

Release Notes for Simulink[®] Report Generator[™]

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Release Notes for Simulink® Report Generator™

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R2013a

Version: 3.14
New Features: Yes
Bug Fixes: Yes

Toolstrip that replaces menus and toolbars in XML Comparison Tool

The Comparison Tool is redesigned for more efficient workflow and access to tools. The toolstrip contains components that were previously available in menus and toolbars. Tools are unified across different comparison types such as text, MAT, variable, and Simulink® XML, to make it easier to find controls for displaying, filtering, and navigating differences.

For details, see “Explore the XML Comparison Report for Simulink Models”.

Scope Snapshot display of additional scopes

The Scope Snapshot component, in addition to inserting images of the Simulink library Scope and XY Graph blocks, now supports:

- Spectrum Analyzer and Time Scope blocks (DSP System Toolbox™)
- Video Viewer (Computer Vision System Toolbox™)
- Blocks in the Simulink Control Design™ Linear Analysis Plots library (for example, the Bode Plot block)

R2012b

Version: 3.13
New Features: Yes
Bug Fixes: Yes

Inclusion or exclusion of model references from System Design Description reports

The System Design Description dialog box provides an option for you to include or exclude model references from a System Design Description report. Prior to R2012b, model references were always included. In R2012b, by default reports include model references, but you can choose to exclude them.

Simulink functions in reports

R2012b provides enhanced Stateflow® reporting capabilities for Simulink functions:

- The System Loop component provides an option to exclude from a report a subsystem that implements a Simulink function.
- The new Simulink Function System Loop component provides information on the function-call subsystem hierarchy that implements a Simulink function.

R2012a

Version: 3.12
New Features: Yes
Bug Fixes: Yes

XML Comparison of Configuration Parameters

In R2012a, you can view changes in Configuration Parameters dialog box options in the Simulink XML Comparison report.

After comparing XML text files exported from Simulink models, you can use the report to explore differences in the Configuration Parameters. Click report items to view changed options in the Parameters pane of the report. The Parameters pane displays the label text from the dialog controls and the parameter values. If you have reverse annotation on, the report also displays the appropriate root node pane of both Configuration Parameters dialog boxes.

For details, see [Display Items in Original Models in the Simulink Report Generator™ User's Guide](#).

Print Filtered XML Comparison Results

In R2012a, the printable XML Comparison report has improved speed and filtered results. If you set filters, you can now create a printable report containing the filtered results only.

For details, see [Filter Out Differences in the Simulink Report Generator User's Guide](#).

R2011b

Version: 3.11
New Features: Yes
Bug Fixes: Yes

Use Full Page Option for PDF Reports

To display full-page images in PDF reports, set the **Paper orientation** property to the new **Full page image (PDF only)** option. The following components provide this new option:

- Look-Up Table
- Scope Snapshot
- Stateflow Snapshot
- System Snapshot
- To Workspace Plot

Filter Systems for the System Filter Component

You can use the new Custom filtering MATLAB® code property of the System Filter component to extend the system filtering criteria beyond the existing System Filter properties (for example, the **Report only if system has at least N blocks** property).

Filter Properties for the Simulink Workspace Variable Component

You can define a filter for selecting the variable properties that the `Simulink Workspace Variable` component displays. You can choose from a set of properties for a class, or you can define a custom MATLAB function to specify a filter.

R2011a

Version: 3.10
New Features: Yes
Bug Fixes: Yes

Merge Simulink Models From Comparison Report

You can now merge Simulink models from the XML text comparison report. You can merge individual parameters, blocks, or entire subsystems. This feature enables you to merge two versions of a design modeled in Simulink.

You can merge from the left (or base) model to the right (or edited) model using the XML text files. If necessary, you can swap sides. Click **Undo** to revert all merge operations.

For details, see Merge Simulink Models From the Comparison Report in the Simulink Report Generator User's Guide.

Export XML Comparison Results to the Workspace

You can now export XML comparison results to the MATLAB base workspace. You can use the results data for tasks such as further analysis or incorporating into different reports.

For details, see [Export Results to the Workspace](#) in the Simulink Report Generator User's Guide.

Improved PDF Images of Models and Charts

The Simulink Report Generator includes Simulink models and Stateflow charts in PDF reports as Scalable Vector Graphics (SVG) images. SVG images substantially improve the readability of Simulink models and Stateflow diagrams.

R2010b

Version: 3.9
New Features: Yes
Bug Fixes: Yes

Simulink Workspace Variable and Simulink Workspace Variable Loop Components Added

The new Simulink Workspace Variable and Simulink Workspace Variable Loop components report on Simulink workspace variable objects.

MATLAB Function Component Added

The new MATLAB Function component inserts information about MATLAB Function blocks into a report.

Model Configuration Set Component Added

The new Model Configuration Set component inserts the active configuration set of a model into a report.

System Design Description Report Enhancements

The System Design Description report, which you can generate from the Simulink Model Editor, includes additional information about these elements of a model:

- Simulink workspace variables
- Configuration sets
- MATLAB Function blocks
- Truth tables

The System Design Description dialog box includes a new stylesheet option, for specifying the report output format. Customizing the System Design Description report is simpler.

For details, see [Generate System Design Description Reports](#).

Transposable Columns for Summary Table Components

For the Fixed Point Summary Table, Stateflow Summary Table, and Requirements Summary Table components, use the new **Transpose table** check box to change the summary table rows into columns in the generated report. Specifying this option puts the property names in the first column and the values in the other columns.

Improved XML Comparison Report

Reports for comparisons of XML files exported from Simulink models have a new faster user interface, with changed parameters displayed in a separate panel for easier review. The enhanced report now has color highlighting for new and changed items. The report provides additional filter options, allowing you to filter categories of changes, such as nonfunctional changes (such as position or font), line changes, and changes in block parameter defaults.

For details, see [Explore the XML Comparison Report](#) in the Simulink Report Generator User's Guide.

R2010a

Version: 3.8
New Features: Yes
Bug Fixes: Yes

Model Reference Support for Model Loop Component

The Model Loop component has a new Model Reference option for automatically reporting on referenced models.

Improved XML Comparisons for Files with the Same Name

Comparisons of XML files exported from Simulink models with the same name now only contain information about user changes to the files. In previous releases, the comparison process introduced confusing artificial changes to both files, such as file name changes. Comparing the XML exported from two versions of the same file is a common workflow when using Configuration Management tools. The XML comparison now produces better results for this workflow.

R2009b

Version: 3.7
New Features: Yes
Bug Fixes: Yes

System Design Description Report

From the Simulink Model Editor, you can access a new System Design Description report. The report provides summary or detailed information about the system design represented by a model. You can specify report options using the report dialog box, or you can create a customized version of the report using the Report Explorer. For details, see [Generate System Design Description Reports](#).

Blocks Sortable by Model and Chart Layout

For looping components, you can sort blocks based on how the blocks are arranged in the model or chart. The two new **sort blocks** options are: **By layout (left to right)** and **By layout (top to bottom)**. These options reflect the model or chart layout horizontally across rows or vertically down columns.

The components with these new block sorting options are:

- Block Loop
- Chart Loop
- Fixed Point Block Loop
- Fixed Point Summary Table
- Missing Requirements Block Loop
- Requirements Block Loop
- Requirements Summary Table
- Simulink Summary Table
- Stateflow Summary Table

Reporting Compiled Simulink Model Data

The new **Compile model to report on compiled information** report output option ensures that a report reflects compiled values for Simulink parameters. For details, see Report Explorer Report Options in the Simulink Report Generator documentation.

New Components for the Requirements Management Interface

New components that support the Requirements Management Interface are:

- Missing Requirements Block Loop — Apply all child components to blocks that do not have requirements
- Missing Requirements System Loop — Loop only on systems and subsystems that do not have associated requirements
- Requirements Documents Table — Insert table of linked requirements documents
- Requirements Signal Loop — Run child components for each signal with requirements in current system, model, or block

Goto and From Block Information Added to Simulink Summary Table

The Simulink Summary Table component now reports additional information about Goto and From blocks.

For Goto block properties, the new columns are:

- **From Blk** — Name of the From block connected to the Goto block; this name links to that block's properties information in the report
- **From Blk Location** — Path to From block location in the model

For From block properties, the new columns are:

- **Goto Blk Name** — Name of the Goto block connected to the From block; this name links to that block's properties information in the report
- **Goto Blk Location** — Path to Goto block location in the model

If a Goto or From block is not connected to a corresponding From or Goto block, you see "Unconnected" in the Goto or From block name and location columns.

Improved Images in Word and RTF Reports on Windows Platforms

Compatibility Considerations: Yes

To provide better graphics quality in reports using the Word document format or RTF (Rich Text format) on Windows® platforms, the default format for Handle Graphics®, Simulink, and Stateflow images is now Windows metafile format (the default was black and white TIFF).

You can control the image format using the MATLAB preferences or the Simulink Report Generator Preferences, or from snapshot components such as the Axes Snapshot component.

Compatibility Considerations

To change the image format back to the previous default of black and white TIFF, change the preferences.

Required Products Information for MATLAB/Toolbox Version Number Component

The MATLAB/Toolbox Version Number component now supports options to display information based on whether a Simulink model or Stateflow chart requires a MathWorks™ product.

Block Summary Table Link to Data Object Property Information

For Simulink data object variables, in the Block Summary table, the block variables column (third column) now provides a link from the variable name to the Simulink Functions and Variables table row for that variable. The Model Variables table includes information about the data object, such as the data type and the minimum and maximum values.

Adobe Illustrator Image File Format No Longer Supported

Compatibility Considerations: Yes

Compatibility Considerations

The **Image file format** options for these components no longer include Adobe® Illustrator:

- Look-Up Table
- Scope Snapshot
- Stateflow Dialog Snapshot
- Stateflow Snapshot
- System Snapshot
- To Workspace Plot

If you wish to integrate a Simulink Report Generator image into Adobe Illustrator, specify a image file format supported by Adobe Illustrator, such as PDF, and then open the image file in Adobe Illustrator.

Navigation Controls for XML Comparison Report

The XML comparison report has new navigation controls to step through differences in the report. You can use the toolbar buttons or the **XML** menu to move to the next or previous group of changes. As you step through selected changes in the report, Simulink Report Generator can highlight the corresponding items in the original models.

Other usability improvements in the report include:

- Enhanced XML comparison algorithm with reduced memory consumption
- Improved matching results for many types of Simulink blocks and Stateflow elements
- Ability to filter out nonfunctional differences in the comparison result
- Simplified toolbar and **XML** menu

For details, see [Explore the XML Comparison Report](#) in the Simulink Report Generator User's Guide.

R2009a

Version: 3.6
New Features: Yes
Bug Fixes: Yes

New XML Comparison Demo

The following new demo shows you how to use Simulink Report Generator to export XML text files from two Simulink models and perform an XML comparison on the exported files:

`slxml_eml_radar`

Print a Sample Time Legend

Version 3.4 introduced the Sample Time Legend to the Simulink Report Generator. With Version 3.6 you can easily print a Sample Time Legend.

R2008b+

Version: 3.5
New Features: Yes
Bug Fixes: Yes

Comparison of XML Files Exported From Simulink Models

New comparison report for pairs of XML files, including an option to compare XML files exported from Simulink models.

XML comparison report can display highlighted results in the original models.

For details, see [Comparing XML Files Exported from Simulink Models](#) in the Simulink Report Generator documentation.

See also the following new demos:

- `s1xml_sfcar`
- `s1xml_truthtables`

R2008b

Version: 3.4
New Features: Yes
Bug Fixes: Yes

Simulink Web View Support for MATLAB Function Blocks in Stateflow

Web views support Stateflow MATLAB Function blocks, enabling the display of Stateflow MATLAB Function block code in Web views.

Simulink Web View Support for Simulink Functions in Stateflow

Web views support Stateflow Simulink functions, allowing display of function contents in Web views.

R2008a+

Version: 3.3.1
New Features: No
Bug Fixes: Yes

R2008a

Version: 3.3
New Features: Yes
Bug Fixes: Yes

Simulink Web View Enhancements

Performance and Scalability Enhancements

- The Simulink Report Generator 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.

MATLAB Function Block Support

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

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

R2007b

Version: 3.2.1
New Features: No
Bug Fixes: Yes

R2007a

Version: 3.2
New Features: Yes
Bug Fixes: Yes

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.

R2006b

Version: 3.1
New Features: Yes
Bug Fixes: Yes

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 Simulink Coder™ software. Also imports custom files you specify as part of your model.

R2006a+

Version: 3.0.1
New Features: No
Bug Fixes: Yes

R2006a

Version: 3.0
New Features: Yes
Bug Fixes: Yes

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 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 MathWorks products installed.

For details, see *Export 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:

```
HKEY_CURRENT_USER\Software\Adobe\Adobe SVG Viewer\version\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:

```
HKEY_CURRENT_USER\Software\Adobe\Adobe SVG Viewer\3.03\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.

R14SP3

Version: 2.3.1
New Features: No
Bug Fixes: Yes

R14SP2+

Version: 2.3
New Features: Yes
Bug Fixes: Yes

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.