

# Simulink® Requirements™ Release Notes



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Phone: 508-647-7000



The MathWorks, Inc.  
3 Apple Hill Drive  
Natick, MA 01760-2098

## *Simulink® Requirements™ Release Notes*

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# R2017b

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Version: 1.0

New Features

## **Introduction to Simulink Requirements: Author, analyze, and manage requirements**

With Simulink Requirements, you can author and manage requirements within Simulink. Create requirement sets, organize requirements in hierarchies, and link requirements to model entities, tests, or other requirements. You can author requirements in the Simulink Editor or the Requirements Editor. You can also import requirements from external Microsoft® Word or Microsoft Excel® documents.

Quickly create implementation-type links by dragging requirements from the Requirements Browser to your model. Annotate your model diagrams with requirements information and navigate to the source requirement. Trace requirements to associated model entities and tests. To help you quantify completeness of your development activities in Model-Based Design, summarize implemented and verified requirements in your set and include this information in a report. For more information, see “Getting Started with Simulink Requirements”.

## **Requirements Editor and Browser: Author, edit, and organize requirements within Simulink**

You can author, edit, and organize requirements within Simulink from the Requirements Editor or the Requirements Browser in the Simulink Editor. Describe requirements with rich text and images, and organize requirements in hierarchies. The requirements view displays the hierarchy and the detailed information for each requirement. The links view displays the source, destination, and type of relationship. To perform impact analysis for your requirements, use the links view. For more information, see “Author Requirements in Simulink”.

## **Requirements Import Wizard: Import requirements content from Microsoft Word and Microsoft Excel documents**

You can import requirements stored in external Microsoft Word and Microsoft Excel documents into Simulink Requirements. You can import requirements in two ways:

- As editable requirements objects, in which you make subsequent updates by using Simulink Requirements.
- As read-only requirements objects that reference the external document, in which you use Word or Excel to update your requirements. You can navigate to the external document content from a requirement object.


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For more information, see “Import Requirements from Third-Party Tools”.

## Requirements Perspective: Establish requirements – design traceability and annotate your model with requirements information in the Simulink Editor

With a new requirements user interface in the Simulink Editor, you can:

- Create links by dragging requirements to model entities.
- Annotate your model block diagram with requirements information.
- Show and hide requirements information associated with your model.
- Understand traceability gaps by identifying blocks without requirements badges.

To enable the Requirements Perspective, click the  icon in the lower right of the Simulink canvas, and then click the Requirements graphic. For more information, see “Author Requirements in Simulink”.

## Requirements Change Tracking and Comparison: Automatically identify and manage changing requirements and impacts on design, models, and tests

The Requirements Editor highlights changes to requirements or links in your requirement set. You can use this information to assess potential impacts to your design, and take appropriate action. Changes to the requirement set appear in the **Change Information** section of the Requirements Editor. If a requirement change impacts your model or tests, update the related model element to meet the modified requirement. If an issue has no impact, you can clear the issue to reflect the latest revision of the requirement. For more information, see “Track Changes to Requirements Links”.

## Implementation and Verification Status Summary: Review implementation and verification status metrics for your requirements

The Requirements Editor summarizes your requirement set implementation links in the **Implementation status** column. For a particular requirement, implementation status shows whether the requirement has an implementation link. For a parent requirement or requirement set, implementation status aggregates the implementation metrics for

child requirements. For more information, see “Review Requirement Implementation Status Metrics Data”.

The Requirements Editor also summarizes the results of verification type links in the **Verification status** column. With a Simulink Test™ license, verification status summarizes the results of linked test cases. With a Simulink Design Verifier™ license, verification status summarizes the results of linked proof objectives. For more information, see “Review Requirement Verification Status Metrics Data”.

## **Requirements Reporting: Archive and document your requirements traceability, implementation status, and change history**

From the Requirements Editor, you can generate a detailed report of your requirement set and links. You can include detail such as requirement description, rationale, implementation status, verification status, and revision history. Reports use Microsoft Word format. For more information, see “Report Requirements Information”.

## **Simulink Verification and Validation Packaging: Moved Requirements Management Interface (RMI) features from Simulink Verification and Validation to Simulink Requirements**

Linking and management features that use the Requirements Management Interface from Simulink Verification and Validation™ are now included in Simulink Requirements. You can update your RMI links to use the Simulink Requirements interface. For an example, see “Migrating Requirements Management Interface Data to Simulink® Requirements™”.