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# How to draw a Activity Diagram in UML

[Activity diagram](#) is a kind of [UML diagram](#) that shows flow of control from activity to activity. It shows concurrency, branch, control flow and object flow. Furthermore, swimlane is used for partitioning actions based on the participants involved.

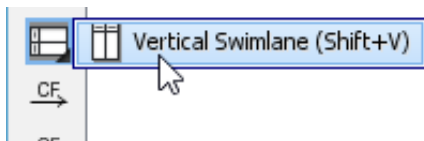
## Creating activity diagram

Perform the steps below to create a UML activity diagram in Visual Paradigm.

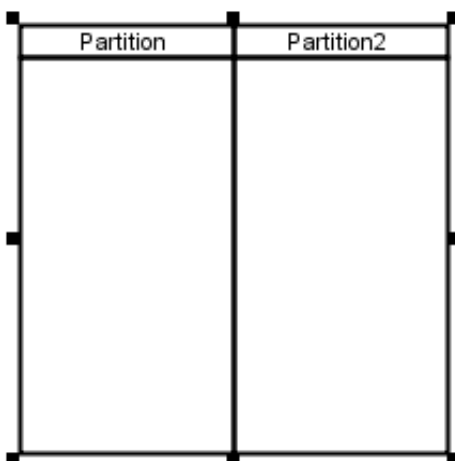
1. Select **Diagram > New** from the application toolbar.
2. In the **New Diagram** window, select **Activity Diagram**.
3. Click **Next**.
4. Enter the diagram name and description. The **Location** field enables you to select a model to store the diagram.
5. Click **OK**.

## Creating swimlane

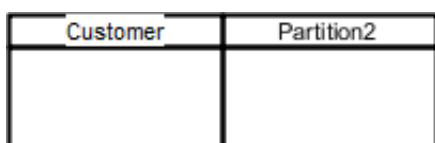
You can click either **Horizontal Swimlane** or **Vertical Swimlane** on the diagram toolbar.



Click on the diagram to create the swimlane.



Double-click the partition name to rename it.

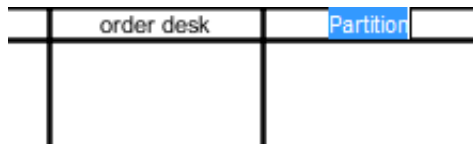
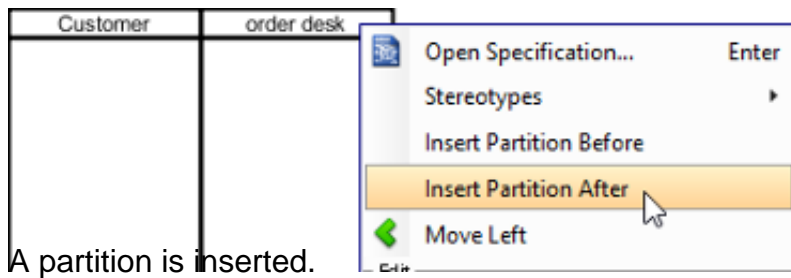


## Inserting partition to swimlane

To insert partition to swimlane, right-click on a partition and select either **Insert Partition**

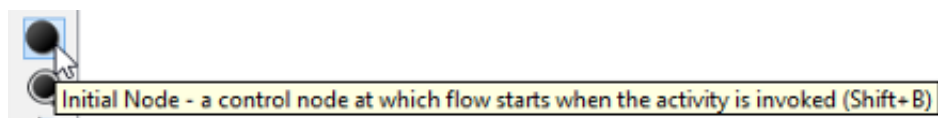
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**Before** or **Insert Partition After** from the pop-up menu.

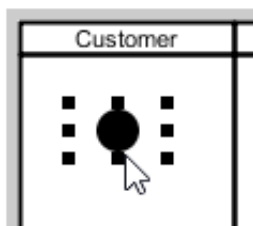


## Creating initial node

Click **Initial Node** on the diagram toolbar.

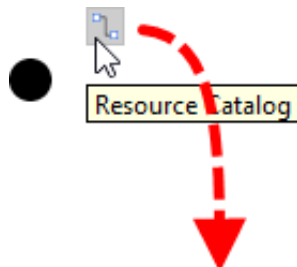


Click inside the partition to create the initial node there.

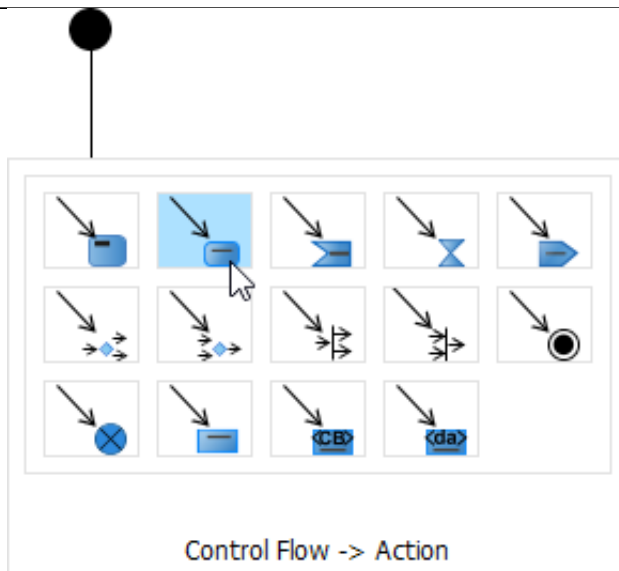


## Creating action

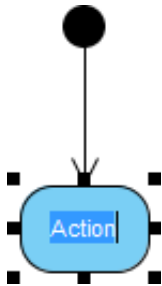
1. Move your mouse pointer over the source shape.
2. Press on the **Resource Catalog** button and drag it out.



3. Release the mouse button at the place where you want the action to be created.
4. Select **Control Flow** -> **Action** from Resource Catalog.



5. A new action will be created and is connected to the source shape with a control flow. Enter its name and press **Enter** to confirm editing.

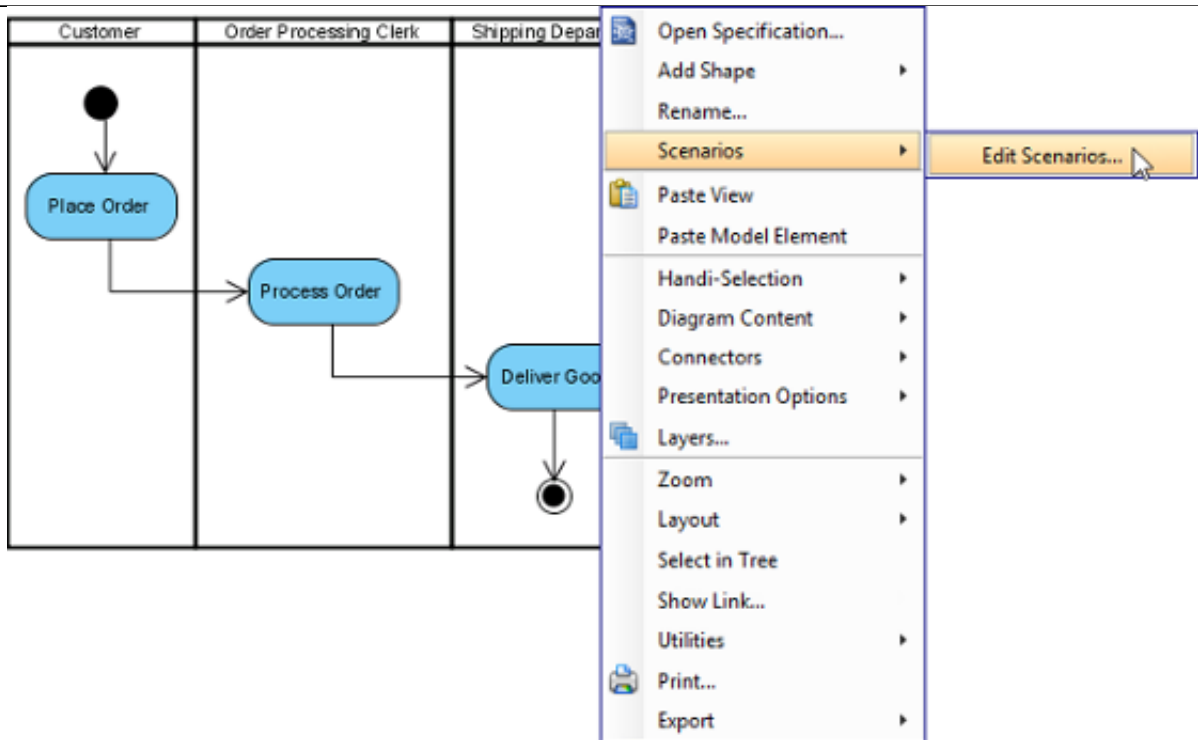


## Working with scenario

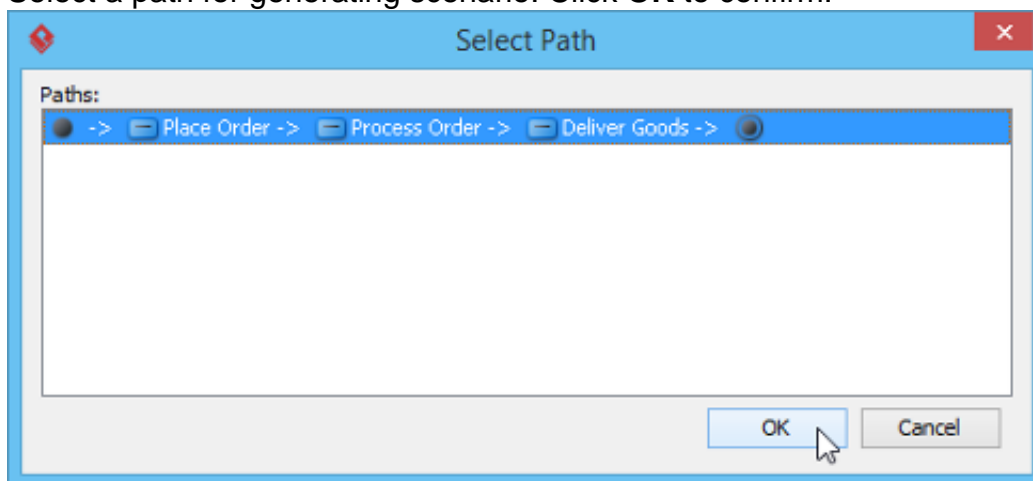
A scenario is a diagram formed by the internal interaction of a sequence of action, modeled by their sub-diagrams. With scenario, you can produce a diagram which presents an overview of an execution path in activity diagram, so as to know how user and system communicate with each other in order to complete the flow.

### Producing scenario from activity diagram

1. Right click on the activity diagram that contains the flows that you want to produce a scenario and select **Scenarios > Edit Scenarios...** from the popup menu.



2. In the **Edit Scenarios** window, click **Add...** button at the bottom left corner.
3. Select a path for generating scenario. Click **OK** to confirm.



**Note:** A path is a continuous flow of actions in the diagram, with an initial node placed at the beginning of the actions. Multiple paths are obtained by determining the existence of decision nodes within the flow.

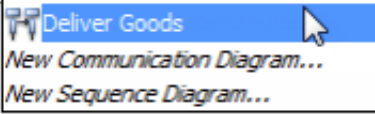
4. Name the scenario. Add description if necessary.

Name:	Order Processing Scenario
Description:	Interaction between customer, order processing clerk and shipping department for completing an order.
Path	
Model	Diagram
● <unnamed>	N/A
▢ Place Order	<Unspecified>
▢ Process Order	<Unspecified>
▢ Deliver Goods	<Unspecified>
● <unnamed>	N/A

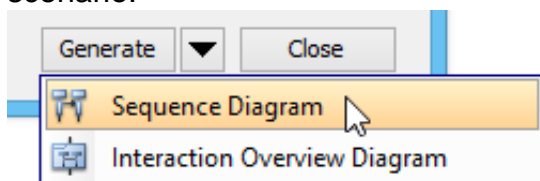
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5. The actions being involved in the flow are listed in the **Path** table. For actions that have sub-diagram(s), pick up the sub-diagram in **Diagram** column or just create a new one. You may, however, leave it unspecified which cause that action to be ignored when producing scenario.

Path

Model	Diagram
● <unnamed>	N/A
▢ Place Order	<Unspecified>
▢ Process Order	<Unspecified>
▢ Deliver Goods	<Unspecified>
● <unnamed>	<Unspecified>



6. Click on the arrow beside the **Generate** button and select the type of diagram of the scenario.



## Updating scenario

Whenever the sub-diagram(s) of action(s) are updated, you can update the scenario to make it represents the latest information of interaction. To update scenario, right click on the activity diagram that have scenario produced before, select **Scenarios**, then the name of scenario from the popup menu.