# Working with Security Structure diagram

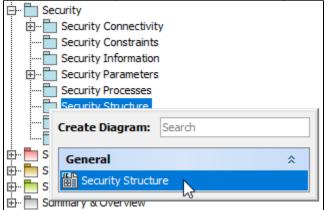
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- Creating a diagram
- Creating an element
- Connecting the Resource Mitigation
- Changing the role name and specifying multiplicity
- Displaying created structure

### **Creating a diagram**

To create an Security Structure diagram

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



- In the modeling tool's main menu, click Create Diagram, search for Security 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 Resource Mitigation element, but the same is valid for other structural elements.

To create an Resource Mitigation in a diagram

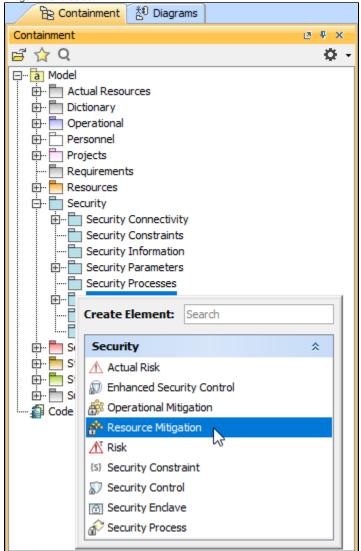
1. In the diagram palette, click the Resource Mitigation and then click the appropriate place on the diagram pane.

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🍰 Operational Mitigation	
Resource Mitigation	
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2. Name the element.

To create an Resource Mitigation in a Containment tree

1. In the Containment tree, right click the Security Structure package and from the shortcut menu, select **Create Element**. Search for the Resource Mitigation and select it.



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

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× /		Directed Composition •			

the structure of each Resource Mitigation can be modeled using the Security Internal Connectivity (Resources) diagram or Security Internal

Connectivity (Operational) diagram.

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 Resource Mitigation (or other appropriate element).

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

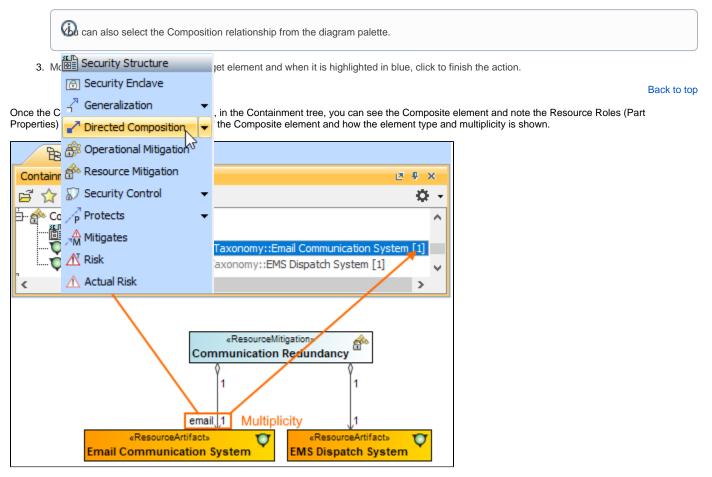
## **Connecting the Resource Mitigation**

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

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To connect the elements with the Composition relationship

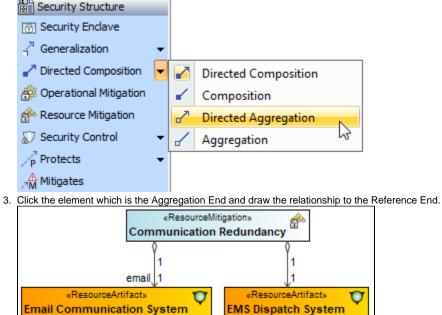
- 1. Select an element, which will be the Composition End.
- 2. From the Smart Manipulator, which appears after you select the element, choose Directed Composition.



To connect the elements with the Aggregation relationship

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

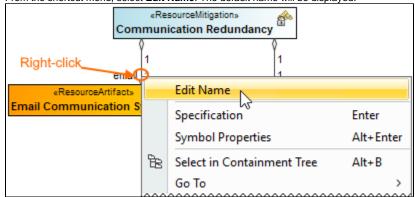
2. In the diagram palette, click the black arrow near the Directed Composition and choose Directed Aggregation.



#### Changing the role name and specifying multiplicity

To change the role name

- 1. Right-click the selected Role end of the relationship.
- 2. From the shortcut menu, select Edit Name. The default name will be displayed.



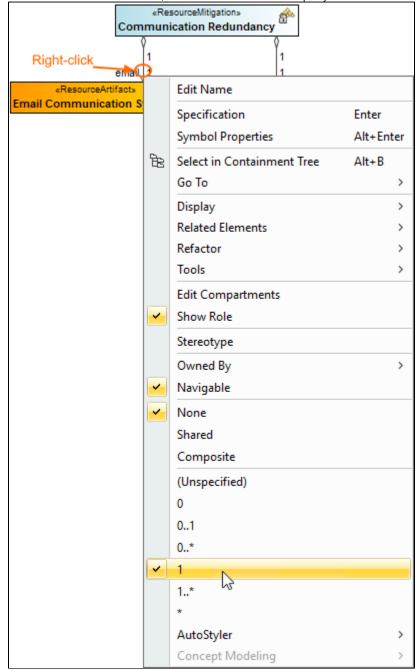
You can edit the default name on the diagram, in the Containment tree, or in the role's Specification window.

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.

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

It Resource Artifacts (or other structural elements) were related using the Resource Association relationship, select the Resource Association also. 4. Click OK. ۴þ., «ResourceMitigation» 0 æ Communication Redundancy Specification Enter Symbol Properties Alt+Enter Create Diagram 🔁 Select in Containment Tree Alt+B Go To > Display > Display Parts/Ports... **Related Elements** > **Display Internal Structure** > Refactor > **Display All Paths** Tools > **Display Related Elements** Edit Compartments Stereotype 🔀 Display Related Elements × AutoStyler Concept Mode **Display related elements** Show symbols on the diagram representing elements which are related to the selected model element. Specify the relationship types to be used when searching for the related elements and choose where to search for related elements (scope). Element: Resource Mitigation Communication Redundancy Expand Relations Relations Association Incoming □ \_<sup>⊕</sup> Containment Outgoing Both Scope Whole Project O Package Always create new symbols 🗸 Layout related elements OK Cancel Help «ResourceMitigation» đ Communication Redundancy 1 «ResourceArtifact: Q «ResourceArtifact» Q Email Communication System EMS Dispatch System

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To display a created structure on a diagram (Attribute Compartment Notation)

1. Drag the selected element with the part properties on to the diagram.

2. Select the element ant click the Compartments smart manipulator.

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	Communication Redundancy	
	Compartments	
3.	In the Compartments menu, select Attributes	S.

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)
  - a. Drag the selected element with the part properties on to the diagram.
  - b. Do one of the following:
    - ٠ 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**.
  - c. In the Display Parts/Ports dialog, select the parts you want to be displayed.

Com	«ResourceMitigation» munication Redundancy Specification	Enter	
	Symbol Properties	Alt+Enter	
	Create Diagram		
æ	Select in Containment Tree	Alt+B	
	Go To	>	
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#### **Related pages**

- Displaying related elementsDisplaying parts and ports
- ٠ Compartments
- Smart manipulation

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