# How to Draw Component Diagram?

[Component diagram](https://www.visual-paradigm.com/features/uml-tool/#componentdiagram) is a kind of [UML diagram](https://www.visual-paradigm.com/features/uml-tool/). shows the physical aspect of an object-oriented software system. It illustrates the architectures of the software components and dependencies between them.

## Creating component diagram

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

1. Select **Diagram > New** from the application toolbar.
2. In the **New Diagram** window, select**Component 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 component

To create component in component diagram, click **Component** on the diagram toolbar and then click on the diagram.

|  |
| --- |
| Create component |
| *Create component* |

A component will be created.

|  |
| --- |
| Component created |
| *Component created* |

### Assigning stereotypes

Right click on the package and select **Stereotypes** > **Edit Stereotypes**... from the pop-up menu.

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| --- |
| Assign stereotypes |
| *Assign stereotypes* |

When the **Component Specification** window is opened, with the **Stereotypes** tab selected. The list on the left shows the selectable stereotypes.

If the stereotype you want to use is not on the list, click **Edit Stereotypes...** button.

|  |
| --- |
| Edit stereotypes |
| *Edit stereotypes* |

Click **Add...** button in the **Configure Stereotypes** window.

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| --- |
| Add stereotype |
| *Add stereotype* |

Name the stereotype (e.g. application) in the **Stereotype Specification** window and then click **OK** button to close it. Click **OK** button in the **Configure Stereotypes** window. The added stereotype will then be shown on the list in the **Component Specification** window. Select it and click **Add Selected** button. Finally, click **OK** button to confirm.

|  |
| --- |
| Add selected stereotypes |
| *Add selected stereotypes* |

Close the specification window. Stereotypes will be applied to the package.

|  |
| --- |
| Stereotypes assigned |
| *Stereotypes assigned* |

## Creating provided interface

To create provided interface for a component:

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

|  |
| --- |
| Using Resource Catalog |
| *Using Resource Catalog* |

1. Release the mouse button at the place where you want the interface to be created.
2. Select **Realization** -> **Interface** from Resource Catalog.

|  |
| --- |
| To create a provided interface |
| *To create a provided interface* |

1. A new interface will be created and is connected to the source component. Enter its name and press **Enter** to confirm editing.

|  |
| --- |
| Interface created |
| *Interface created* |

## Creating required interface

To create required interface for a component, just follow the steps described above for creating provided interface, but change to select **Usage**-> **Interface** in Resource Catalog.

|  |
| --- |
| Create required interface |
| *Create required interface* |

## Creating dependency

To create dependency, click **Dependency**on the diagram toolbar.

|  |
| --- |
| https://images.visual-paradigm.com/docs/vp_user_guide/11/94/2581/335/create_dependency_25156.png |
| *Create dependency* |

Drag from the source shape, move the mouse over the target shape and then release the mouse button to create the dependency.

|  |
| --- |
| Dependency created |
| *Dependency created* |

Continue to complete the diagram

|  |
| --- |
| https://images.visual-paradigm.com/docs/vp_user_guide/11/94/2581/335/completed_diagram_25157.png |
| *Completed diagram* |

# How to Draw Deployment Diagram?

[Deployment diagram](https://www.visual-paradigm.com/features/uml-tool/#deployment-diagram) is a kind of [UML diagram](https://www.visual-paradigm.com/features/uml-tool/) that shows the physical aspects of an object-oriented system. It also shows the configuration of run time processing nodes and artifacts.

## Creating deployment diagram

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

1. Select **Diagram > New** from the application toolbar.
2. In the **New Diagram** window, select**Deployment 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 node

To create node in deployment diagram, click **Node**on the diagram toolbar and then click on the diagram.

|  |
| --- |
| Node selected |
| *Node selected* |

## Creating instance of node

To create instance of node, click **Instance Specification** on the diagram toolbar and then click on the diagram.

|  |
| --- |
| Create instance specification |
| *Create instance specification* |

An instance specification will be created.

|  |
| --- |
| Instance specification created |
| *Instance specification created* |

### Selecting classifiers

To specify classifiers for an instance specification, right-click it and select **Select Classifier** > **Select Classifier...** from the pop-up menu.

|  |
| --- |
| Select classifier |
| *Select classifier* |

When the **Instance Specification Specification** window pops out, the **Classifiers** tab is opened by default. Click **Add...**. Then, select the classifier(s) in the popup window and click **OK**.

|  |
| --- |
| Select node |
| *Select node* |

Click **OK** button to close the specification window. The selected classifiers are assigned to the instance specification.

|  |
| --- |
| Classifiers assigned |
| *Classifiers assigned* |

## Creating link

To create link from instance specification:

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

|  |
| --- |
| https://images.visual-paradigm.com/docs/vp_user_guide/11/94/2582/336/create_instance_spec_26871.png |
| *Using Resource Catalog* |

1. Release the mouse button at the place where you want the instance specification to be created.
2. Select **Link -> Instance Specification** from Resource Catalog.

|  |
| --- |
| To create an instance specification |
| *To create an instance specification* |

1. A new instance specification will be created and is connected to the source shape. Enter its name and press **Enter** to confirm editing.

|  |
| --- |
| Instance Specification created |
| *Instance specification created* |

## Creating instance of component

Similar to creating instance of node, you first create a component model element and then create an instance specification. However, this time assigns a component to the instance specification as classifier. After that the instance specification will be displayed as a component.

|  |
| --- |
| Instance of component |
| *Instance of component* |

## Creating dependency

To create dependency, click **Dependency** on the diagram toolbar.

|  |
| --- |
| Create dependency |
| *Create dependency* |

Drag from the source shape, move the mouse over the target shape and then release the mouse button to create the dependency.

|  |
| --- |
| Dependency created |
| *Dependency created* |

Continue to complete the diagram.

|  |
| --- |
| Completed diagram |
| *Completed diagram* |