

Evaluating operation performance

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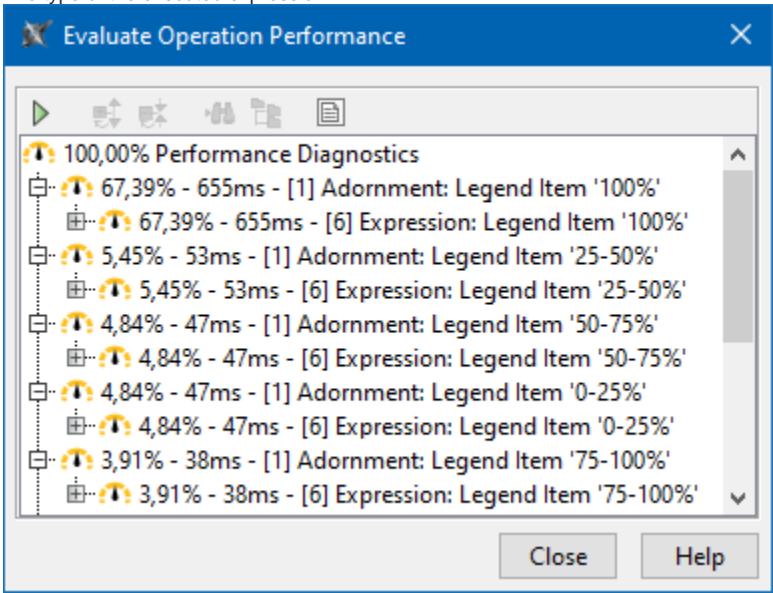
You can use the Evaluate Operation Performance functionality to see the performance diagnostics that help determine the reasons behind degraded tool performance if it is caused by the execution of expressions (e.g., derived properties, smart packages, legends, validation rules) defined in the model. Matrix and table building can also be analyzed.

Evaluating operation performance






To evaluate operation performance



- In the Main menu, click **Tools** and select **Evaluate Operation Performance**.
- Click the **Start** button.
- Run an operation whose performance you want to evaluate.
- Click the **Stop** button when the operation is finished and you want to stop the evaluation.
The performance diagnostics are displayed in the dialog, indicating:

- The time taken to execute an expression in percentages.
- The time taken to execute an expression in milliseconds.
- The number of times the expression was executed.
- The name of the executed expression.
- The type of the executed expression.



Evaluate Operation Performance dialog buttons

| Button | Description |
|---|--|
|  | Start the evaluation. |
|  | Stop the evaluation. |
|  | Expand the selected result recursively. |
|  | Collapse the selected result recursively. |
|  | Add the element associated with the tested expression to the search results tab. |

| | |
|---|---|
|  | Select the element associated with the tested expression in the Containment tree. |
|  | Export the diagnostics to a log file. |

Evaluate Operation Performance example

For example, you noticed that opening a particular diagram took longer than expected. A progress bar titled "Adorning" popped up for a few seconds before the diagram opened. To know what caused this performance issue, run the Evaluate Operation Performance tool. In its dialog, click the 'Start' button, then open the diagram again reproducing the slow operation, and once it is done, click the 'Stop' button to see the results. You can use this information to investigate the particular expression and improve its efficiency.

req [Package] Requirements [System Requirements]

«extendedRequirements»
HSUV System Requirements
Id = "SR1"
Text = "Requirements of HSUV System Requirements."

«extendedRequirements»
Braking safety requirements
Id = "SR1.3"
Text = "These requirements require the cooperative regenerative system safety requirements."

«extendedRequirements»
Vehicle Mass
Id = "SR1.1"

«extendedRequirement»
Regenerative Braking
Id = "SR1.2"
Text = "When the electric generator shall transfer the drivetrain to the electric mode, the electric generator shall produce the required power to slow the vehicle."

«extendedRequirements»
Stopping Distance
Id = "SR1.3.1"
Text = "The vehicle shall completely stop from 100 km per hour in less than 30 meters."

Friction Brake Heating
Id = "SR1.3.2"
Text = "Friction braking at 100 km per hour shall not generate more than 55 kW of heat at each wheel."

Status

☐ Closed
☒ Approved
☐ Disapproved
☐ In Progress

Coverage by Design Elements

☐ 0-25%
☐ 25-50%
☐ 50-75%
☐ 75-100%
☐ 100%

Tools

Analyze Collaborate 3DEXPERIENCE Window

Model Transformations
Project Merge
DDS
Integrations
Check Spelling
Rebuild Text Index
Expression Evaluation
Report Wizard... Ctrl+Shift+G
Macros
Project Statistics
Evaluate Operation Performance
DataHub

Evaluate Operation Performance

Click the start button on the toolbar, then reproduce the situation with unsatisfactory performance. Click the Stop button when you're finished.

Close Help

Evaluate Operation Performance

When you're done, click Stop to see the results.

Close Help

Evaluate Operation Performance

100,00% Performance Diagnostics

67,39% - 655ms - [1] Adornment: Legend Item '100%'

67,39% - 655ms - [6] Expression: Legend Item '100%'

5,45% - 53ms - [1] Adornment: Legend Item '25-50%'

5,45% - 53ms - [6] Expression: Legend Item '25-50%'

4,84% - 47ms - [1] Adornment: Legend Item '50-75%'

4,84% - 47ms - [6] Expression: Legend Item '50-75%'

4,84% - 47ms - [1] Adornment: Legend Item '0-25%'

4,84% - 47ms - [6] Expression: Legend Item '0-25%'

3,91% - 38ms - [1] Adornment: Legend Item '75-100%'

3,91% - 38ms - [6] Expression: Legend Item '75-100%'

Close Help