

Webinar “Total Mass, Cost, and Power Rollups”

Questions and Answers

- 1. How can I define custom rollups, let's say for bandwidth usage in my network?**

You can define custom rollup patterns. As of version 18.3, there are three predefined rollup patterns in Cameo Systems Modeler. You can find them in a SysML template project. We recommend to copy and then modify one of these patterns according to your needs. For more information, see:
<http://docs.nomagic.com/display/SYSMLP183/Defining+Rollup+Pattern+Blocks#DefiningRollupPatternBlocks-Definedifferenttypeofrolluppatterns>
- 2. Can we modify the wizard to support use with rollups for other parameters, such as bandwidth?**

Yes. For this you need to create a custom pattern. For more information, see:
<http://docs.nomagic.com/display/SYSMLP183/Defining+Rollup+Pattern+Blocks#DefiningRollupPatternBlocks-Definedifferenttypeofrolluppatterns>
- 3. If I create my own rollup pattern, how does the Cameo Systems Modeler know that it is a rollup pattern?**

You shouldn't create your own rollup patterns from scratch. The typical approach is to reuse, that is, copy/paste and modify, the predefined patterns. For more information, see:
<http://docs.nomagic.com/display/SYSMLP183/Defining+Rollup+Pattern+Blocks#DefiningRollupPatternBlocks-Definedifferenttypeofrolluppatterns>
- 4. Did each of the blocks have mass and totalMass properties before applying the rollup pattern?**

Structural elements used in the webinar did not have the mass and totalMass properties before applying the rollup pattern. They inherited these value properties from the applied rollup pattern (in this case – mass).
- 5. If an instance specification defines a block, then why can't we satisfy performance requirements with slot values?**

You need to bind the value property to the requirement by using the «satisfy» relationship. Then the slot value of that value property will be verified during the execution of the instance.
- 6. The requirement in the first project is a Text. How could the system compare it with the result?**

As of version 18.4, Cameo Systems Modeler can automatically extract the mathematical constraint from a textual requirement. For more information, see:
<https://docs.nomagic.com/display/CRMP184/Extracting+Constraint+from+Requirement>
- 7. All of this does require that you have the Cameo Simulation Toolkit, correct?**

Yes, you are right. Calculations in Parametric diagrams and execution of behavior diagrams requires Cameo Simulation Toolkit.
- 8. Are all these features well documented? Or is there a tutorial?**

The documentation of how to apply rollups can be found here:
<http://docs.nomagic.com/display/SYSMLP183/Rollup+Pattern+Wizard>

This webinar can be used as tutorial.

- 9. Can you mention again the "satisfy" relationship between the value property and the Requirement? How does the text requirement relate to the name of the value property, if at all, in order for the requirement to be considered unfulfilled when the value property e.g. exceeds a certain value?**

In the webinar, we displayed a new tool feature, which automatically extracts the mathematical constraint from the textual requirement. So, to verify your requirement you only need to connect the value property to the wanted requirement by using the SysML «satisfy» relationship, and the tool does the work for you. For more information, see: <https://docs.nomagic.com/display/CRMP184/Extracting+Constraint+from+Requirement>

- 10. Can Cameo Systems Modeler be linked to IMB Doors?**

Yes. For this, you need to use the Cameo DataHub Plugin. For more information, see: <http://www.nomagic.com/products/cameo-datahub.html>

- 11. What is the minimum MagicDraw version to use the rollups feature?**

The rollup pattern wizard was introduced in Cameo Systems Modeler (or MagicDraw with SysML plugin) 18.3.

For those who have an older version of the tool, we suggest to use the MBSE Plugin (no-cost), which enables the rollup calculations. The MBSE Plugin can be downloaded from the Resource Manager of the tool.

- 12. It is possible to evaluate this module?**

The rollup pattern wizard comes with the standard edition of Cameo Systems Modeler 18.3 or later. It is not provided in a separate plugin, and if you have the above-mentioned version of the tool, you're welcome to evaluate this feature.

- 13. Do you have a pattern to define the requirement and extract the values?**

As of version 18.4, Cameo Systems Modeler can automatically extract the mathematical constraint from the textual requirement. For more information, see: <https://docs.nomagic.com/display/CRMP184/Extracting+Constraint+from+Requirement>

- 14. What the Cameo products are involved in this webinar?**

In the webinar, Cameo Systems Modeler was used together with Cameo Simulation Toolkit.

- 15. Can we apply probabilities in the calculation? For example, there is a certain probability distributions on the rollup pattern?**

Currently, this functionality is not available.