# **Extract State Machine Wizard**

The **Extract State Machine Wizard** is used for extracting a selected part of a state machine diagram to a separate diagram. Using this wizard, you can:

- Create and specify the target diagram that will be created as the result of the extraction. The selected part will be extracted to the newly created diagram.
- Select the entry and exit points that will be created in a new diagram. The entry and exit points
  are listed for each intersected transition from the source diagram.
- Specify a referencing element that is created in the source state machine diagram and represents the elements moved to the target diagram during the extraction.

### To start the Extract State Machine Wizard

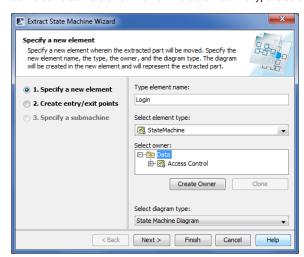
- 1. In the state machine diagram, select a part that you want to extract.
- From the selected part's shortcut menu, choose Refactor > Extract. The Extract State Machine Wizard opens.

## The Extract State Machine Wizard consists of three steps:

- 1. Specification of a new element
- 2. Creation of entry/exit points
- 3. Specification of a submachine

# Step #1. Specification of a new element

In this step, you can specify a diagram into which the extracted part will be moved. The new diagram will be created along with a new state machine. The diagram will be created as an inner state machine element. You can also define the element type, name, and the owner. Note, that the diagram name will be the same as the element name. The state machine type is selected by default.



Element name	Description
Type element name	Type the name of the new element wherein the extracted part will be stored. The new element will contain the new diagram.
Select element type	Open the list and select the element type in which the extracted part and new diagram will be created. The default element type is a state machine. By using customized plugins, you can add custom elements to the element type list.

### On this page

- Step #1. Specification of a new element
- Step #2. Creation of entry /exit points
- Step #3. Specification of a submachine

### Related pages

- Extracting
- Extracting in State Machine diagram
- Working with model elements

Select owner	In the model tree, select a package, profile, or model as an owner of the newly created state machine. You can also:
	<ul> <li>Create a new owner. Click the Create Owner button, select an element type, and specify its properties.</li> <li>Clone an existing package, profile, or model. To clone, in the model tree, select an owner, click the Clone button, and specify properties of the cloned element.</li> </ul>
Select diagram type	Open the list and select the diagram type for the extracted part. The default diagram type is a state machine diagram. By using customized plugins, you can add custom diagrams to the diagram type list.

After you have specified the new element name, an owner of the element, and the type of the new diagram, do one of the following:

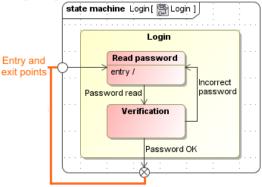
- Click Next, if you want to specify entry/exit points and define a referencing element. The next wizard step opens.
- Click Finish. The selected part of a state machine diagram is extracted to a new diagram that is specified in this step. Instead of the extracted part, the submachine state is created referencing to the newly created diagram. The second and the third wizard steps are skipped - that is the default options are taken.

# Step #2. Creation of entry/exit points

The entry and exit points that will be created for the intersected transitions are listed in this step.

# Source diagram state machine Access Control Login Read password entry / password read Verification Password OK Connection

Target diagram - new diagram created after extraction



As you can see in the example, in the *Access Control* source diagram, the intersected transitions are selected for the extraction. After the extraction, in the target diagram, the entry and exit points are created for each intersected transition.



In the **Extract State Machine Wizard**, the **Create entry/exit point** step is empty unless there are intersected transitions selected in the source state machine diagram.



After you have selected the parameters, do one of the following:

- Click Back to return to the first step.
- Click **Next** to define a referencing element. The next wizard step opens.
- Click Finish. The selected part of the state machine diagram is extracted to a new diagram. The third wizard step is skipped - that is the default submachine name is taken.

# Step #3. Specification of a submachine

A referencing element is created in the source diagram instead of the extracted part. Double-click the referencing element to navigate to the extracted part.



After you have typed the submachine name, do one of the following:

- Click **Back** to return to the second step.
- Click Finish. The selected part of the state machine diagram is extracted to the new state machine diagram.