Deployment Diagram is a type of diagram that specifies the physical hardware on which the software system will execute. It also determines how the software is deployed on the underlying hardware. It maps software pieces of a system to the device that are going to execute it.

The deployment diagram maps the software architecture created in design to the physical system architecture that executes it. In distributed systems, it models the distribution of the software across the physical nodes.

Purpose of a deployment diagram

Deployment diagrams are used with the sole purpose of describing how software is deployed into the hardware system. It visualizes how software interacts with the hardware to execute the complete functionality. It is used to describe software to hardware interaction and vice versa. You can use them to:

- Show which software elements are deployed by which hardware elements.
- Illustrate the runtime processing for hardware.
- Provide a view of the hardware system's topology.

Deployment diagram elements

- **Artifact:** A product developed by the software, symbolized by a rectangle with the name and the word "artifact" enclosed by double arrows.


- **Association**: A line that indicates a message or other type of communication between nodes.

- **Component:** A rectangle with two tabs that indicates a software element.
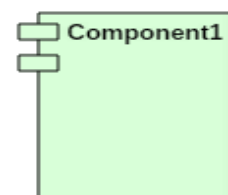
- **Dependency:** A dashed line that ends in an arrow, which indicates that one node or component is dependent on another.

- **Interface:** A circle that indicates a contractual relationship. Those objects that realize the interface must complete some sort of obligation.
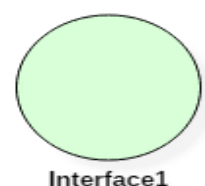
- **Node:** A hardware or software object, shown by a three-dimensional box.
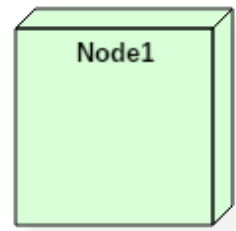
- **Node as container:** A node that contains another node inside of it—such as in the example below, where the nodes contain components.
- **Stereotype:** A device contained within the node, presented at the top of the node, with the name bracketed by double arrows.