



Comments (1)

from Jacques Durand

Table of Contents

1 Introduction.....	5
1.1 Example Test Assertion.....	5
1.2 Terminology.....	5
1.3 Normative References.....	6
1.4 Non-normative References.....	6
2 Test Assertions.....	7
2.1 Section 4.....	7
2.2 Section 5.....	10
2.3 Section 6.....	23
2.4 Section 7.....	36
2.5 Section 8.....	41
2.6 Section 9.....	47
2.7 Section 10.....	48
2.8 Section 12.....	49
2.9 Section 13.....	61
2.10 Section 14.....	62
3 Cross Mapping of Conformance Statements to Assertions.....	64
4 Conformance.....	70

1 Test Assertions

1.1 Section 4

Sometimes, one wants to have only a few high-level categories of Targets, and avoid fine-grain targets (e.g. like single attributes). That can simplify the way a test report is classifying the targets and identifying them.

For example, ASM-TA-4001 (and also ASM-TA-4006, ASM-TA-4007) could be seen as having the Target type: <componentType/> element. That would entail the following rewording: (only Target and Prerequisite are changed)

Assertion ID	ASM-TA-4001
Source	[ASM40002]
Target	<u>@constrainingType attribute of a</u> <componentType/> element
Prerequisites	<u>has a @constrainingType attribute</u>
Predicate	@constrainingType attribute value of the <componentType/> element is the QName of a <constrainingType/> element
Prescription Level	Mandatory
Tags	"componentType" "constrainingType"

In the following, although a <service> element appears to be a valid target, the requirement is more about a combination of such Services as found inside a <componentType/> element. In other words, a failure of this TA is not really a failure of the <service/> element itself, when considered separately: it is a failure of the <componentType/> element, that contains an ambiguous, invalid set of <service/> elements each one of them well-formed when considered individually. The same <service> element may be perfectly OK in another <componentType/>.

Suggested changes:

Assertion ID	ASM-TA-4002
Source	[ASM40003]
Target	<u><service/> element of a</u> <componentType/> element
Prerequisites	The <componentType/> element has >1 <service/> elements
Predicate	The @name attribute of <u>theeach</u> <service/> element is not equal to the @name attribute of any other <service/> element of the <componentType/>
Prescription Level	Mandatory
Tags	"componentType" "service" "name"

Although again that is not a major issue: it is OK in a test assertion to assume some dependencies of the target with the context where the test target appears. That depends on how you want to do test reporting: it could become embarrassing if you pretended to report on the target as a separate object, e.g. identified as such independently from its context (however, if in your test report you identify a Service as always being part of a well-defined ComponentType then its OK).

Same suggested update below:

Assertion ID	ASM-TA-4003
Source	[ASM40004]
Target	<reference/> element of a <componentType/> element
Prerequisites	The <componentType/> element has >1 <reference/> elements
Predicate	The @name attribute of the <u>each</u> <reference/> element is not equal to the @name attribute of any other <reference/> element of the <componentType/>
Prescription Level	Mandatory
Tags	"componentType" "reference" "name"

Similar change suggested here too:

Assertion ID	ASM-TA-4004
Source	[ASM40005]
Target	<property/> element of a <componentType/> element
Prerequisites	The <componentType/> element has >1 <property/> elements
Predicate	The @name attribute of the <u>each</u> <property/> element is not equal to the @name attribute of any other <property/> element of the <componentType/>
Prescription Level	Mandatory
Tags	"componentType" "property" "name"

Shouldn't the prerequisite also require the presence of an <implementation/> child like in TA-5002

Assertion ID	ASM-TA-5006
Source	[ASM50004]
Target	<service/> element of a <component/> element
Prerequisites	<u>The <component/> element has an <implementation/> child element AND</u> The <service/> element has an <interface/> child element
Predicate	The interface specified by the <interface/> child element of [the <service/>

	element] is a compatible subset of the interface declared for the <service/> with the same @name attribute in the <componentType/> of the <implementation/> child of the <component/>
Prescription Level	Mandatory
Tags	"compatible interfaces"

ASM-TA-5006 is also a TA that has a Predicate that requires its target to satisfy conditions that depend on context, like ASM-TA-4002. However I think such cases as ASM-TA-5006 are more justified to keep their target as is (here a <service>) in contrast with ASM-TA-4002 as such conditions (as in TA-5006) have more to do with the right way to derive a valid <service> element from an existing template present in related <componentType/>..So I have less a problem with ASM-TA-5006 than with ASM-TA-4002.

This said, I believe the following is also a valid way to express ASM-TA-5006:

Assertion ID	ASM-TA-5006b
Source	[ASM50004]
Target	<component/> element
Prerequisites	The <component/> element has an <implementation/> child element AND at least one <service/> element has an <interface/> child element
Predicate	The interface specified by the <interface/> child element of each <service/> element [with an <interface> child] is a compatible subset of the interface declared for the <service/> with the same @name attribute in the <componentType/> of the <implementation/> child of the <component/>
Prescription Level	Mandatory
Tags	"compatible interfaces"