Provided and Required Interfaces in the Composite Structure diagram

Information about provided and required interfaces is crucial in the assembly stage of complex internal structures. It helps to decide where connectors should be attached. Provided and required interfaces are valuable parts of the UML Composite Structure Diagram and SysML Internal Block Diagram.

A provided interface is shown using the "lollipop" notation attached to the port, and a required interface is shown using the "fork" notation attached to the port (see the following figure).

In the Composite Structure diagram, you cannot draw provided and required interfaces themselves, but, with the new functionality of MagicDraw, you can display a preexisting port with the required and provided interfaces as images.

Lollipop and fork symbols in the Composite Structure diagram are implemented as small attachments to a Port symbol similar to name a label. It is not the same as the independent stand alone notation of the interface, it is only part of the port symbol. It is important for Composite Structure diagrams in which real Interfaces (as Classifiers) cannot be used. It is an optional notation as a port does not display provided or required interfaces by default.

To display provided-required interfaces in the Composite Structure diagram

1. Select the port shape that has the provided-required interfaces you want to display.
2. Do one of the following:
   - From the port shortcut menu, select Display > Display Provided/Required Interfaces.
   - On the diagram toolbar, click and select Display Provided/Required Interfaces.

Ports can provide or require many interfaces, therefore, you can choose which ones to display or hide. Use the Edit Compartment dialog to manage the visibility of these interfaces.