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

On this page

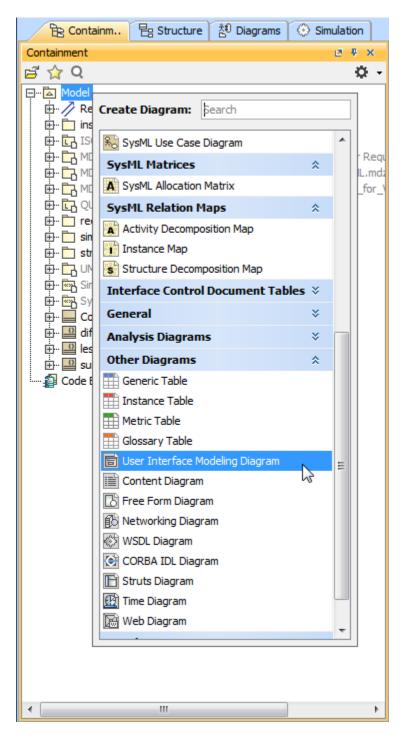
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Generating an HTML table from a UI table

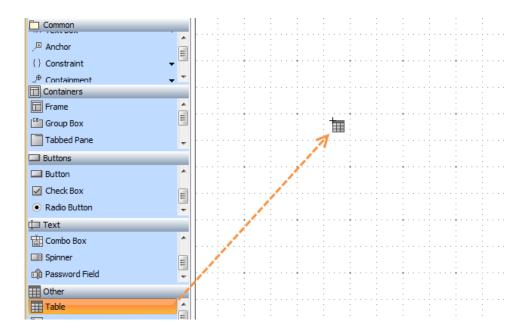
This feature of Cameo Simulation Toolkit enables you to export MagicDraw HTML tables in UI modeling diagrams to HTML5, allowing them to be viewed in a web browser. The sample model used on this page, SpacecraftMassRollup, demonstrates how to create a User Interface table in the User Interface Modeling 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.

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B···□ amplifier B··□ anterna F··□ propulsion	Containers	Column,1 Column 2	
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	Panel		
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- E spacecraft - Component - diff	Table		

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

Sou Tigg the spacecraft Block to the table quickly, the column name will change automatically, without having to select Create UI Prototype.

	Column 1	-
Create	UI Prototype	
Create	Block spacecraft Symbol	

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

Name		Va	lue		

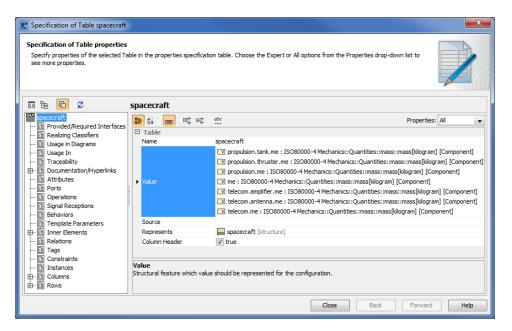
When you select the Create UI Prototype, the table column names change to Name and Value.

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 Repr esents property.

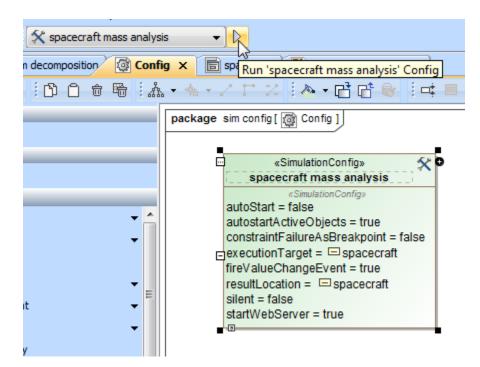
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7. Click beside the Value property and select the values you want to monitor from the tree view in the Select Nested Properties dialog. OK 8. Click

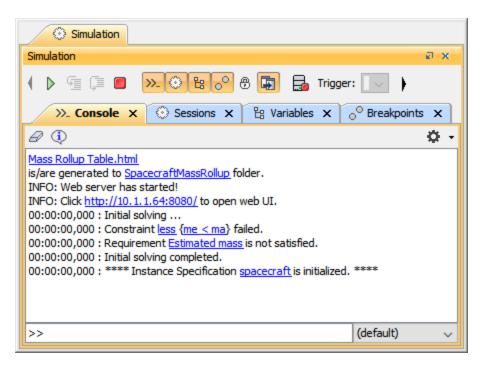
. The selected values will appear in the Value property in the UI table Specification window.



- 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.

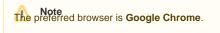


The Console messages appearing in the Simulation Console with the filter Options set to Warn.

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

Specification of Simulation Cont	iguration spacecraft mass analysis		×
Specification of Simulation Conf Specify properties of the selected 3 drop-down list to see more propert	imulation Configuration in the properties specification table. C	Choose the Expert or All options from the Properties	
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spacecraft mass analysis		Properties: All	•
🗈 Timing Properties	Simulation Configuration		<u> </u>
😳 🛅 Usage in Diagrams	Name	spacecraft mass analysis	_
🗈 Usage In	Start Web Server Auto Start	✓ true	E
Documentation/Hyperlinks Attributes	Auto Start Clone References	taise	
Ports	Constraint Failure As Breakpoint	alse	
Operations	Decimal Places	<pre></pre>	_
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Template Parameters	Result Location	spacecraft : structure::spacecraft [instance]	_
Inner Elements	Run Forks In Parallel	 spaced art is docurespaced art [instance] undefined> 	_
Tags	Treat All Classifiers As Active	 <undefined></undefined> 	-
Constraints Instances Language Properties	Start Web Server	mockup. HTML must be generated in advance, using the "Generat	e HTML*
	Q Type here to filter properties		
[<u> </u>		Close Back Forward	Help

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.



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

Specification of Table Mass Rollu	p Table X
Specification of documentation ar Write documentation for the selected a model element, web page, or file.	hd hyperlinks Table and assign hyperlinks. The hyperlink can direct the user to
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Image: Second control of the second	✓ HTML A 18 (pt) B I U S A 18 (pt) SpacecraftMassRollup Sample Delete Active Hyperlink Open Edit Add Remove
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Changing the Documentation/Hyperlinks tag will reflect on the table's descriptions in the browser.

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Mass Rollup Table	2			
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Export Data				

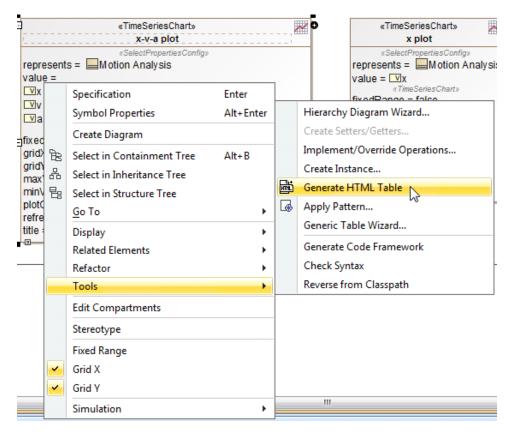
The changes to the Documentation/Hyperlinks tag appearing as the HTML table's description. **14.** You can edit the values from the web browser page. The simulation engine will automatically pick the values up and re-calculate. In addition, verification status of runtime values is supported and shown 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.