

# **Simulink<sup>®</sup> Design Optimization<sup>™</sup> Release Notes**

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*Simulink® Design Optimization™ Release Notes*

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## Summary by Version

This table provides quick access to what's new in each version. For clarification, see “Using Release Notes” on page 1.

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
New Product V1.0 (R2009a)	Yes Details	No	Bug Reports Includes fixes	Printable Release Notes: PDF  Current product documentation

### Using Release Notes

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorks™ products required for this product (for example, MATLAB® or Simulink®) for enhancements, bugs, and compatibility considerations that also might impact you.

If you are upgrading from a software version other than the most recent one, review the release notes for all interim versions, not just for the version you are installing. For example, when upgrading from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

### What's in the Release Notes

#### New Features and Changes

- New functionality
- Changes to existing functionality

## **Version Compatibility Considerations**

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product is released appear under Bug Reports at the MathWorks Web site. Bug fixes can sometimes result in incompatibilities, so you should also review the fixed bugs in Bug Reports for any compatibility impact.

## **Fixed Bugs and Known Problems**

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release time and as more information becomes available. This includes provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

# Version 1.0 (R2009a) Simulink Design Optimization Software

This table summarizes what's new in V 1.0 (R2009a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports Includes fixes	Printable Release Notes: PDF  Current product documentation

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**Note** As of R2009a, Simulink® Parameter Estimation™ and Simulink® Response Optimization™ functionality are merged into a new product, Simulink® Design Optimization™. Simulink Parameter Estimation and Simulink Response Optimization are no longer available.

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New features and changes introduced in this version are:

- “New Parallel Computing Support for Estimating Model Parameters” on page 3
- “Updated Demos” on page 4

## New Parallel Computing Support for Estimating Model Parameters

If you have the Parallel Computing Toolbox™ software installed, you can use parallel computing to speed up estimating parameters of a Simulink model. The parallel computing option is available in the `Nonlinear least squares`, `Gradient descent` and `Pattern search` algorithms. You can enable this option from either the GUI or at the command line.

Using parallel computing can speed up the estimation time in the following situations:

- The model contains a large number of parameters to estimate.
- The model is complex and takes a long time to simulate.

For more information about using parallel computing for estimating model parameters, see “Speeding Up Parameter Estimation Using Parallel Computing” in the Simulink Design Optimization documentation.

## **Updated Demos**

The Simulink Design Optimization demos have been categorized into the following new categories:

- Parameter Estimation in Simulink
- Response Optimization in Simulink
- Response Optimization in SISO Design Tool
- Design Optimization Using Parallel Computing
- Adaptive Lookup Tables

To open the Simulink Design Optimization demos, type

```
demo simulink 'simulink design optimization'
```

at the MATLAB prompt.

## Compatibility Summary for Simulink Design Optimization Software

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided in the description of the new feature or change.

<b>Version (Release)</b>	<b>New Features and Changes with Version Compatibility Impact</b>
<b>New Version V 1.0 (R2009a)</b>	None