SCA 4.1 Allocation Properties

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Proposal

This document contains a proposal to change the Draft SCAv4.1 specification to make it clear who has responsibility of setting a BasePlatformComponent's ComponentType specializedInfo allocation properties.

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Recommendation

SCA v4.1 BasePlatformComponent Allocation Properties

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Topics

Description of the Issue

Summary of the Proposal

Detailed Proposal

Specifications Changes (found in a word document)

- Main Specification Changes
- IDL Change

Description of the Issue

Two Issues:

- No component has sole responsibility of ensuring that the registering BasePlatformComponent's ComponentType specializedInfo allocation properties exist before registering to DomainManagerComponent

- Multiple BasePlatformComponent types state the same "may statement" on setting the specializedInfo allocation properties

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Summary of the Proposal

Give DeviceManagerComponent sole responsibility of ensuring that the registering BasePlatformComponent's ComponentType specializedInfo allocation properties are set before registering to DomainManagerComponent

Remove multiple BasePlatformComponent types "may" statements of setting the specializedInfo allocation properties and place one statement at the BasePlatformComponent.

Also for the SCA User Guide add explanation about self-launching platform components could set its ComponentType's allocation properties

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Detailed Proposal

Add ID statements

3.1.3.1.3.27 AllocationProperties

The AllocationProperties sequence defines a sequence of AllocationPropertyType structures that is a BasePlatformComponent supplemental information for a ComponentType's specializedInfo. The associated ID for AllocationProperties type is ALLOCATION_PROPS_ID

typedef sequence< AllocationPropertyType> AllocationProperties;

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Detailed Proposal

<u>Add SpecializedInfo Identifiers section</u>

3.1.3.1.3.29 SpecializedInfo Identifiers

Constants are defined to be used to identify the type value for a DataType within ComponentType's specializedInfo field.

This string constant is the identifier for AllocationsProperties type

within a ComponentType's specializedInfo

const string ALLOCATION_PROP**S**_ID = "ALLOCATION_PROP**S**";

Update Appendix C and SpecializedInfo IDL file.

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Detailed Proposal

3.1.3.3.2.4.3 DeviceManagerComponent Semantics

<u>Add Requirement Statement</u>

SCAXXX The DeviceManagerComponent shall set a ComponentType's specializedInfo allocation properties with an id of ALLOCATION_PROPS_ID and a value of AllocationProperties for a deployed BasePlatfomComponent when no AllocationProperties are supplied by the component.

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Detailed Proposal

3.1.3.4.2.1.3 DeviceComponent Semantics

The ComponentType's type field of the registering DeviceComponent is a DEVICE_COMPONENT. ~~The specializedInfo field may contain a sequence of AllocationPropertyType structures that holds the DeviceComponent's allocation properties.~~

Detailed Proposal

3.1.3.5.2.4.3 BasePlatformComponent Semantics

Add Statements

A BasePlatformComponent may add its allocation properties to the ComponentType's specializedInfo field, but if this is not done then the DeviceManagerComponent is responsible for adding the allocation properties.

3.1.3.5.2.6.3 ServiceComponent Semantics

The ComponentType's type field of the registering component is assigned as a SERVICE_COMPONENT. ~~The specializedInfo field may contain a sequence of AllocationPropertyType structures that holds the ServiceComponent's allocation properties.~~

3.1.3.5.2.7.3 ManageableServiceComponent Semantics

The ComponentType's type field of the registering component is a MANAGEABLE_SERVICE_COMPONENT.~~. The specializedInfo field may contain a sequence of AllocationPropertyType structures that holds the ManageableServiceComponent's allocation properties.~~

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