	[JCI100011]
Target	SCA Runtime
Prerequisites	a) Contribution A imports Java classes b) Contribution B exports the same Java classes
Predicate	Contribution B's class loader loads classes from Contribution A
Prescription Level	mandatory
Tags	“class-loader”

Assertion ID	JCI-TA-10009
Source	[JCI100009]
Target	SCA Runtime
Prerequisites	a) SCA POJO component contained within Contribution A b) The SCA component is instantiated
Predicate	SCA Runtime's thread context class loader is the class loader for Contribution A
Prescription Level	mandatory
Tags	“class-loader”

3 Cross Mapping of Conformance Statements to Assertions

Conformance statement	Test Assertion
JCI20001	JCI-TA-2001
JCI20002	JCI-TA-2002

Conformance statement	Test Assertion
JCI40001	JCI-TA-4001 JCI-TA-4002

Conformance statement	Test Assertion
JCI50001	JCI-TA-5001
JCI50002	JCI-TA-5006
JCI50004	JCI-TA-5002 JCI-TA-5003 JCI-TA-5004 JCI-TA-5005
JCI50005	JCI-TA-5007

Conformance statement	Test Assertion
JCI60001	JCI-TA-6001 JCI-TA-6002

Conformance statement	Test Assertion
JCI8001	JCI-TA-8001, JCI-TA-8002, JCI-TA-8003, JCI-TA-8004, JCI-TA-8005, JCI-TA-8006, JCI-TA-8007, JCI-TA-8008, JCI-TA-8009, JCI-TA-8010, JCI-TA-8011, JCI-TA-8012, JCI-TA-8013, JCI-TA-8016, JCI-TA-8017, JCI-TA-8018, JCI-TA-8019, JCI-TA-8020, JCI-TA-8021, JCI-TA-8022, JCI-TA-8023, JCI-TA-8024, JCI-TA-8025, JCI-TA-8026, JCI-TA-8027, JCI-TA-8028, JCI-TA-8029, JCI-TA-8030, JCI-TA-8031, JCI-TA-8032, JCI-TA-8033, JCI-TA-8034, JCI-TA-8035,

Conformance statement	Test Assertion
	JCI-TA-8036, JCI-TA-8037
JCI8002	JCI-TA-8014 JCI-TA-8015

Conformance statement	Test Assertion
JCI90001	JCI-TA-9001
JCI90002	JCI-TA-9002 JCI-TA-9003 JCI-TA-9004 JCI-TA-9005
JCI90003	JCI-TA-9006

Conformance statement	Test Assertion
JCI100001	JCI-TA-10001
JCI100002	JCI-TA-10002 JCI-TA-10003
JCI100003	JCI-TA-10004
JCI100004	JCI-TA-10005
JCI100007	JCI-TA-10006
JCI100008	JCI-TA-9002 JCI-TA-9003 JCI-TA-9004 JCI-TA-9005
JCI100009	JCI-TA-10009
JCI100010	JCI-TA-10007
JCI100011	JCI-TA-10008

4 Conformance

There are no conformance statements relating to the Test Assertions.

Appendix A. Acknowledgments

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

Participants:

Participant Name	Affiliation
Dave Booz	IBM
Mark Combellack	Avaya
Mike Edwards	IBM

Appendix B. Revision History

Revision	Date	Editor	Changes Made
1	08/28/09	David Booz	Initial version
2	09/29/09	David Booz	Updates in section 5 and 6 as per review comments
3	11/12/09	David Booz	Cleaned up and accepted changes to date.
4	03/11/10	Mark Combellack	Initial updates to match CD02 and applied changes for AI 2009-09-28-05
5	03/15/10	David Booz	More updates to align with CD02
6	04/09/10	Mark Combellack	Reverted my changes to section 5 from WD04 and cleaned up to do comments.
7	04/16/10	Mark Combellack	Cleaned up and accepted changes to date.
wd08	07/26/10	Mike Edwards	Editorial changes
wd09	07/27/10	Mike Edwards	Text adjusted for: JCI-TA-8022 JCI-TA-8023 JCI-TA-8036 JCI-TA-8037
wd10	10/19/10	Mike Edwards	Issue 214 applied - JCI-TA-8037