What’s New in Simulink

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2,611
Test and Verify

Share and Deploy
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
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User interfaces

Libraries

Systems engineering

Architecture Model
By The MathWorks, Inc.

Create an architecture model. Model physical and logical architecture of a system. Create a visual representation with components, ports, and connectors. Specify information exchange between components with interfaces.
Enable any engineer at any level to model any system

User interfaces

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

Well...

We spend too much time formatting blocks!

We need tools to align and distribute blocks.

You bet

Now it's time to show you a little of what's old...

Interface View
It’s not your fault!

New Features by Year

- Year 1: 607
- Year 2: 1076
- Year 3: 984
- Year 4: 1101
- Year 5: 1143
- Year 6: 1476
- Year 7: 1653
- Year 8: 1980
- Year 9: 2097
- Year 10: 2611
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

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  
R2019a

Automatic Port Creation  
R2018b

State Drag Regions  
R2012b
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
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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Systems engineering
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

Share and Deploy
Test and verify your design

Review and analyze traceability between artifacts in one interface

| Traceability Matrix | Simulink Requirements |
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

- **Standalone Apps**
- **Web Apps**
- **Standalone FMUs**
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