Simulink® Report Generator™ Release Notes

Contents

Summary by Version	1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4
Version 3.2.1 (R2007b) Simulink® Report Generator $^{\text{TM}}$ Software	6
Version 3.2 (R2007a) Simulink® Report Generator $^{\text{TM}}$ Software	7
Version 3.1 (R2006b) Simulink® Report Generator TM Software	8
Version 3.0.1 (R2006a+) Simulink® Report Generator $^{\text{TM}}$ Software	9
Version 3.0 (R2006a) Simulink® Report Generator TM Software	10
Version 2.3.1 (R14SP3) Simulink® Report Generator TM Software	13
Version 2.3 (R14SP2+) Simulink® Report Generator TM Software	14
Version 2.2 (R14SP1+) Simulink® Report Generator TM Software	16
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	17
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	19

Version 1.3 (R13) Simulink [®] Report Generator TM	
Software	21
Compatibility Summary for Simulink® Report	
Generator TM Software	22

Summary by Version

This table provides quick access to what's new in each version. For clarification, see "Using Release Notes" on page 2.

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Latest Version V3.3 (R2008a)	Yes Details	No	Bug Reports Includes fixes	Printable Release Notes: PDF Current product documentation
V3.2 (R2007a)	Yes Details	No	Bug Reports Includes fixes	No
V3.1 (R2006b)	Yes Details	No	Bug Reports Includes fixes	No
V3.0.1 (R2006a+)	No	No	Bug Reports Includes fixes	No
V3.0 (R2006a)	Yes Details	No	Bug Reports Includes fixes	No
V2.3.1 (R14SP3)	Yes Details	No	Bug Reports Includes fixes	No
V2.3 (R14SP2+)	Yes Details	No	Bug Reports Includes fixes	No
V2.2 (R14SP1+)	Yes Details	No	No bug fixes	No
V2.1 (R14+)	Yes Details	No	No bug fixes	No
V2.0 (R14)	Yes Details	No	Bug Reports	No
V1.3 (R13)	Yes Details	No	No bug fixes	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®) 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 3.3 (R2008a) Simulink® Report Generator™ Software

This table summarizes what's new in Version 3.3 (R2008a):

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

New features and changes introduced in this version follow.

Simulink® Web View Enhancements

Performance and Scalability Enhancements

- The Simulink® Report GeneratorTM software now loads only visible systems into Web views, resulting in a faster viewing experience for Web views of large Simulink® models.
- Clicking the **Show All Layers** button in a Web view now displays all layers as thumbnail images in png format, resulting in faster loading of the Show All Layers view.

DocBlock Support

You can now export information contained in DocBlock blocks from Simulink models to Web views.

For more information on DocBlock blocks, see the DocBlock reference page in the Simulink documentation.

Support for Embedded URLs in Simulink® Annotations

You can now specify the MATLAB® web command in the format:

```
web('http://[url]')
```

as the callback function in a Simulink annotation. When you click on the annotation in the model's Web view, the Simulink Report Generator software launches the Web page with the specified URL.

For more information about specifying functions in annotations, see "Annotation Callback Functions" in the Simulink documentation.

Embedded MATLAB™ Function Block Support

You can place your cursor over an Embedded MATLAB Function block in a Web view to display the M-code contained in the block.

For more information on Embedded MATLAB Function blocks, see the Embedded MATLAB Function reference page in the Simulink documentation.

Version 3.2.1 (R2007b) Simulink® Report Generator™ Software

This table summarizes what's new in Version 3.2.1 (R2007b):

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

There are no new features or changes in this version.

Version 3.2 (R2007a) Simulink® Report Generator™ Software

This table summarizes what's new in Version 3.2 (R2007a):

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

New features and changes introduced in this version follow.

- "Simulink® Web View Enhancements" on page 7
- "Adobe® Scalable Vector Graphics (SVG) Format Support in System Snapshot and Stateflow® Snapshot Components" on page 7

Simulink® Web View Enhancements

Support for hierarchical Web view navigation, which provides you with:

- Easy navigation through layers of your Web view
- Visual indications of what context you are in when you navigate through your Web view

Adobe® Scalable Vector Graphics (SVG) Format Support in System Snapshot and Stateflow® Snapshot Components

The System Snapshot and Stateflow® Snapshot components now support Adobe® Scalable Vector Graphics (SVG) format, providing enhanced graphics resolution in HTML reports.

Version 3.1 (R2006b) Simulink® Report Generator™ Software

This table summarizes what's new in Version 3.1 (R2006b):

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	No

New features and changes introduced in this version follow.

• "New Real-Time Workshop® Components" on page 8

New Real-Time Workshop® Components

Two new components report on code generated by the Real-Time Workshop® product:

Code Generation Summary

Produces version information, a list of the generated files, code generation configuration information, and, if the model includes subsystems, a subsystem map.

Import Generated Code

Imports source and header (include) files generated by Real-Time Workshop software. Also imports custom files you specify as part of your model.

Version 3.0.1 (R2006a+) Simulink® Report Generator™ Software

This table summarizes what's new in Version 3.0.1 (R2006a+):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	Bug Reports Includes fixes	No

There are no new features or changes in this version.

Version 3.0 (R2006a) Simulink® Report Generator™ Software

This table summarizes what's new in Version 3.0 (R2006a):

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	No

New features and changes introduced in this version follow.

- "Simulink® Models Can Be Exported as Web Views" on page 10
- "Model Loop Component Reports on Libraries" on page 11
- "Model Advisor Results Reported by New Component" on page 12
- "User Interface and Performance Enhanced" on page 12
- "Empty Columns Removed from Summary Tables" on page 12

Simulink® Models Can Be Exported as Web Views

You can now create a Web view of a Simulink® model or Stateflow® chart. A Web view is an interactive rendition of the model or chart that you can view in a Web browser. A Web view uses Scalable Vector Graphics (SVG) to render and navigate a model.

Creating a Web view requires the Simulink® Report Generator™ product. Using a Web view in a Web browser requires SVG support in the browser, implemented natively or through a plug-in, but it does not require The MathWorks™ products to be installed.

Because they require only Web browsers with widely available SVG support, Web views are useful for presenting models to audiences and for sharing models with colleagues who do not have The MathWorks products installed.

For details, see "Exporting Simulink Models to Web Views" in the Simulink Report Generator documentation.

Browser Requirements and Limitations

Web views in V3.0 (R2006a) are supported only in these Web browsers:

- Firefox Version 1.5 or later, which has native support for Scalable Vector Graphics (SVG). To obtain the Firefox browser, visit http://www.mozilla.com/.
- Microsoft® Internet Explorer® with the Adobe® SVG Viewer plug-in. To obtain the SVG Viewer plug-in, visit http://www.adobe.com/svg/.

Web views have these limitations in Firefox:

- There is no shortcut menu.
- When you move the mouse over exported systems and diagrams, they are not highlighted, but the cursor changes.
- Fonts may be too large in some circumstances.
- Compressed SVG files are not supported.

Web views have these limitations in Internet Explorer with the SVG Viewer plug-in:

- In panning mode, the cursor does not change.
- On a Japanese Microsoft Windows® system, you must edit the Windows registry to obtain Japanese text in menus. Define this key:

```
{\tt HKEY\_CURRENT\_USER\backslash Software \backslash Adobe \ SVG \ Viewer\backslash \it version \backslash Locale}
```

substituting the version of your Adobe SVG Viewer plug-in for *version*. For example, if the plug-in version is 3.03, define this key:

```
{\tt HKEY\_CURRENT\_USER\backslash Software \backslash Adobe\ SVG\ Viewer\backslash 3.03 \backslash Locale}
```

Then, define a string value for this key. The value name is systemLanguage, and the value data is ja.

Model Loop Component Reports on Libraries

The Model Loop component can now report on libraries. The Model Loop attribute pane in Report Explorer specifies which libraries to include in the report.

Model Advisor Results Reported by New Component

A new Model Advisor Report component runs Model Advisor and includes its report in the report you are generating.

User Interface and Performance Enhanced

The Report Explorer interface has a number of enhancements. The **View** menu has commands to increase and decrease font size and to show the message window if it is not displayed.

Simulink Report Generator performance has improved. Reports are often generated more rapidly and with less chance of running out of memory.

Empty Columns Removed from Summary Tables

Simulink Summary Table components now have an option to remove empty columns from the report. The option is selected by default.

Version 2.3.1 (R14SP3) Simulink® Report Generator™ Software

This table summarizes what's new in Version 2.3.1 (R14SP3):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	Bug Reports Includes fixes	No

There are no new features or changes in this version.

Version 2.3 (R14SP2+) Simulink® Report Generator™ Software

This table summarizes what's new in Version 2.3 (R14SP2+):

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	No

New features and changes introduced in this version follow.

- "Dialog Snapshot Components" on page 14
- "Table Cell Spanning" on page 14
- "Annotation Loop Component" on page 14
- "Improved Graphical User Interface" on page 15

Table Cell Spanning

You can create advanced table layouts for Simulink® and Stateflow® property tables. The advanced layouts include cells that span multiple rows or columns.

Dialog Snapshot Components

You can take screen captures of Simulink and Stateflow editor dialog boxes. You can choose to display the current settings associated with an object, or document the appearance of your custom mask dialog boxes.

See Simulink Dialog Snapshot and Stateflow Dialog Snapshot in the Simulink Report Generator documentation.

Annotation Loop Component

You can include Simulink annotations in your reports. A Simulink annotation is a text field that you can edit directly in the block diagram. You typically use an annotation to display brief information about a subsystem.

For more details, see Annotation Loop in the Simulink Report Generator documentation.

Improved Graphical User Interface

The following changes and improvements have been made to the graphical user interface:

• There is an improved user interface for searching according to property/value pairs in Simulink System Loop and Block Loop components.

Version 2.2 (R14SP1+) Simulink® Report Generator™ Software

This table summarizes what's new in Version 2.2 (R14SP1+):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	No bug fixes	No

New features and changes introduced in this version follow.

• "64-bit Linux® Platforms Supported" on page 16

64-bit Linux® Platforms Supported

The Simulink® Report Generator TM software now supports 64-bit Linux® platforms.

Version 2.1 (R14+) Simulink® Report Generator™ Software

This table summarizes what's new in Version 2.1 (R14+):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	No bug fixes	No

New features and changes introduced in this version follow.

- "Support for Non-English Systems" on page 17
- "Enhancements for Simulink® Components" on page 17
- "Commands to Customize Simulink® Reports" on page 18

Support for Non-English Systems

This version has better support for Japanese and other non-English systems.

Enhancements for Simulink® Components

This version includes:

- Better integration between Report Explorer and Simulink®
- New Simulink Library Information component
 - Reports on referenced Simulink libraries in the current model, block, or system
 - Merges repeated rows in the generated table to save space
- Improved Model Change Log component
 - Controls over sort order and date format
- Property for displaying the destination and source of a signal

Commands to Customize Simulink® Reports

To provide greater control over report generation, new commands are available to set the model, system, block, or signal reported on by a Simulink component:

```
RptgenSL.getReportedBlock
RptgenSL.getReportedSystem
RptgenSL.getReportedModel
RptgenSL.getReportedSignal

RptgenSL.setReportedBlock(blkName)
RptgenSL.setReportedSystem(sysName)
RptgenSL.setReportedModel(mdlName)
RptgenSL.setReportedSignal(sigHandle)
```

You can use the set commands inside an Evaluate MATLAB Expression component. In an Evaluate MATLAB Expression component, you could enter:

```
RptgenSL.setReportedSystem('f14/Controller')
```

You can use the get commands inside any component that supports %<> notation. For example, in a Paragraph component, you could enter:

```
%<RptgenSL.getReportedBlock>
```

When getting or setting a block, system, or model, the object is identified by its full path string. When setting or getting the signal, the signal is identified by the source block's numeric outport handle. Note that none of the set methods set the current reporting context like a loop.

Version 2.0 (R14) Simulink® Report Generator™ Software

This table summarizes what's new in Version 2.0 (R14):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	No	No

New features and changes introduced in this version follow.

- "Improvements to Components" on page 19
- "New Components" on page 19

Improvements to Components

These components have been improved:

- Looping components intrinsically create sections and anchors.
- All summary tables support manual property names and column widths.
- Simulink® Parameter and Stateflow® Property components provide increased control over output formatting.
- Stateflow Hierarchy Loop component allows searching by property/value pairs.
- Model Change Log component can limit revisions by date.
- Model Loop component can mix current model looping with specified model names.
- Simulink Functions and Variables component (formerly two separate components) can have system or block level scope.
- System Loop component can search by property/value pairs.

New Components

These components have been added:

- Requirements Table
- Stateflow Machine Loop
- Stateflow Object Loop
- Stateflow State Loop
- Stateflow Auto Table
- Stateflow Hierarchy
- Stateflow Property

Version 1.3 (R13) Simulink® Report Generator™ Software

This table summarizes what's new in Version 1.3 (R13):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	No bug fixes	Yes

New features and changes introduced in this version follow.

- "Stateflow® Notes Supported" on page 21
- "Simulink® and Stateflow® Components Improved" on page 21

Stateflow® Notes Supported

The Simulink $^{\text{@}}$ Report Generator $^{\text{TM}}$ software now supports Stateflow $^{\text{@}}$ Notes.

Simulink® and Stateflow® Components Improved

 $Simulink^{\textcircled{\tiny{\$}}}$ and State flow components have been enhanced:

- Scope Snapshot: Viewing of multiple black and white traces is improved.
- System Snapshot: You can now specify titles and sizes of diagrams.
- Stateflow Snapshot: You can now specify titles for the diagrams.
- Look-Up Table: You can now report on the Pre-Lookup table.

Component Inserts Text from Doc Blocks

A new Documentation component inserts text extracted from Doc Blocks in Simulink models.

Compatibility Summary for Simulink® Report Generator™ 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.

Version (Release)	New Features and Changes with Version Compatibility Impact
Latest Version V3.3 (R2008a)	None
V3.2.1 (R2007b)	None
V3.2 (R2007a)	None
V3.1 (R2006b)	None
V3.0.1 (R2006a+)	None
V3.0 (R2006a)	None
V2.3.1 (R14SP3)	None
V2.3 (R14SP2+)	None
V2.2 (R14SP1+)	None
V2.1 (R14+)	None
V2.0 (R14)	None
V1.3 (R13)	None