What’s New in Simulink

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Senior Application Engineer
Test and Verify

Share and Deploy
Enable any engineer at any level to model any system

User interfaces
Enable any engineer at any level to model any system

User interfaces

Libraries

- Driveline
- Electrical
- Fluids
- Foundation Library
- Multibody
- Utilities
- Controls
- Electrical Systems
- Protection and Diagnostics
- Sensor Decoders
- Sensorless Estimators
- Signal Management
Enable **any engineer at any level to model any system**

User interfaces

Libraries

Systems engineering
Enable any engineer at any level to model any system

User interfaces

Libraries

Systems engineering
Why do we have to navigate out of a subsystem just to see its interface?

Well…

You bet

We spend too much time formatting blocks!

We need tools to align and distribute blocks.

Interface View

Now it’s time to show you a little of what’s old…
It’s not your fault!

New Features by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>607</td>
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<tr>
<td>2</td>
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<td>8</td>
<td>1980</td>
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<td>9</td>
<td>2097</td>
</tr>
<tr>
<td>10</td>
<td>2611</td>
</tr>
</tbody>
</table>
Our Online Release Notes are interactive

Filter by product or category
Filter by text
Filter by release range

Sort by release or topic
Expandable feature bullets with graphics

Bug fixes by update

So what’s the problem?

Found 654 notes | Release Range: R2016b to R2019b
It's our job to bring forward the tools and techniques you need when you need them.

Even Spacing Guides

Automatic Port Creation

State Drag Regions
Simulink menus have been around for a long time
How many unique menu actions do Simulink products have?

A + B + C

251 + 392 + 644
How many unique menu actions do Simulink products have?

1,285 actions and counting
Long menus are inefficient

Click on

Signals & Ports

Click on

Port Data Types

Click on

Port Data Type Display Format

Click on

Base and Alias Types

Close the window and click

DO IT AGAIN
New toolstrip improves discoverability and access to Simulink functionality

Discover & Access
Toolstrip supports workflows in clearly organized steps

Simulation Workflow

1. PREPARE
2. ‘DO IT’
3. REVIEW RESULTS
Prepare and Results galleries support simulation workflow
Debugging tools work together
Format tab makes your ideas ready for sharing
In summary, new Simulink toolstrip improves discoverability and access to long-existing functionality
Access and discover Simulink capabilities when you need them

User interfaces

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Simulink Toolstrip
Real Simulink models can get messy

How many of you have a model like this?
You can make your models more easily readable and editable

Let’s get started!
You can get started with buses easily
It’s useful to be able to see the port near where it gets used
Bus element ports allow you to see bus structure and put the port where the data gets used.
Bus element ports allow you to see bus structure and put the port where the data gets used.
Bus element ports allow you to easily modify signals in your buses
Bus objects are no longer necessary when passing bus signals across Model blocks
You can make your model more easily readable and editable with buses and bus element ports.
Edit at the speed of thought

User interfaces

Libraries

Systems engineering
Edit at the speed of thought

User interfaces

Libraries

Systems engineering
Model deformations and contact between bodies

User interfaces

Libraries – Physical modeling

Systems engineering
Model fluid power and transport applications

User interfaces

Libraries – Physical modeling

Systems engineering
Model fluid power and transport applications

User interfaces

Libraries – Physical modeling

Systems engineering
Generate motor control software with just a few clicks

User interfaces

Libraries – Motor control

Systems engineering
Design and analyze complex system and software architectures

User interfaces

Libraries

Systems engineering
Simulink is the **simulation integration platform**
Simulink is the simulation integration platform
Test and verify your design

Review and analyze traceability between artifacts in one interface
Test and verify your design

Review and analyze traceability between artifacts in one interface

Scope model coverage to requirements-based tests (RBT)
Use Jenkins servers to automatically run and test your project

Install MATLAB Plugin for Jenkins directly from the Jenkins Plugin Manager

This plugin integrates MATLAB (R) with Jenkins and provides Jenkins interface to run MATLAB and Simulink (R) tests.
Share Simulink simulations – *where Simulink is not available*

Package a compiled Simulink model with MATLAB code.
Simulink®

Test and Verify

Share and Deploy
Quickly learn the basics with free Onramp courses

Simulink Onramp

Stateflow Onramp
Learn more about what's new with blogs and release notes