# Working with Services Structure diagram

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### Creating a diagram

To create an Services Structure diagram

- 1. In the Containment Tree, select the Services Structure and do one of the following:
  - From the selected package's shortcut menu, select Create Diagram > Services Structure.

🛱 📩 Services
Services Connectivity
🗄 🖷 📩 Services Constraints
Services Information
Services Interaction Scenarios
🗄 🖷 📩 Services Parameters
Services Processes
Services Structure
Create Diagram: Bearch
General      General      Services Structure
Services Structure
Code Engineering Sets

- In the modeling tool's main menu, click Create Diagram, search for Services Structure and select it.
- 2. Name a diagram or leave it with the default name.

### **Creating an element**

When the diagram is created, you can start creating the appropriate elements. An example is described using Service Specification element, but the same is valid for other structural elements.

To create an Service Specification in a diagram

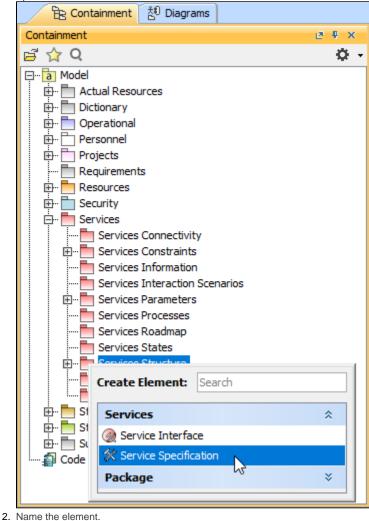
1. In the diagram palette, click the Service Specification and then click the appropriate place on the diagram pane.

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Tools	
Common	
🗞 Dictionary	
Services Structure	
💥 Service Specification	
Service Interface	
A ServiceFunction	
∑_ Implements	

2. Name the element.

To create an Service Specification in a Containment tree

1. In the Containment tree, right click the Services Structure package and from the shortcut menu, select Create Element. Search for the Service Specification and select it.



3. Drag the created element from the Containment tree to the diagram pane.

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Services States	🗞 Dictionary	1
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Services Structure	% Service Specification	
Services Taxonomy 🗸	② Service Interface	
< >	KerviceFunction	

the structure of each Service Specification can be modeled using the Services Internal Connectivity diagram.

#### To create the elements from other resources (e.g. Word, Excel, HTML)

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- 1. Copy a list in your resource.
- 2. In a diagram, press Ctrl+V and from the Paste Special dialog, choose Element.
- 3. From the Select Type dialog, choose Service Specification (or other appropriate element).

D more information about creating the elements from other resources, see Creating elements from other resources.

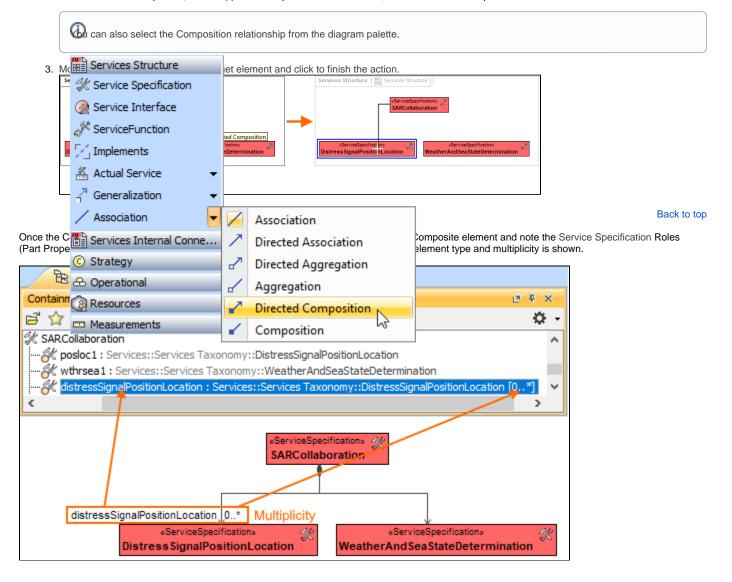
#### **Connecting the Service Specifications**

When you have Service Specification created, you can start connecting them using the Composition and Aggregation relationships.

#### To connect the elements with the Composition relationship

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- 1. Select an element, which will be the Composition End.
- 2. From the Smart Manipulator, which appears after you select the element, choose Directed Composition.



To connect the elements with the Aggregation relationship

1. Select an element, which will be the Composition End.

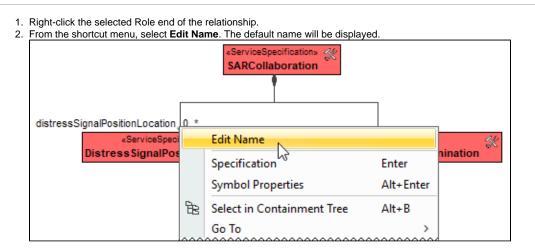
2. In the diagram palette, click the black arrow near the Association and choose Directed Aggregation.

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© Strategy	~	Directed Aggregation
& Operational	~	Aggregation
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3. Click the element which is the Aggregation End and draw the relationship to the Reference End.

## Changing the role name and specifying multiplicity

To change the role name

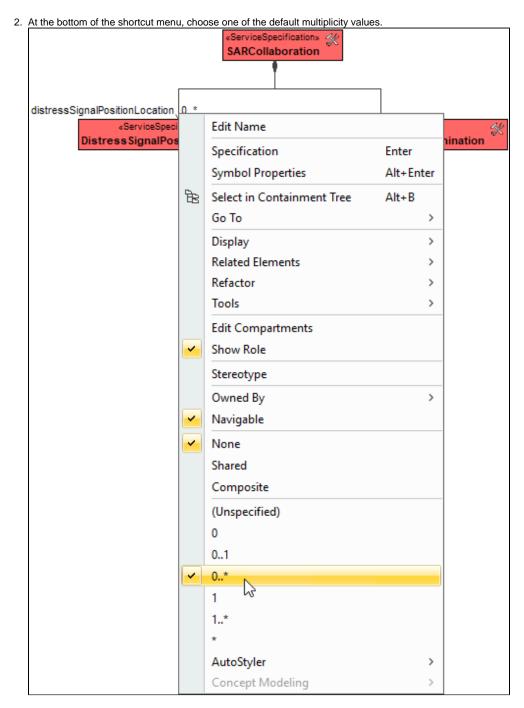


You can edit the default name on the diagram, in the Containment tree, or in the role's Specification window.

To specify multiplicity

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1. Right-click the selected Role end of the Composite relationship.



You can always change the multiplicity value on the diagram or in the specification window of the role element.

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#### **Displaying created structure**

If you already have created a structure in the Containment tree, you can display it on the diagram. There are three ways to display the structure:

- Relationship (direct) Notation. If you choose using this notation, the structure will be displayed on a diagram pane with the elements connected with relationships.
- Attribute Compartment Notation. If you choose using this notations, the structure will be displayed as the attributes in the Attributes compartment.
- Structure (Nested elements) Notation. If you choose using this notations, the structure will be displayed in the Structure compartment.

To display a created structure on a diagram (Direct Notation)

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<sup>1.</sup> Drag the selected element with the part properties on to the diagram.

- Right-click that element, and from its shortcut menu, select Display > Display Related Elements.
   In the Display Related Elements dialog, select Association.

Resource Artifacts (or other structural elements) were related using the Resource Association relationship, select the Resource Association also.

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- 1. Drag the selected element with the part properties on to the diagram.
- 2. Select the element ant click the Compartments smart manipulator.

«ServiceSpecification»	24	D
SARCollaboration		
Compartments		

3. In the Compartments menu, select Attributes.

When connecting the elements with Composition/Aggregation relationships, the roles are Association Ends. In such case, the roles will not be displayed in the Attributes compartment, only in the Structure compartment.

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To display a created structure on a diagram (Structure (Nested elements) Notation)

- 1. Drag the selected element with the part properties on to the diagram.
- 2. Do one of the following:
  - Select the element, click the Compartments smart manipulator, and choose Structure.
  - Right-click that element, and from its shortcut menu, select Display > Display Parts/Ports.
- In the Display Parts/Ports dialog, select the parts you want to be displayed.
   Click OK.

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- Displaying related elements
  Displaying parts and ports
  Compartments
  Smart manipulation