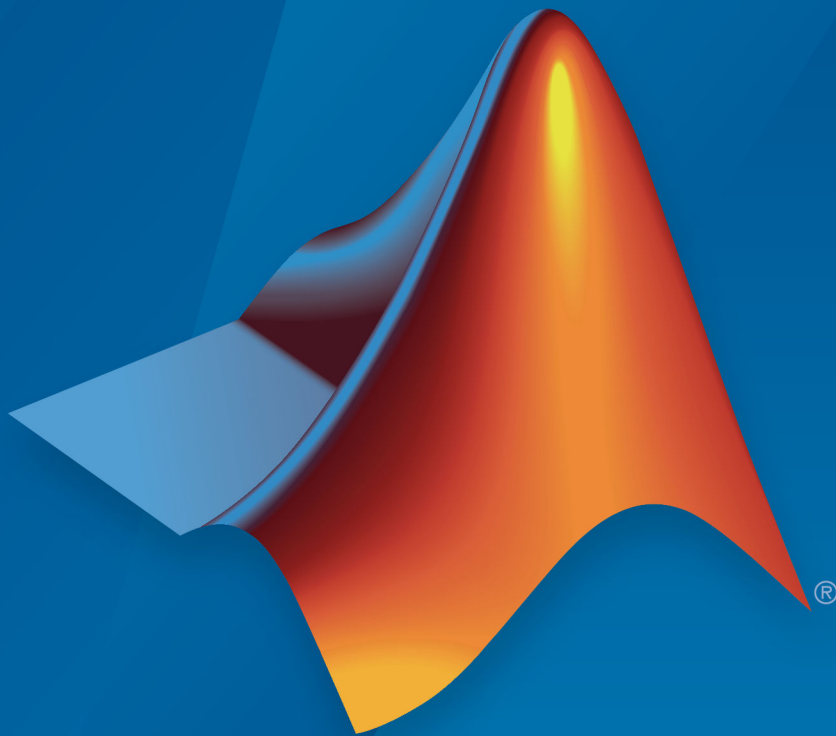


Simulink[®] Coverage[™] Release Notes



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Simulink® Coverage™ Release Notes

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Simulink Verification and Validation Packaging: Moved model and generated code coverage functionality and component verification functions such as slvnmakeharness to Simulink Coverage	1-2
Coverage Filtering API: Filtering choices for coverage justifications that include specified decisions, conditions, and outcomes	1-2
Logical Expressions in Assignment Statements: Record Condition and MCDC coverage for logical expressions in assignments in Stateflow and MATLAB Function Blocks	1-2
Function and Function Call Coverage: Collect SIL & PIL coverage as required by ISO 26262	1-3

R2017b

Version: 4.0

New Features

Compatibility Considerations

Simulink Verification and Validation Packaging: Moved model and generated code coverage functionality and component verification functions such as slvnmakeharness to Simulink Coverage

The model and generated code coverage functionalities and component verification functions of Simulink® Verification and Validation™ have been transitioned to Simulink Coverage™. For an introduction to the product, a basic Simulink Coverage workflow, and an outline of how Simulink Coverage fits into a systematic, end-to-end verification workflow, see the “Getting Started with Simulink Coverage” category. For coverage-related release notes for Simulink Verification and Validation prior to R2017b, see <https://www.mathworks.com/help/slvnv/release-notes.html>.

Coverage Filtering API: Filtering choices for coverage justifications that include specified decisions, conditions, and outcomes

You can use a command-line API to create filtering rules for blocks. Selection criteria for filtering includes filtering by individual block ID, filtering for all blocks of the same type, filtering certain decisions, conditions, and outcomes of a block, and more. You can also filter S-Function C++ code by code coverage outcome. For more information and examples, see “Automate Coverage Workflows”.

Logical Expressions in Assignment Statements: Record Condition and MCDC coverage for logical expressions in assignments in Stateflow and MATLAB Function Blocks

In models where logical expressions are assigned to variables – to break up complicated logic, to reuse common subexpressions, etc. – Simulink Coverage now records Condition and MCDC coverage for the logical expressions in assignment statements. For a detailed example of how Simulink Coverage records Condition and MCDC coverage for models where logical expressions are assigned to variables, see “Coverage for MATLAB® Function Blocks”.

Compatibility Considerations

Models that use logical expressions in assignment statements in Stateflow® and MATLAB® Function blocks record an increased number of Condition and MCDC objectives than previously recorded.

Function and Function Call Coverage: Collect SIL & PIL coverage as required by ISO 26262

Simulink Coverage introduces two new metrics for measuring Statement coverage for code.

- **Function Coverage:** Function coverage determines whether all the functions of your code have been called during simulation.
- **Function Call Coverage:** Function call coverage determines whether all function calls in your code have been executed.

The new metrics are reported in the top-level Summary and in the Details section of the HTML Coverage Report when you record code coverage.

