

Component diagram

Overview

A Component diagram falls under the structural diagramming family. A Component diagram represents pieces of software in the implementation environment in terms of code components.

A [Component](#) contains information about the logical [Class](#) or Classes that it implements, thus creating a mapping from a logical view to a component view. Dependencies between the Components make it easy to analyze how a change in one component affects the others. The Components may also be shown with any of the [Interfaces](#) that they expose. They, as with almost any other model elements, can be grouped into [Packages](#), much like Classes or [Use Cases](#).

Purpose

A Component diagram models the implementation view. It is used in the later phases of the software development when there is a need to divide up Classes among different Components. When working with the CASE facilities, the Components are used for file-class mapping during code generation, reverse engineering, and round-trip engineering operations.

Usage

A Component diagram can be used to:

- analyze system components and how they relate
- analyze system's physical structure
- understand the exact service behavior provided by software.

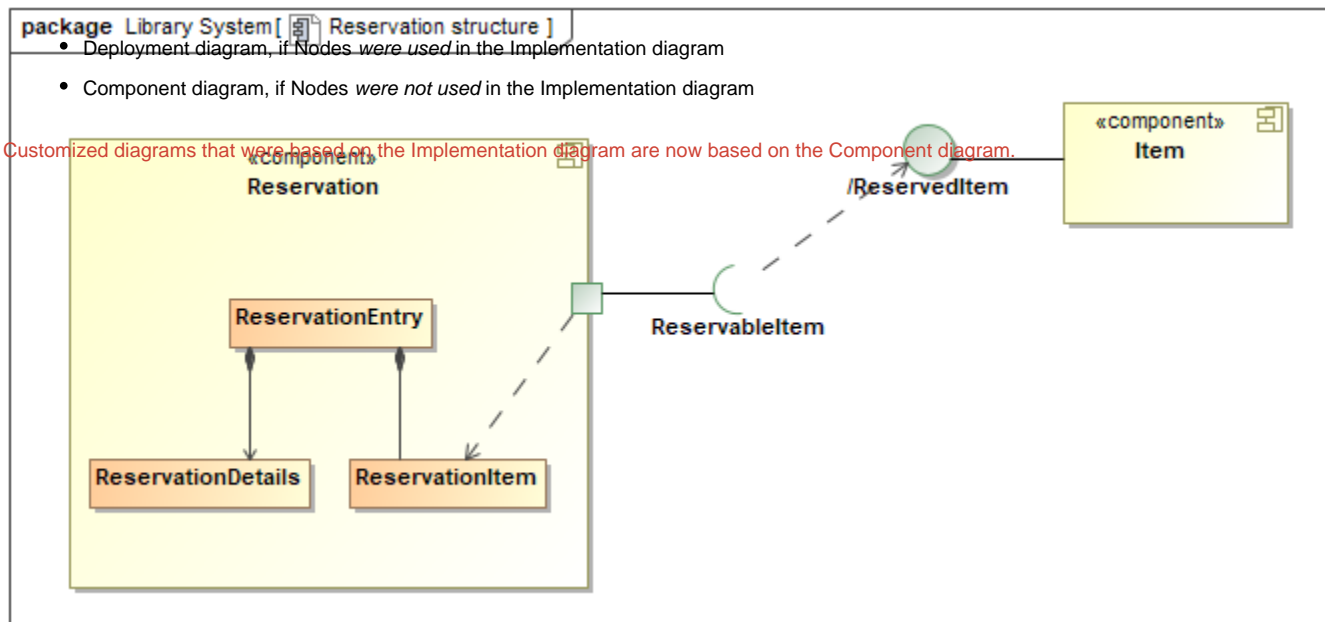
Summary

Component diagrams are valuable because they:

- reveal possible software configuration issues
- provide an accurate picture of existing systems prior to making changes/enhancements
- model the real software in the implementation environment
- help to reveal bottlenecks in an implementation.



As of MagicDraw 17.0.1, the Component diagram (or the [Deployment diagram](#)) replaces the Implementation diagram, which is no longer supported in UML standard. An Implementation diagram created with earlier versions of MagicDraw, now opens as



Example of a Component diagram

Related pages

- [Creating diagrams](#)