

Simulink[®] Code Inspector[™]

Release Notes

How to Contact MathWorks



www.mathworks.com Web
comp.soft-sys.matlab Newsgroup
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suggest@mathworks.com Product enhancement suggestions
bugs@mathworks.com Bug reports
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service@mathworks.com Order status, license renewals, passcodes
info@mathworks.com Sales, pricing, and general information



508-647-7000 (Phone)



508-647-7001 (Fax)



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

For contact information about worldwide offices, see the MathWorks Web site.

Simulink® Code Inspector™ 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
New Product V1.0 (R2011b)	Yes Details	No	No

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®). Determine if enhancements, bugs, or compatibility considerations in other products impact you.

If you are upgrading from a software version other than the most recent one, review the current release notes and all interim versions. For example, when you upgrade from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

What Is 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 release appear under Bug Reports at the MathWorks Web site. Bug fixes can sometimes result in incompatibilities, so review the fixed bugs in Bug Reports for any compatibility impact.

Fixed Bugs and Known Problems

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. Bug Reports include 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.

Documentation on the MathWorks Web Site

Related documentation is available on mathworks.com for the latest release and for previous releases:

- Latest product documentation
- Archived documentation

Version 1.0 (R2011b) Simulink Code Inspector Software

This table summarizes what's new in V1.0 (R2011b):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems
Yes Details below	No	No

- “Introducing Simulink® Code Inspector” on page 3
- “Features” on page 3
- “Introductory Demo” on page 4

Introducing Simulink Code Inspector

Simulink® Code Inspector™ automatically compares generated code with its source model to satisfy code-review objectives in DO-178B and other high-integrity standards. The Code Inspector systematically examines blocks, parameters, and settings in a model to determine whether they are structurally equivalent to operations, operators, and data in the generated code. Simulink Code Inspector provides detailed model-to-code and code-to-model traceability analysis. It generates structural equivalence and traceability reports that you can submit to certification authorities to satisfy DO-178 software coding verification objectives.

Features

Key features of Simulink Code Inspector Version 1.0 include:

- Structural equivalence analysis and reports
- Bidirectional traceability analysis and reports
- Compatibility checker to restrict model, block, and coder usage to operations typically used in high-integrity applications
- Tool independence from Simulink code generators

Use Simulink Code Inspector tooling to:

- Prepare for code inspection during model development.
- Run inspections on code generated from models and review reported results.
- Automatically generate code verification reports to support software certification.

Introductory Demo

The Simulink Code Inspector product provides the following introductory demo.

Demo	Shows How You Can...
slcidemo_intro	<p>Use MATLAB commands to:</p> <ul style="list-style-type: none">• Prepare a model hierarchy for code generation and code inspection.• Automatically generate code for the model hierarchy.• Verify the generated code independently of the code generation tool.• Purposely introduce an error into the generated code and inspect for failure.

Note “Quick-Start Example” in the Simulink Code Inspector documentation provides an equivalent demonstration using the Simulink Code Inspector dialog box to control the code inspection workflow.

Compatibility Summary for Simulink Code Inspector

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.

Version (Release)	New Features and Changes with Version Compatibility Impact
Latest Version V1.0 (R2011b)	None