

Test Assertions for the SCA WS-BPEL Client and Implementation Version 1.1 Specification

This document defines the Test Assertions for the SCA WS-BPEL Client and Implementation Version 1.1 specification.

The test assertions in this document follow the format defined in the OASIS Test Assertion Guidelines specification:

http://www.oasis-open.org/apps/group_public/download.php/30070/TestAssertionsGuidelines-draft-0-9-9-6.pdf

Example Test Assertion

Test assertions are presented in a tabular format with rows corresponding to the entry types defined in the OASIS Test Assertions Guidelines

Assertion ID	SBL-TA-xxxx
Source	[BPELx00yy]
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 sewage system of the Domain.
Prescription Level	Mandatory
Tags	kitchenSink drain sewage

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 - "SBL" is for the SCA WS-BPEL Client and 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 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.

Test Assertions

Assertion ID	SBL-TA-1001
Source	[BPEL1001]
Target	??
Prerequisites	??
Predicate	??
Prescription Level	Mandatory
Tags	??
Comment	This assertion seems backwards

Assertion ID	SBL-TA-1002
Source	[BPEL1001]
Target	The @process attribute of a <implementation.bpel> element
Prerequisites	The <component> element has a <implementation.bpel> child element
Predicate	The value of the @process attribute is a QName that identifies an executable BPEL process
Prescription Level	Mandatory
Tags	“implementation.bpel” “BPEL process”
Comment	

Assertion ID	SBL-TA-2001
Source	[BPEL2001] [BPEL2002]
Target	The component type of the component that uses <implementation.bpel>
Prerequisites	A partner link of a BPEL process that is pointed to by <implementation.bpel> has the @sca-bpel:service attribute specified
Predicate	The component type contain a <service> element that corresponds to the partner link and whose @name attribute value is the same as the @sca:service attribute value
Prescription Level	Mandatory
Tags	“component type” “service” “sca-bpel:service” “partner link”
Comment	

Assertion ID	SBL-TA-2002
Source	[BPEL2003] [BPEL2004]
Target	The component type of the component that uses <implementation.bpel>
Prerequisites	A partner link of a BPEL process that is pointed to by <implementation.bpel> has the @sca-bpel:reference attribute specified
Predicate	The component type contains a <reference> element that corresponds to the partner link and whose @name attribute value is the same as the @sca:service attribute value
Prescription Level	Mandatory
Tags	“component type” “reference” “sca-bpel:reference” “partner link”
Comment	

Assertion ID	SBL-TA-2003
Source	[BPEL2005]
Target	The component type of the component that uses <implementation.bpel>
Prerequisites	The partner link of a BPEL process that is pointed to by <implementation.bpel>: a) does not have either the @sca-bpel:service attribute nor the @sca-bpel:reference attribute b) static analysis of the process determines that it is possible that the first message for the partner link will be received in a <receive> activity, the <onMessage> element of a <pick> activity or the <onEvent> element of an event handler
Predicate	The component type contains a <service> element that corresponds to the partner link
Prescription Level	Mandatory
Tags	“component type” “service” “partner link” “static analysis”
Comment	

Assertion ID	SBL-TA-2004
Source	[BPEL2006]
Target	The component type of the component that uses <implementation.bpel>
Prerequisites	a) Those specified for SBL-TA-2003 b) The name of the partner link is unique within the BPEL process
Predicate	The component type contains a <service> element that corresponds to the partner link and the @name attribute value of the <service> element is the same as the @name attribute value of the <bpel:partnerLink> element

Prescription Level	Mandatory
Tags	“component type” “service” “partner link” “static analysis”
Comment	

Assertion ID	SBL-TA-2005
Source	[BPEL2007]
Target	The component type of the component that uses <implementation.bpel>
Prerequisites	a) A partner link of a BPEL process that is pointed to by <implementation.bpel> has neither the @sca-bpel:reference or the @sca-bpel:service attribute specified b) static analysis of the process does not determines that it is possible that the first message for the partner link will be received in a <receive> activity, the <onMessage> element of a <pick> activity or the <onEvent> element of an event handler
Predicate	The component type contains a <reference> element that corresponds to the partner link
Prescription Level	Mandatory
Tags	“component type” “reference” “partner link” “static analysis”
Comment	BPEL2007 incorrectly talks about the range BPEL2001-BPEL2006. It is actually the rules: 2001, 2003 and 2005.

Assertion ID	SBL-TA-2006
Source	[BPEL2008]
Target	The component type of the component that uses <implementation.bpel>
Prerequisites	a) Those specified for SBL-TA-2005 b) The name of the partner link is unique within the BPEL process
Predicate	The component type contains a <reference> element that corresponds to the partner link and the @name attribute value of the <reference> element is the same as the @name attribute value of the <bpel:partnerLink> element
Prescription Level	Mandatory
Tags	“component type” “reference” “partner link” “static analysis”
Comment	

Assertion ID	SBL-TA-XXXX
Source	[BPELYYYYY]
Target	
Prerequisites	
Predicate	

Prescription Level	
Tags	
Comment	

Cross Mapping of Conformance Statements to Assertions

Conformance statement	Test Assertion