# Predefined Relation Maps

You can use all predefined relation maps to represent the traceability of system requirements and design elements. The main purpose of relation maps is to review and analyze relations among the elements and create new elements directly in the relation map. It is a special kind of diagram that automatically updates and renders an element's dependency tree according to predefined dependency criteria. You can create five kinds of predefined relation maps:

- Activity Decomposition Map.
- Structure Decomposition Map.
- Instance Map.
- Requirement Containment Map.
- Requirement Derivation Map.

> You can create predefined relation maps only if you have the SysML Plugin installed. How to install SysML Plugin >>

The different purposes for each relation map are illustrated below:
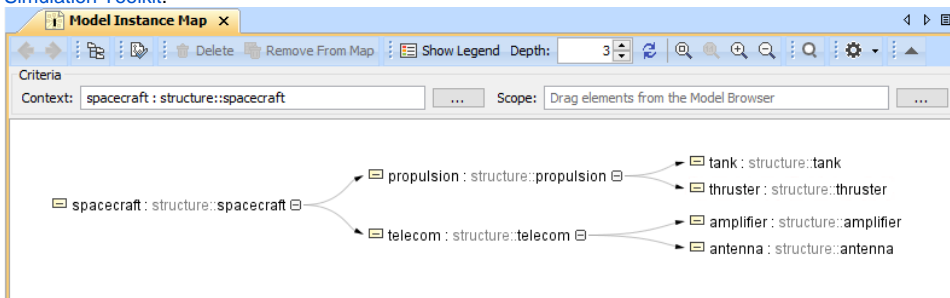
- **Activity Decomposition Map** displays an Activity decomposition of the selected context. You can review, analyze, and decompose the Activities. The example below is created by using the distiller model.mdzip sample model that only comes with SysML Plugin.
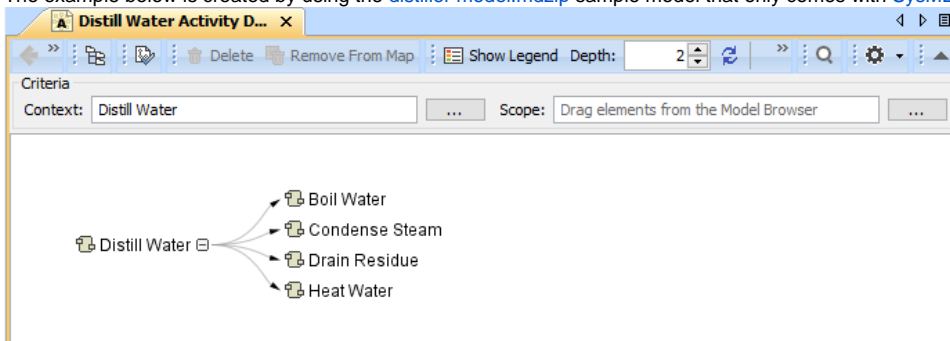
- **Structure Decomposition Map** displays the decomposition of the Part Properties related through the Composition relationship of the specified context. You can review, analyze, and decompose the Part Properties. The example below is created by using the VehicleStructure.mdzip sample model that only comes with Cameo Simulation Toolkit.
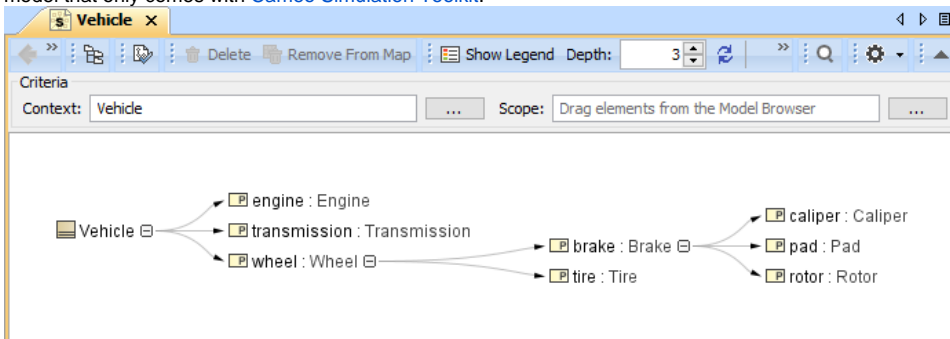

- **Instance Map** displays a hierarchy of the Instance Specifications of the selected context. You can review and analyze the hierarchy of Instance Specifications. The example below is created by using the SpacecraftMassRollup_HTMLTable.mdzip sample model that only comes with Cameo Simulation Toolkit.


- **Requirement Containment Map** displays the decomposition of the Requirements related through the Containment relationship of the specified context. You can review, analyze, and decompose the Requirements. The example below is created by using the hybrid sport utility vehicle.mdzip

sample model that only comes with the SysML Plugin.
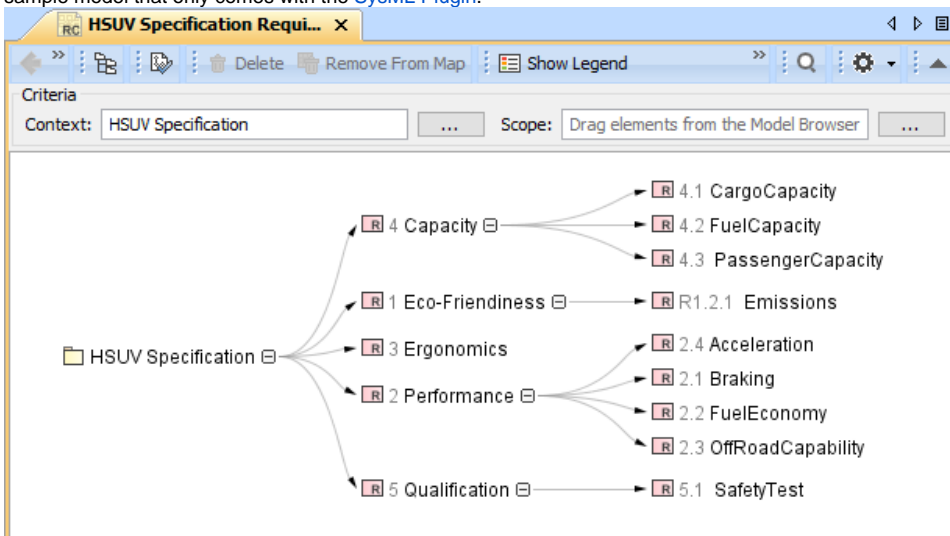
- **Requirement Derivation Map** displays the decomposition of Requirements that are related trough the Derive relationship. You can review, analyze, and create Derive relationships among the Requirements. The example below is created by using the hybrid sport utility vehicle.mdzip sample model that only comes with the SysML Plugin.
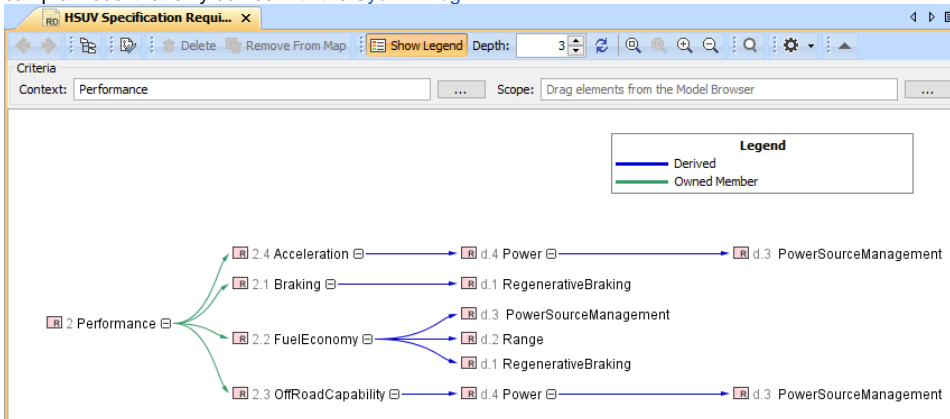
⚠️ **Additional relation map**
You can also create a Relation Map Diagram if you want a rapid review, analysis, and creation of relationships among the elements of the entire model.

Lean more about Relation Map Diagram >>

The following procedures explain how to work with relation maps.

- Creating relation map
- Specifying criteria, layout, and depth
- Changing the context
- Cutting element names
- Showing single node per element
- Displaying element numbering
- Specifying colors and legend
- Manipulations in the relation map

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