Generating an HTML table from a UI table, Time series chart, and CSV export configuration

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Generating an HTML table from a UI table

This feature of Cameo Simulation Toolkit enables you to export MagicDraw HTML tables in UI modeling diagrams to HTML5, allowing them to be viewed in a web browser. The sample model used on this page, SpacecraftMassRollup, demonstrates how to create a User Interface table in the User Interface Modeling diagram, generate HTML, run the simulation, and view the UI table in HTML5 in your web browser. You can download SpacecraftMassRollup at the end of this page.
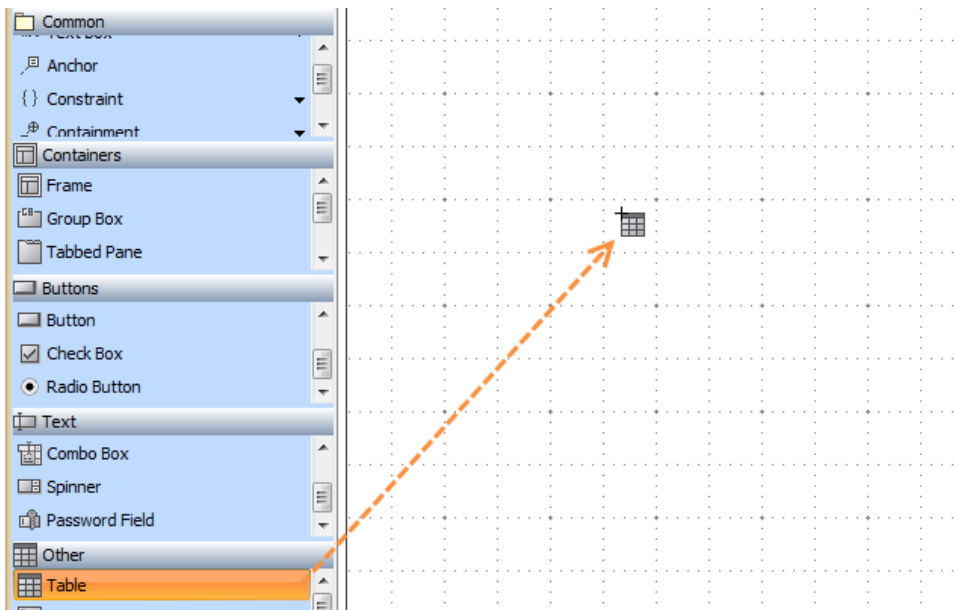
To generate an HTML table from a UI table component

1. Open SpacecraftMassRollup from the MagicDraw installation file: *folder\samples\simulation*.
2. Right-click the Model element in the containment tree. Select **Create Diagram** > **Other Diagrams** > **User Interface Modeling Diagram**.
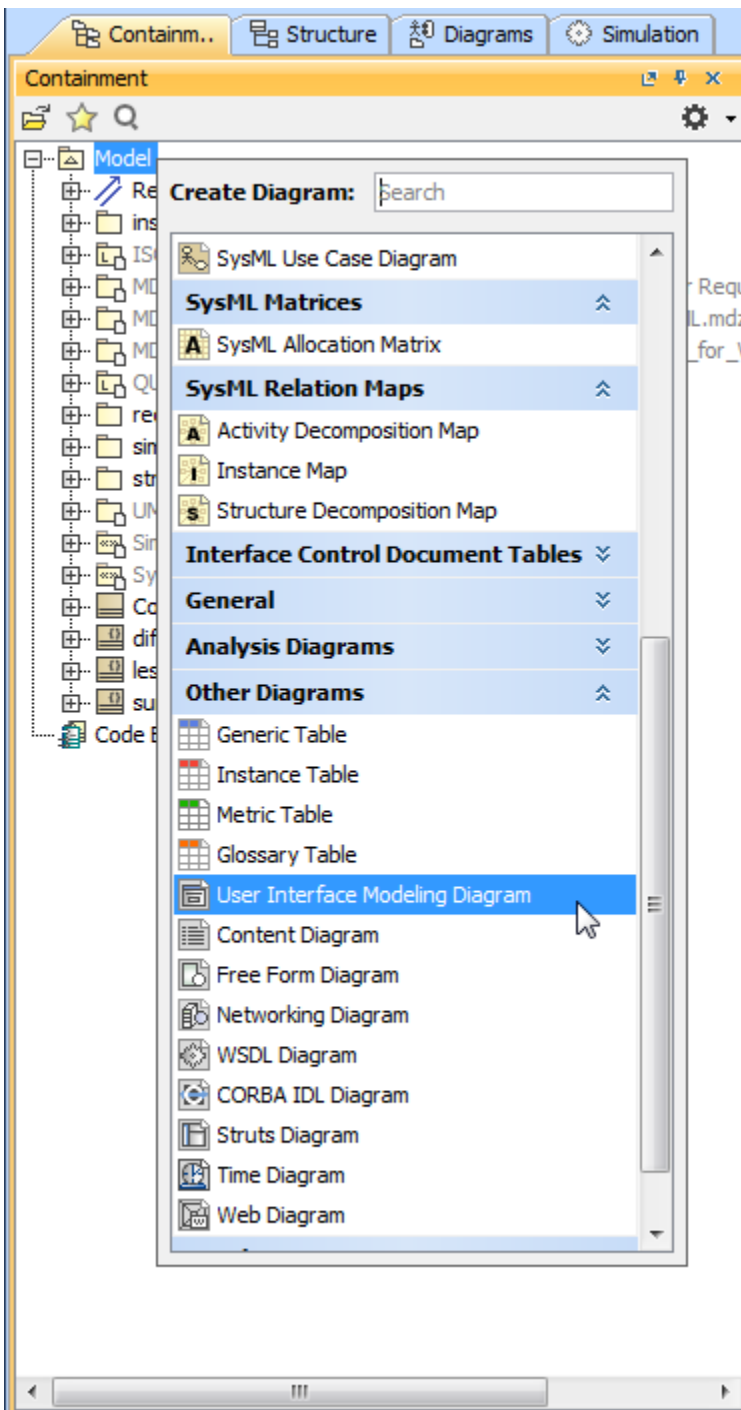
**3.** Drag a UI table component onto the newly created diagram.

4. Drag the **spacecraft** Block from the **Structure** Package in the Containment tree to the table.
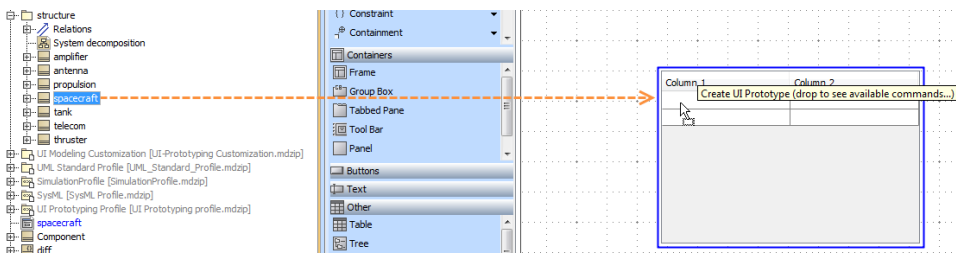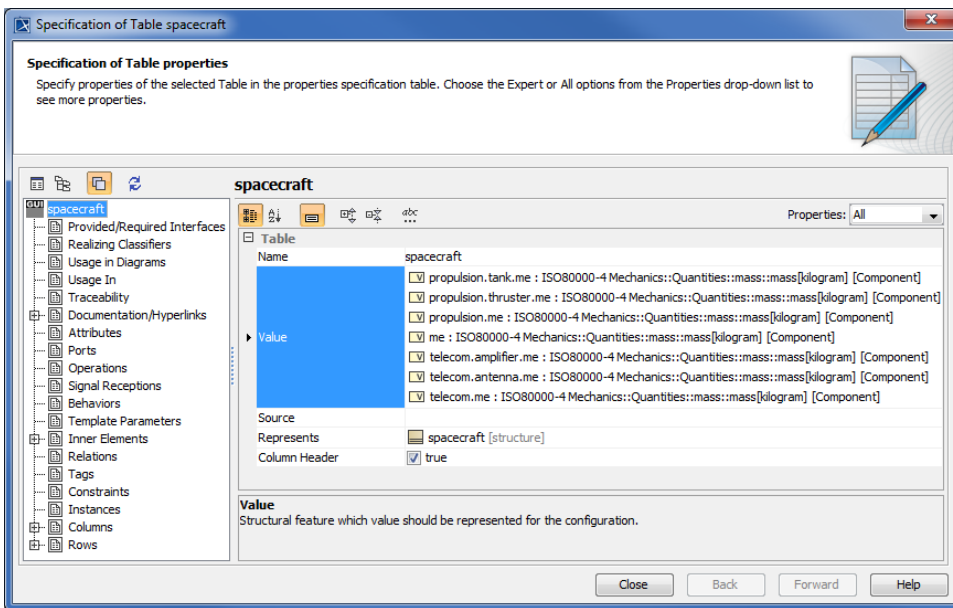

5. Select **Create UI Prototype**. The table headers will change from **Column 1** and **Column 2** to **Name** and **Value**.

> **Tip**
> If you drag the **spacecraft** Block to the table quickly, the column name will change automatically, without having to select **Create UI Prototype**.
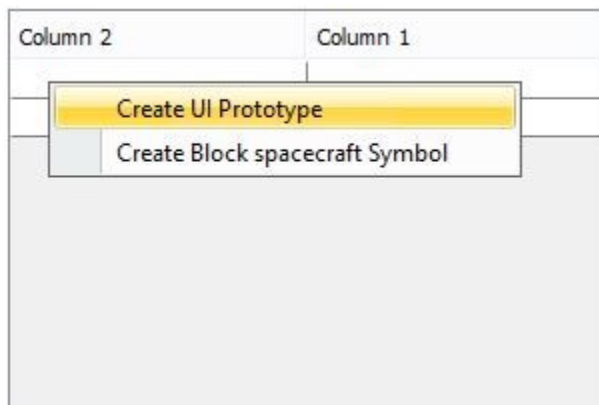

Selecting the **Create UI Prototype** menu that appears after dragging the spacecraft Block to the table.

Name	Value

When you select the **Create UI Prototype**, the table column names change to Name and Value.

6. Right-click the UI table. Select **Specification** to bring up its Specification window as shown below. Note that the Classifier is assigned to the **Represents** property.

7. Click beside the **Value** property and select the values you want to monitor from the tree view in the **Select Nested Properties** dialog.

8. Click . The selected values will appear in the **Value** property in the UI table Specification window.
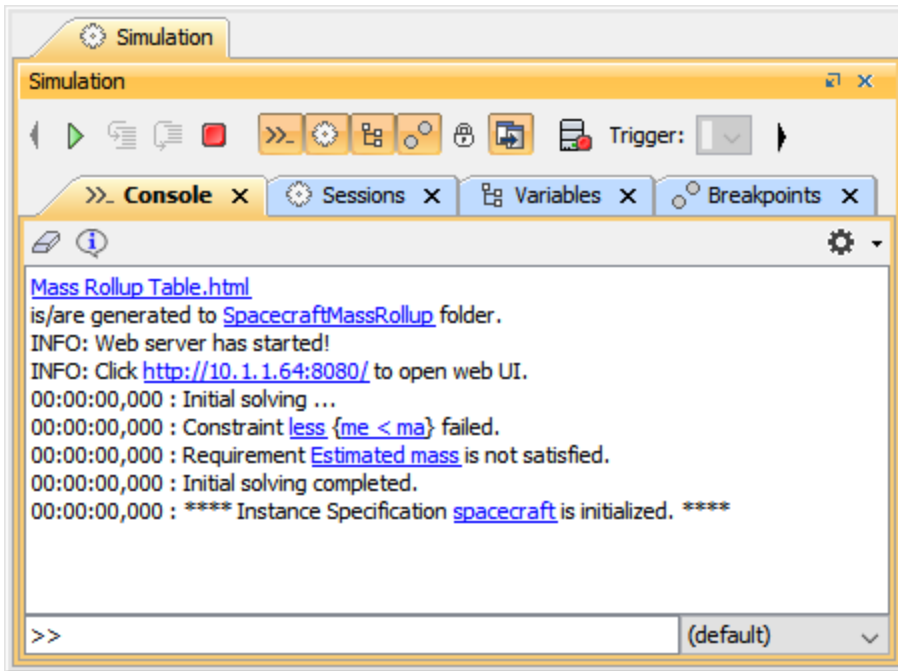
9. Close the Specification window.
10. Run the *spacecraft mass analysis* Simulation Configuration. The Console messages will appear.
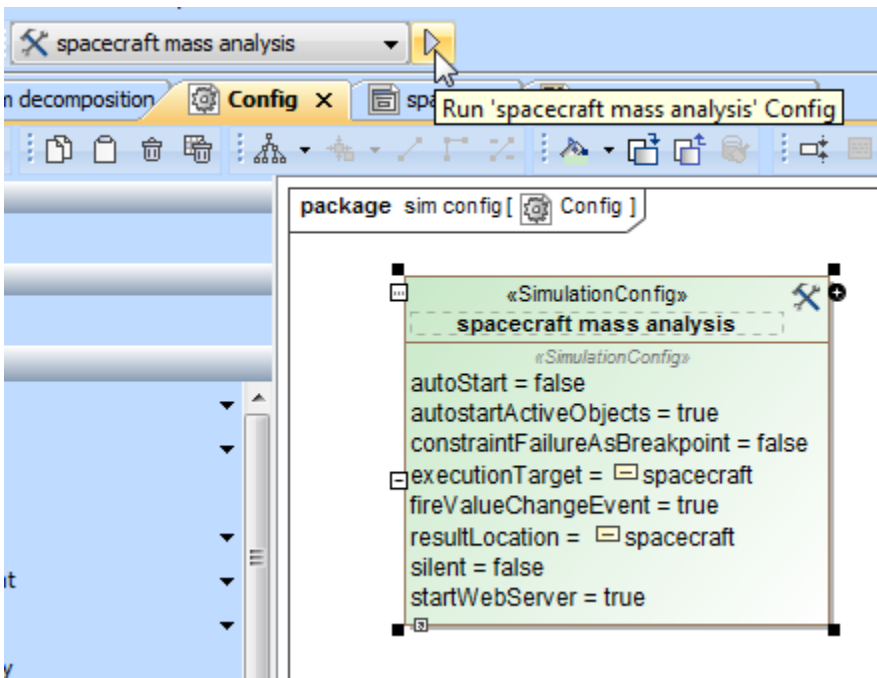
Running the spacecraft mass analysis Simulation Configuration.

The Console messages appearing in the Simulation Console with the filter Options set to Warn.

11. Note that a simulation web server has started. You can open the Specification window of Simulation Configuration to see the **Start Web Server** (true) option.
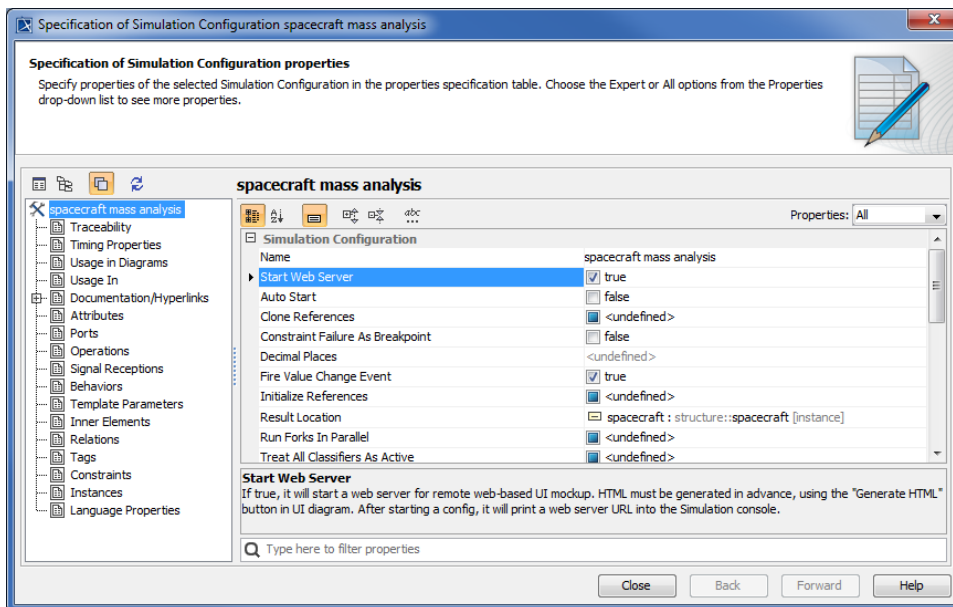

12. Click the HTTP link, e.g., http://10.1.1.64:8080/ in the **Console** pane to view the simulation in real-time in your browser.

> ⚠ **Note**
> The preferred browser is **Google Chrome**.

13. You can edit the **Documentation/Hyperlink** tag from the UI table's Specification window and run the simulation again. It will show the table's descriptions. See the following two figures
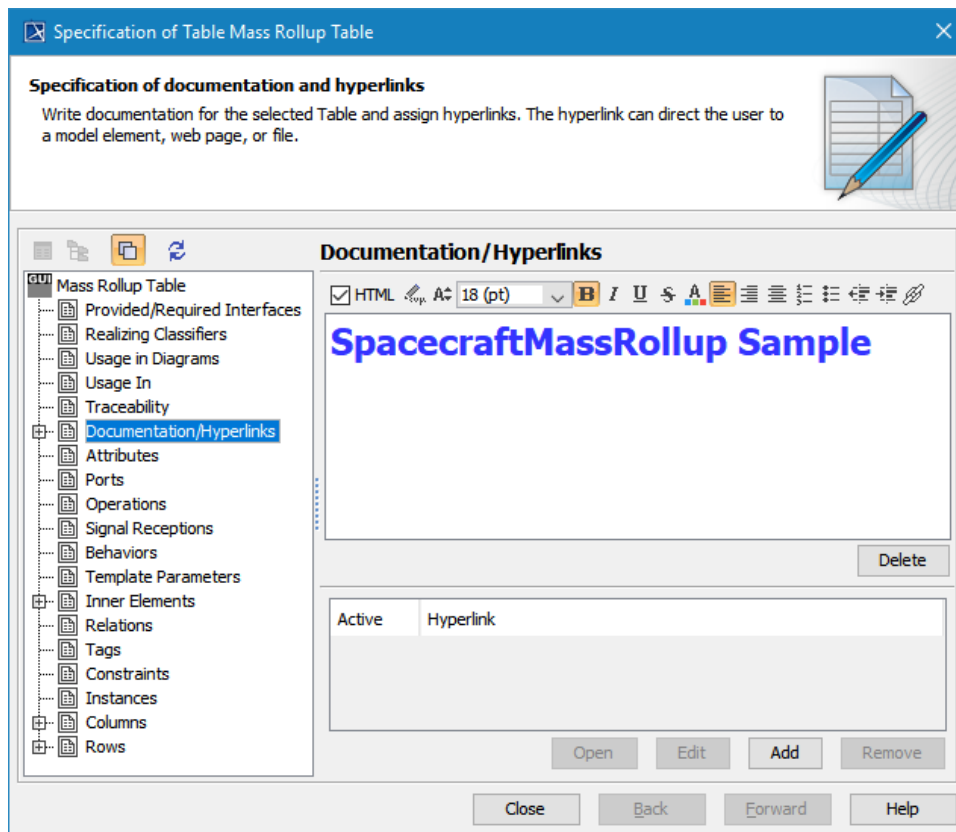
Changing the Documentation/Hyperlinks tag will reflect on the table's descriptions in the browser.
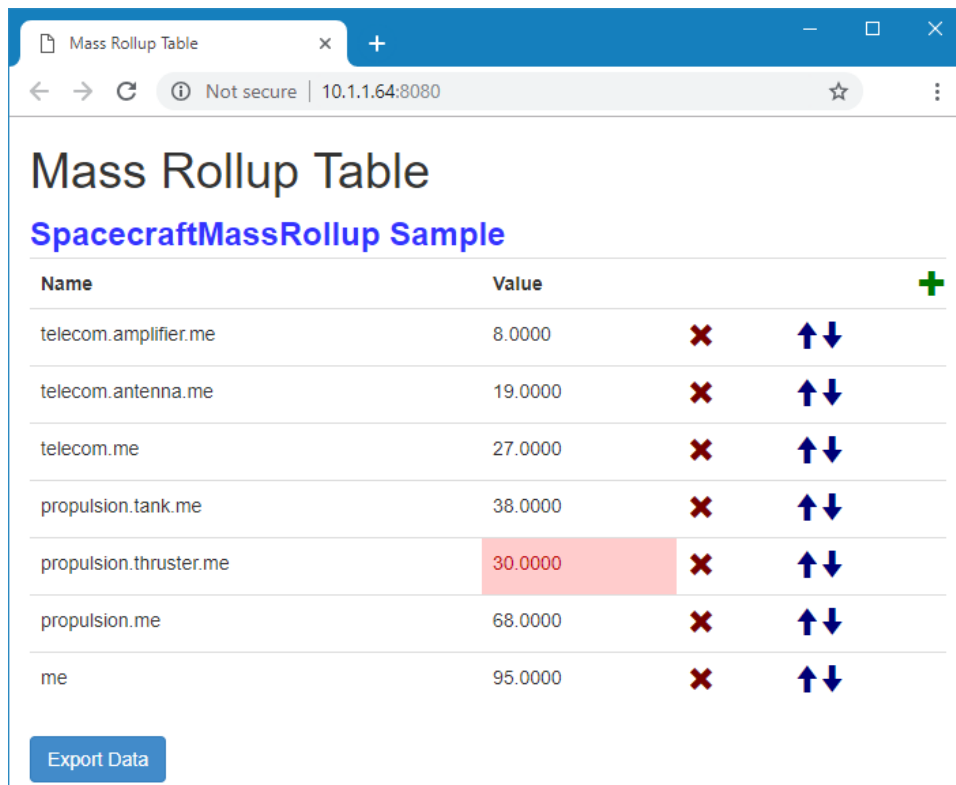
The changes to the Documentation/Hyperlinks tag appearing as the HTML table's description.

14. You can edit the values from the web browser page. The simulation engine will automatically pick the values up and re-calculate. In addition, verification status of runtime values is supported and shown that there is constraint failure, which is colored in red.

Generating an HTML table from a Time series chart and CSV export configuration

An HTML table can also be generated from a Time series chart and CSV export configuration.

To generate an HTML table from either a Time series chart or a CSV export configuration

1. Right-click a Time Series Chart or a CSV Export configuration and choose **Tools** > **Generate HTML Table**.
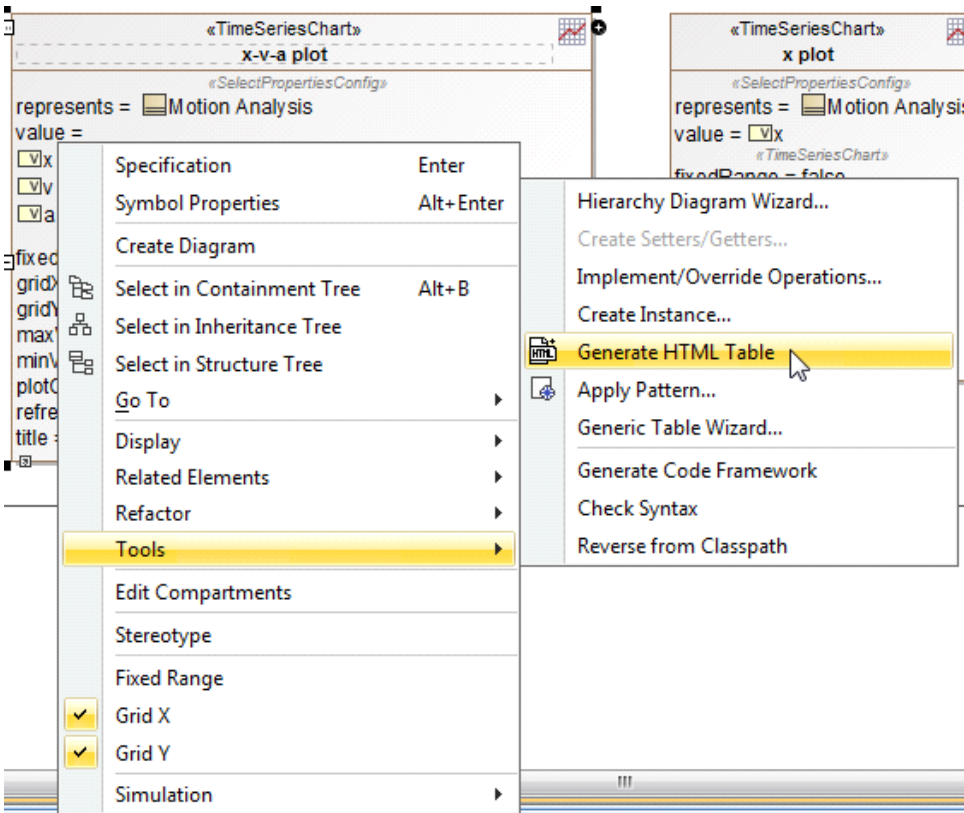
2. This will generate an HTML file, which can be viewed either online or offline. A message stating, "INFO: HTML table(s) is/are generated to the C:\Users\Downloads\CoffeeMachine_test1 folder, " in the Console pane will appear in the **Simulation Console** pane.

Sample model

The model used in the figures on this page is the **SpacecraftMassRollup** sample model that comes with your modeling tool.

To open this sample, do either of the following

- Download SpacecraftMassRollup.mdzip.
- Find it in the modeling tool *<modeling tool installation directory>\samples\simulation\SpacecraftMassRollup.mdzip.*