## Composite Structure diagram

## Overview

A Composite Structure diagram falls under the structural diagramming family. The Composite Structure diagram allows a decomposition and modeling of the internal structure of the classifiers, such as classes, components, nodes, and other elements that are able to own other elements.

## Purpose

A Composite Structure diagram can be used to visually represent the parts of a class, component, or collaboration, including the interaction points (called ports) that are used to access features of the structure. Additionally, Composite Structure diagrams model collaborations that describe behavior, resources used to perform the behavior, and the roles the participating resources take during the behavior.

## Usage

Composite Structure diagram can be used to:

- analyze an object to see exactly what it is composed of
- detail internal actions of a class, including the relationships of nested classes
- show objects that need to be defined as a composition of other classified objects.


## Summary

Composite Structure diagrams are valuable because they:

- show complex components design
- show components interfaces separately from their structures
- describe the roles played by elements in the structure.


Example of a Composite Structure diagram.

## Related pages

- Creating diagrams
- Composite Structure Diagram context
- Nesting parts that are association ends
- Mapping ports on a Part type change
- Creating nested parts by pasting items from the list

