Understanding cell content

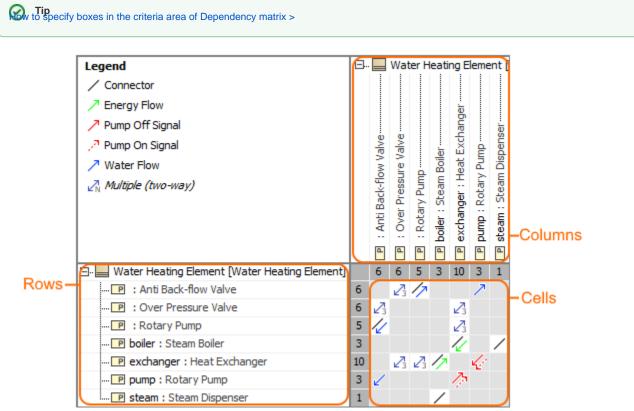
This page explains the content of the cell in the Dependency matrix. The following sections describe the Dependency matrix areas and cell content:

- Rows, columns, and cells in the Dependency matrix
- Representation of the dependencies in a cell
- Numbers in the Dependency matrix
- The details of a cell

Rows, columns, and cells in the Dependency matrix

The Dependency matrix contains the following areas:

- Rows display elements specified in the Row Element Type box and Row Scope box of the criteria area.
- Columns display elements specified in the Column Element Type box and Column Scope box of the criteria area.
- Cells display dependencies between elements specified in the rows and columns. The content of the cells depends on selected criteria in the Dep endency Criteria box and the Direction box of the criteria area.



The main areas of the Dependency matrix. The illustration displays concepts from the SysML Plugin.

Representation of the dependencies in a cell

The default representation of the dependencies in the cells includes the following:

• Arrowed diagonal. The direction of the arrow is from the client element to the supplier element.

Arrowed diagonal representation the representation of the arrowed diagonal is different when the same elements are connected through:

- **Diagonar**perentients depend on each other.
 - Two dependencies, e.g., 🥕 and 🦉.

🐼 carrspecify the colors and line styles used to represent the relationships in your dependency matrices. How to specify relationship line styles >



Numbers in the Dependency matrix

There are three types of numbers directly in the matrix (see the following figure):

- 1. The number of dependencies in the row.
- The number of dependencies in the column.
 The number of criteria in the cell.

| Legend | ⊡ | | Wat | ter H | leati | ng E | leme | nt [| |
|---|----|----------------------|---------------------|-------------|-----------------------|----------------------------|--------------------|-----------------|----|
| / Connector | | | | | | | | | |
| | | | | | | G | | | |
| ↗ Pump Off Signal | | | | | | ang | | er, | |
| 🥕 Pump On Signal | | alve | alve | | - | Xch | þ | ens | |
| ✓ Water Flow | | N N | le (| | Boile | eat [| Pun | Steam Dispenser | |
| Multiple (two-way) | | ÷ | nssa | Ţ | am | Ĩ | ary | eam | |
| | | Anti Back-flow Valve | Over Pressure Valve | Rotary Pump | boiler : Steam Boiler | exchanger : Heat Exchanger | pump : Rotary Pump | ਲੋਂ : | |
| | | Anti | Ove | Rota | <u>e</u> | chai | Ē | steam : | |
| | | | - | | _ | e E | E B | | |
| Water Heating Element [Water Heating Element] | - | 6 | 6 | <u>م</u> | <u>۵</u> | | | 1 | 2 |
| | | 0 | | | 3 | (10) | 5 | + | 2. |
| P : Anti Back-flow Valve | 6 | | ⊿3 | 17 | | | 1 | | |
| P : Over Pressure Valve | 6 | 23 | | | | 23 | | | |
| Rotary Pump | 5 | 1 | | | | 3 | | | 3. |
| boiler : Steam Boiler | 3 | | | | | 1 | | / | |
| exchanger : Heat Exchanger | 10 | | \mathbb{Z}_3 | 23 | 17 | | 4 | | |
| pump : Rotary Pump | 3 | 2 | | | | 17 | | | |
| P steam : Steam Dispenser | 4 | | | | / | | | | |
| - | | | | | | | | | |
| | 4 | | | | | | | | |

The details of a cell

Move your mouse over a cell to view details of the dependency (relationship) represented in the cell. The ToolTip displays information about the relationships.

| Legend | Ð | · 📃 | Wat | er H | eati | ng El | leme | ent [| | |
|---|-----|--|-------------------|---------------|--------------------------|-------------------------------|--------------------|---------------------------|--------------------|--|
| / Connector | | | | | | | | | | |
| | | | | | | ā | | | | |
| ↗ Pump Off Signal | | | | | | ang | | 5 | | |
| ² Pump On Signal | | alve | Valve | | _ | -fy | <u>_</u> | Sug | | |
| ✓ Water Flow | | N V | | | Boile | atE | Pum | Sig | | |
| Multiple (two-way) | | A I Anti Back-flow Valve. | P : Over Pressure | - Rotary Pump | P boiler : Steam Boiler- | 5 P exchanger : Heat Exchange | Pump : Rotary Pump | P steam : Steam Dispenser | | |
| Water Heating Element [Water Heating Element] | | 6 | 6 | 5 | 3 | 10 | 3 | 1 | | |
| Anti Back-flow Valve | 6 | 7 | ₹3 | 17 | | 7 | ~ | | | |
| | 6 | R | | | | 23 | | | | |
| P : Rotary Pump | 5 | 100 | | | | \mathbb{Z}_3 | | | | |
| P boiler : Steam Boiler | 3 | 3 Connector between : Over Pressure Valve and : Anti Back-flow Valve | | | | | | | | |
| exchanger : Heat Exchanger | 10 | | | | | | | | | |
| P pump : Rotary Pump | 3 2 | | | | | | | | | |
| P steam : Steam Dispenser | 1 | D | oub | le c | lick | in o | rde | r to i | remove a relation. | |

The ToolTip displays information about existing relations between Over Pressure Valve and Anto Black-flow Valve Blocks. The illustration displays concepts from SysML Plugin.

Related pages

- Creating Dependency Matrix
 Using Dependency Matrix
 Dependency Matrix environment

The model used in the figures of this page is the **dependencyMatrixSa mple** model. Download dependencyMatrixSample.mdzip.