

# Proposal for SCA v4.1

## SCA Clarifications 1

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Slide 1

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# Proposal

This document contains a proposal to change the Draft SCAv4.1 specification to provide clarification for the following submitted issues:

- Issue #111, Component Factory ReleaseObject
- Issue #172, Appendix D Attachment 1, OS and Processor values
- Issue #174, DCD's componentproperties
- Issue #199, Uninstall Argument Wrong
- Issue #201, Normative References

Proposal author:

Name: Jimmie Marks

Organization: Raytheon

Address: 1010 Production Road, Fort Wayne IN 46808

Phone number: 260-429-6422

email: Jimmie\_T\_Marks@raytheon.com

Proposal contributors / reviewers:

- François Lévesque, NordiaSoft
- Gerald Bickle, Raytheon
- Ken Dingman, Harris
- Kevin Richardson, JTNC
- Eric Christensen, JTNC

# Recommendation

## Issue #111, Component Factory ReleaseObject

### Issue Description:

Like the ApplicationManagerComponent releaseObject, the BaseFactoryComponent should destroy all components maintained by the Factory.

# Summary of the Proposal

## Summary of the Proposal:

Add the requirement to the BaseFactoryComponent to release all created components for releaseObject operation.

## Detailed Proposal :

Add following requirement to section.

### 3.1.3.1.2.2.3 Base Factory Component Semantics

The releaseObject operation shall release all component instances created by the BaseFactoryComponent.

# Recommendation

## Issue #172, Appendix D Attachment 1 OS and Processor values

### Issue Description:

The OS and processor elements are used in component definitions. Their values should be standardized to promote the portability of waveform components and to enforce standardization of allocation type usage across vendors. However, the list of values established for these elements is outdated (Appendix D Attachment 1) and must be updated to consider the latest OS and processors available.

# Summary of the Proposal

## Summary of the Proposal:

Modify Appendix D-1 and Appendix D Attachment 1 text to indicate the listed values are examples.

## Detailed Proposal :

### SCA\_4.1\_DRAFT\_App\_D-1\_Psm\_DocumentTypeDefinitionFiles

#### D-1.6.1.6.8 os

The *os\_name* attribute allocation property is defined in Attachment 1 to this appendix.

#### D-1.6.1.6.9 processor

The *processor\_name* attribute allocation property is defined in Attachment 1 to this appendix.

### SCA\_4.1\_DRAFT\_App\_D-1\_Att1\_CommonPropertiesDefinitions

#### D-1.6 OS ELEMENT

```
<simple id="DCE:80BF17F0-6C7F-11d4-A226-0050DA314CD6" type="string" name="os_name" mode="readonly">
```

```
<description> This property identifies the os_name XML allocation property.
```

```
</description>
```

```
<!-- Established Example values for the os_name element are: -->
```

```
<!-- AIX, BSDi, VMS, DigitalUnix, DOS, HPBLS, HPUX, IRIX, -->
```

#### D-1.7 PROCESSOR ELEMENT

```
<simple id="DCE:9B445600-6C7F-11d4-A226-0050DA314CD6" type="string" name="processor_name" mode="readonly">
```

```
<description> This property identifies the processor_name XML allocation property.
```

```
</description>
```

```
<!-- Established Example values for the processor_name element are: -->
```

# Recommendation

## Issue #174, DCD's componentproperties

### Issue Description:

In Section D-1.11.1.4.1.5.1 of Appendix D document it is mentioned that the section D-1.10.1.3.1.2 defines the property list for the componentinstantiation element, which contains initial properties values. To be more precise, it is the section D-1.10.1.3.1.2.1 that should be referenced. However, this section present the property list as configure, factoryparam, and/or execparam properties, which is different than the list of property with a kindtype of configure, execparam or allocation mentioned in D-1.11.1.4.1.5.1. This is very confusing. I think that the reason to refer to D-1.10.1.3.1.2 was to provide the precedence order for the initial values for the properties. If it's the case, then the text used in section D-1.10.1.3.1.2.1 for this purpose should simply be repeated and updated to use "DCD" instead of "SAD".

# Summary of the Proposal

## Summary of the Proposal:

Correct / update the text of D-1.11.1.4.1.5.1.

## Detailed Proposal :

### Replace text in Section D-1.11.1.4.1.5.1 of Appendix D document

The optional *componentproperties* element (see Figure 39) is a list of *configure*, *factoryparam*, *allocation*, and/or *execparam* properties values that are used in creating the component or for the initial configuration of the component.

The following sources will be searched in the following precedence order for initial values for properties with a *kindtype* of “*execparam*”, “*configure*” or “*allocation*” and a *mode* attribute of “*readwrite*” or “*writeonly*”:

1. The DCD partitioning : *componentplacement* : *componentinstantiation* element,
  2. The value, if any, from the SPD using the properties precedence stated in D-1.6.1.
- If no values are found in the sources above, the property is discarded.

The following sources will be searched in the given precedence order for initial values for properties with a *kindtype* of “*factoryparam*”:

1. The DCD *partitioning* : *componentplacement* : *componentinstantiation* : *componentfactoryref* : *componentfactoryproperties* element,
  2. The DCD *partitioning* : *componentplacement* : *componentinstantiation* : *componentproperties* element (component factory),
  3. The value, if any, from the SPD using the properties precedence stated in D-1.6.1.
- If no values are found in the sources above, the property is discarded.

**In section D-1.10.1.3.1.2.1, the text is fine except that it mention "simple" properties. The word simple shall be removed (as in D-1.11.1.4.1.5.1) since not only simple properties can have their value overridden.**

# Recommendation

## Issue #199, Uninstall Argument Wrong

### Issue Description:

In section 3.1.3.3.1.5.5.2.2, the name of the single argument of the uninstallApplication operation is identifier. In section 3.1.3.3.1.5.5.2.5 describing the exceptions/errors raised by this operation, a wrong name is used to refer to the operation argument name, i.e.ApplicationId rather than identifier.

# Summary of the Proposal

## Summary of the Proposal:

Correct the parameter name in section 3.1.3.3.1.5.5.2.5

## Detailed Proposal :

In section 3.1.3.3.1.5.5.2.5, change

SCA126 The uninstallApplication operation shall raise the InvalidIdentifier exception when the ApplicationId is invalid.

To

SCA126 The uninstallApplication operation shall raise the InvalidIdentifier exception when the **identifier parameter** is invalid.

# Recommendation

## Issue #201, Normative References

### Issue Description:

Administrative Recommendation - Normative References to Standards listed in the SCA DRAFT Specification Version 4.1 (e.g., page 13) constitute required provisions of the recommended specification and should be reviewed.

# Summary of the Proposal

## Summary of the Proposal:

Validation of Normative references was performed.

Propose text update of the Normative References as shown below. Proposed resolution lists Author / Standards body, Document ID, Title, Version, date per IEEE, Harvard, etc. referencing system and provides consistent OMG specification references through out main spec, appendices and attachments.

## Detailed Proposal :

- ~~[1] — **OMG Lightweight Log Service Specification, Version 1.1 formal/05-02-02, February 2005.**~~
- [2] **OMG Document formal/05-02-02, Lightweight Log Service Specification, Version 1.1, February 2005.**
- ~~[2] — **OMG Event Service Specification, Version 1.2 formal/04-10-02, October 2004.**~~
- [3] **OMG Document formal/04-10-02, Event Service Specification, Version 1.2, October 2004.**
- ~~[3] — **Software Communications Architecture Specification, Version 2.2.2, 15 May 2006.**~~
- [3] **JTNC Software Communications Architecture Specification, Version 2.2.2, FINAL / 15 May 2006.**
- ~~[4] — **OMG Naming Service Specification, Version 1.3, formal/04-10-03, October 2004.**~~
- [4] **OMG Document formal/04-10-03, Naming Service Specification, Version 1.3, October 2004.**

Update references in following SCA Appendices and Attachments as shown above.

- Appendix D-1 PSM contains normative references
- Appendix E contains normative and informative OMG references
- Appendix E-1, Application PIM, contains normative and informative OMG references
- Appendix E-2, PSM\_CORBA, contains informative OMG references
- Appendix E-3 contains informative OMG references
- Appendix F contains normative references