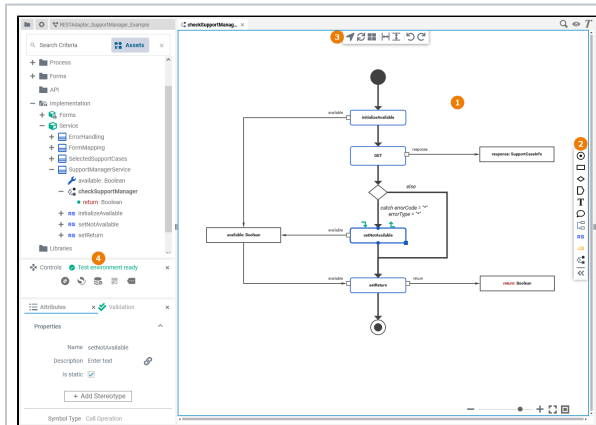


# Working with the Activity Editor

When you open the implementation of an operation that has been implemented as activity, the activity diagram opens in the activity editor.



The activity editor consists of different areas:

1. **Diagram Pane**
2. **Elements Toolbar**
3. **Model Toolbar**
4. **Designer Panels**

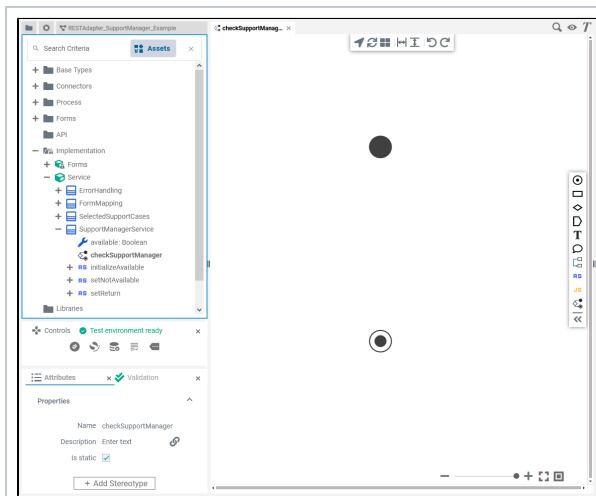
## On this Page:

- [Customizing the Activity Editor](#)
- [Modeling in the Activity Editor](#)
- [Toolbars](#)
  - [Diagram Toolbar](#)
  - [Elements Toolbar](#)
- [Activity Diagram Context Menus](#)
- [Keyboard Shortcuts](#)

## Related Pages:

- [Working with the Designer](#)
  - [Customizing Editors and Panels](#)
- [PAS Designer Developer Guide](#)
  - [Drawing an Activity Diagram](#)

# Customizing the Activity Editor



You have several options to adjust the activity diagram editor. When you open the editor for the first time, the default view is displayed:

- The **Diagram Pane** is displayed in the top-right. (See [Modeling Activities](#) for more information.)
- Four **Designer Panels** are shown in the sidebar on the left.
  - The **Service Panel**
  - The **Controls Panel**
  - The **Attributes Panel**
  - The **Validation Panel**

✓ Refer to Customizing Editors and Panels for detailed information about panel management in general.

The diagram pane shows the torso of an activity diagram: only initial node and final node are present. This leads to the validation panel showing errors because a control flow is missing. Refer to the other pages in this chapter for more information on how to draw a valid activity diagram:

- [Adding Operations in the Activity Editor](#)
- [Drawing the Control Flow](#)
- [Adding Local Variables](#)
- [Adding Literals](#)
- [Adding Comments](#)
- [Drawing Object Flow](#)
- [Adding Parameters in the Activity Editor](#)
- [Moving Pins](#)

# Modeling in the Activity Editor

While modeling, some general functionalities help you to browse through your model, and to adjust your working location within the model. Refer to [Customizing Editors and Panels](#) for more details.

## Toolbars

The activity diagram editor features a diagram toolbar in the center top of the diagram pane, and an elements toolbar on the right.

### Diagram Toolbar

The activity diagram toolbar assist you during modeling an activity diagram:













The available tools are:

Tool Icon	Tool Name	Description
	Select in service panel	Select the related operation in the service panel.
	Reload diagram	Click on this icon to reload the activity diagram.
	Toggle Grid	Use this option to enable or disable the grid on the diagram pane. The grid supports you during modeling: If the grid is enabled, elements snap to the grid points.
	Insert /Remove horizontal space	Use this option if you need more or less space on the diagram pane. Click on the pane to display the start line, the second click marks the end line and defines the size of the area to be added. To add space, click from left to right to define the area. If you want to delete a horizontal space, click from right to left to define the area
	Insert /Remove vertical space	Use this option if you need more or less space on the diagram pane. Click on the pane to display the start line, the second click marks the end line and defines the size of the area to be added. To add space, click from top to bottom to define the area. If you want to delete a vertical space, click from bottom to top to define the area.
	Undo	Undo the previous action you performed in... <ul style="list-style-type: none"><li>• ... one of the Designer editors (except mapping editor).</li><li>• ... the <b>Implementation</b> folder of the service panel.</li></ul> <div> If you click <b>Undo</b> in one of the Designer editors, this may also have an effect on the <b>Implementation</b> folder in the Service panel if you performed your previous action there.</div>
	Redo	Redo your previous action (after undo).

## Elements Toolbar

The elements toolbar contains all elements that you can create on your activity diagram.

Icon	Description
	Add a final node. An activity diagram can have multiple final nodes.
	Add an object node. This can be used to store data locally.
	Add a decision. Decisions are used to split the control flow based on conditions/guards.
	Throw the exception defined by the parameters. If this error is not caught, it will be sent back to the client. For more information, refer to <a href="#">User Defined Errors</a> in the xUML Services Reference Guide.
	Add a literal. It can be connected to output parameters, return parameters or pins (action call or throw exception) that do not have incoming relations.
	Add a comment. This has no effect on the execution, it is just for documenting purposes.
	Add a mapping operation.
	Add an action script operation.
	Add a JavaScript operation.
	Add an activity operation.



If you have added an operation via the elements toolbar, it...


- ... resides in the same class as the activity diagram.
- ... inherits the static attribute of the activity diagram by default, i.e. if the activity diagram is static, the new operation is also static.

## Activity Diagram Context Menus

You are supported during modeling on the activity diagram pane by various context menus:







- [Tools Context Menu](#)
- [Extended Tools Context Menu](#)
- [Control Flow Context Menu](#)
- [Diagram Context Menu](#)

### Tools Context Menu

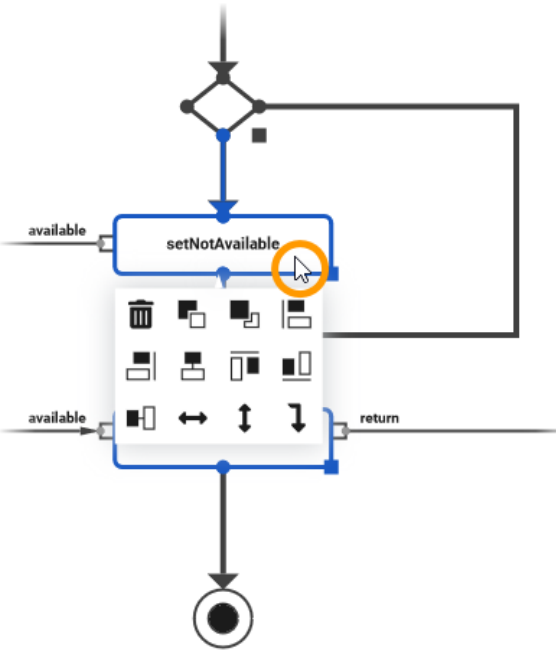


If you right click on an element, the tools context menu opens. Use it to edit the current element.










The following options are available (the options depend on the selected element):

Icon	Description
	<b>Delete</b> the element.
	Bring the element to the <b>front</b> .
	Send the element to the <b>background</b> .
	Align the element to the <b>grid</b> .
	Open the <b>implementation</b> of the element in a new tab.
	Jump to the element in the <b>Service</b> panel.

#### Extended Tools Context Menu

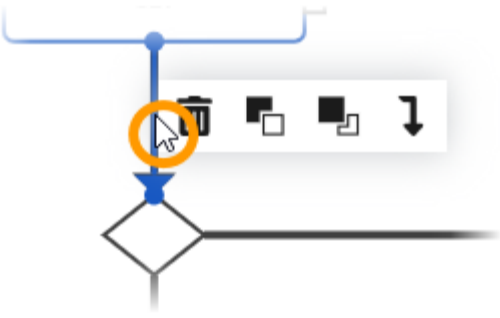


If you have selected more than one element on the pane, the tools context menu is enhanced with additional options. The available options depend on your selection on the diagram pane:





Icon	Description
	<b>Align left</b>
	<b>Align right</b>
	<b>Align center</b>
	<b>Align top</b>
	<b>Align bottom</b>
	<b>Align middle</b>
	<b>Distribute horizontally</b>
	<b>Distribute vertically</b>
	<b>Align relation</b>

✓ If you want to align a relation between two elements, mark the pin (s) to apply the corresponding alignment functionality.

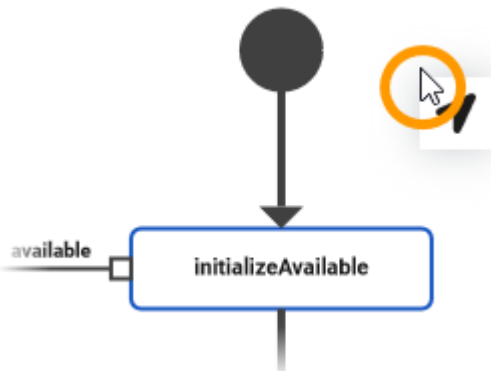
#### Control Flow Context Menu




Right-click a control flow to open the context menu. The following options are applicable to control flows:

Icon	Description
	<b>Delete</b> the relation.
	Bring the relation to the <b>front</b> .
	Send the relation to the <b>background</b> .
	<b>Align</b> the relation.

**Diagram Context Menu**



With a right-click on the diagram pane itself, you open the diagram context menu:

Icon	Description
	Jump to the related operation in the <b>Service</b> panel.

## Keyboard Shortcuts

Find below a list of all keyboard shortcuts that are available in the activity diagram editor.

Shortcut	Description
Arrow down	Moves the editor pane downwards.
Arrow up	Moves the editor pane upwards.
Ctrl + 1, 2, 3 ... 9	Switches to the Designer tab corresponding to the chosen number. This feature is available for the first nine open tabs.
Ctrl + D	Closes the active Designer tab.
Ctrl + Mouse Wheel	Zooms in (scrolling up) or out (scrolling down) of the current model.
Ctrl + Shift + D	Closes all tabs and switches to the service tab.
Del	Removes the selected element(s) from the diagram pane.
Esc	Aborts the following procedures: <ul style="list-style-type: none"> <li>• adding a new element</li> <li>• resizing an element</li> <li>• closing a dialog</li> <li>• drawing a control or object flow</li> <li>• changing the path of a control or object flow</li> </ul>
Mouse Wheel	Moves the diagram pane up or down.

<b>Shift + Page down</b>	Switches to the next Designer tab from left to right.
<b>Shift + Page up</b>	Switches to the next Designer tab from right to left.