What is Deployment Diagram

A deployment diagram is a UML diagram type that shows the execution architecture of a system, including nodes such as hardware or software execution environments, and the middleware connecting them.

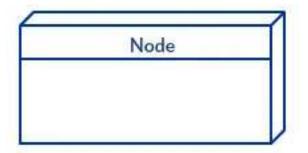
Deployment diagrams are typically used to visualize the physical hardware and software of a system. Using it you can understand how the system will be physically deployed on the hardware.

Deployment diagrams help model the hardware topology of a system compared to other UML diagram types which mostly outline the logical components of a system.

Deployment Diagram Notations

In order to draw a deployment diagram, you need to first become familiar with the following deployment diagram notations and deployment diagram elements.

Nodes



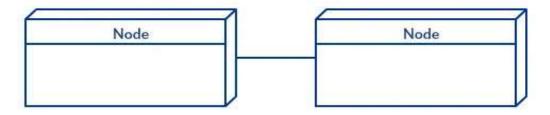
Deployment Diagram Node

A node, represented as a cube, is a physical entity that executes one or more components, subsystems or executables. A node could be a hardware or software element.

Artifacts

Artifacts are concrete elements that are caused by a development process. Examples of artifacts are libraries, archives, configuration files, executable files etc.

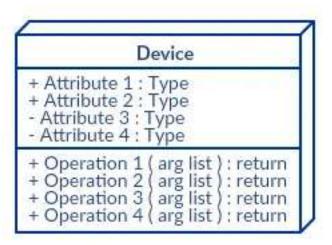
Communication Association



Deployment Diagram Communication Path

This is represented by a solid line between two nodes. It shows the path of communication between nodes.

Devices



Deployment Diagram Devices

A device is a node that is used to represent a physical computational resource in a system. An example of a device is an application server.

Deployment Specifications



Deployment Diagram Specifications

Deployment specifications is a configuration file, such as a text file or an XML document. It describes how an artifact is deployed on a node.

How to Draw a Deployment Diagram

Follow the simple steps below to draw a deployment diagram.

- **Step 1:** Identify the purpose of your deployment diagram. And to do so, you need to identify the nodes and devices within the system you'll be visualizing with the diagram.
- **Step 2:** Figure out the relationships between the nodes and devices. Once you know how they are connected, proceed to add the communication associations to the diagram.
- **Step 3:** Identify what other elements like components, active objects you need to add to complete the diagram.
- Step 4: Add dependencies between components and objects as required.

Deployment Diagram Examples

Deployment Diagram for Online Shopping System

Online Shopping Deployment Diagram

