



Comments (1)

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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	@constrainingType attribute of a <componentType/> element
Prerequisites	has a @constrainingType attribute
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	<service/> element of a <componentType/> element
Prerequisites	The <componentType/> element has >1 <service/> elements
Predicate	The @name attribute of the each <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 theeach <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 theeach <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"