

# Displaying row elements hierarchically

Hierarchical tables are very useful for managing and reviewing data. Hierarchy in a table is a tree-like structure where all the rows are listed according to the elements containment.


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**Important**

The hierarchy in the [Instance table](#) is displayed according to an instance value that is a slot value of another Instance Specification. Composite instances are displayed.









## Displaying elements hierarchically in a table

To display elements hierarchically

- 
1. In the table toolbar, click .
  2. Under the **Display Mode** option choose:
    - **Complete tree** to display row elements in a hierarchy where all the owners are represented in separate rows.

| #  | Name   |
|----|--|
| 1  |  Parts          |
| 2  |  SUV parts      |
| 3  |  Main structure |
| 4  |  Brake          |
| 5  |  Caliper        |
| 6  |  Engine         |
| 7  |  Transmission   |
| 8  |  System         |
| 9  |  Pad          |
| 10 |  Wheel        |


- **Compact tree** to display row elements in a hierarchy where the common owners are grouped together in a separate row.

| # | Name  |
|---|---|
| 1 |  Main structure [Parts::SUV parts] |
| 2 |  Brake                             |
| 3 |  Caliper                           |
| 4 |  Engine                            |
| 5 |  Transmission                      |
| 6 |  System                            |
| 7 |  Pad                               |
| 8 |  Wheel                             |

The hierarchy is created in the table by listing all the elements as they are shown in the Containment tree.


## Displaying row elements in a custom hierarchy

To display elements in a custom hierarchy

1. In the **Criteria** area, next to the **Scope** box, click the  icon.


Scope (optional):

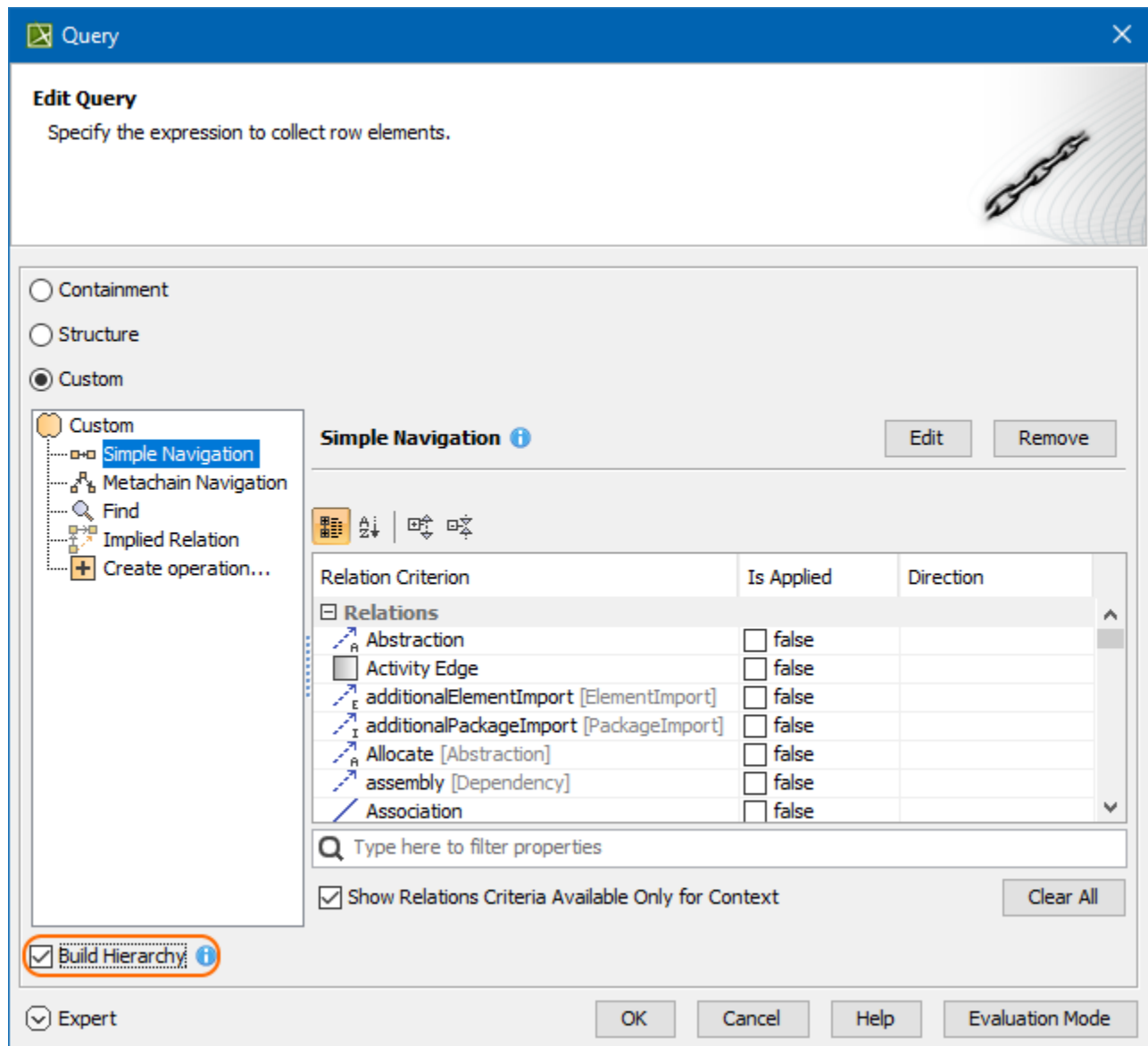
Drag elements from the Model Browser



...

Specify Query (optional)
2. Specify the expression to collect table elements:
  - Select **Containment** to display the decomposition of elements related through the Containment relationship.
  - Select **Structure** to display the decomposition of Part Properties related through the Composition relationship.
  - Select **Custom** to display the decomposition of elements related through any criteria of your choice.



 If you have selected Custom, please [specify the expression](#).







Specifying expression in the Query dialog

## Expanding/collapsing nodes in a hierarchical table

To expand/collapse nodes in a hierarchical table

- Click  /  in the name column.

|    |   |  |
|----|---|--|
| 5  |   SR.1.6 Distance | Requirements of distances on different modes   |
| 9  |  SR.1.7 Adaptive Cruise Control  | The Adaptive Cruise Control (ACC) shall control acceleration and braking of the vehicle. ACC shall detect traffic slowing ahead and automatically reduce speed to match. |
| 10 |  SR.1.1 Vehicle Mass   | The total vehicle mass shall not exceed 1500 Kg.   |

- Select the specific row, hold Ctrl, and then press the right/left arrow key on the keyboard.