Rollup Pattern Wizard

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Introduction

Rollup calculations are among the most common use cases in systems engineering. System modelers want to calculate total mass, cost, power, or another system dimension, based on individual values of all the parts in the model. The pattern can recursively propagate the particular value up a hierarchy of components characterized by this value.

The **Rollup Pattern Wizard** allows you to calculate the total cost, mass, power, or another system metric of elements in the model. Different types of pattern Blocks can be created to suit the calculation needs. This new modeling tool provides three default rollup patterns that calculate the total cost, mass, or power. You can apply the default or newly created pattern Block by using the **Rollup Pattern Wizard**. It automatically applies pattern Blocks (using the Generalization) to any number of Blocks or Instance Specifications recursively, and creates property values. This wizard also allows you to remove pattern Blocks from the selected Block or Instance Specification. The procedures below describe how to open and use the **Rollup Pattern Wizard**.

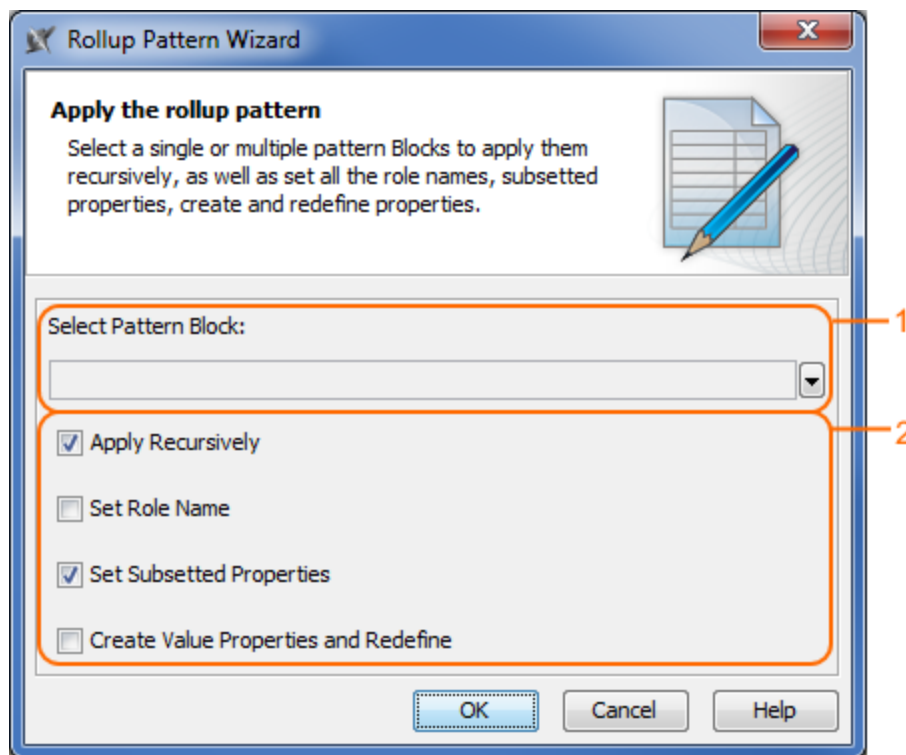## Opening the Rollup Pattern Wizard

To open the **Rollup Pattern Wizard**

1. From the shortcut menu of the Block or Instance Specification to which you want to apply a pattern Block, select:
    - **Tools** > **Apply Rollup Pattern**, if you want to apply a pattern Block for the selected Block or Instance Specification.
    - **Tools** > **Remove Rollup Pattern**, if you want to remove the pattern Block from the selected Block or Instance Specification.

The Rollup Pattern Wizard areas

The **Rollup Pattern Wizard** consists of two areas:

- Select/Remove Pattern Block (1).
- Options (2).

The Rollup Pattern Wizard when trying to apply a rollup pattern for a Block. Two areas of the wizard are highlighted: 1- Select Pattern Block, 2 -Options.

The procedures below describe how to work with the **Rollup Pattern Wizard:**

- Select/remove the pattern Block.
- Select the options.

Selecting/ removing the pattern Block

To select/remove the pattern Block

1. Click [image] to expand the list of available pattern Blocks.
2. Choose the rollup pattern Block that you want to apply/ remove.

Selecting the options

Apply Rollup Pattern Box	Description	Option appears when applying rollup pattern for...
Apply Recursively	Applies the pattern Block recursively.	Block, Instance Specification
Set Role Name	Sets the role names of Part Properties.	Block
Set Subsetted Properties	Sets the Subsetted Properties of the Part Properties.	Block
Create Value Properties and Redefine	Creates and redefines Value Properties.	Block

Remove Rollup Pattern Box	Description	Option appears when applying rollup pattern for...
Recursively Remove Rollup Pattern	Removes the pattern Block recursively.	Block, Instance Specification
Remove Role Name	Removes the role names of Part Properties.	Block
Remove Subsetted Properties	Removes the Subsetted Properties of the Part Properties.	Block
Remove Value Properties	Removes Value Properties.	Block

Related pages

Unknown macro: 'list-children'

Webinar

- Total Mass, Cost, and Power Rollups