

# **Report Generator Release Notes**

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# Summary by Version

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

<b>Version (Release)</b>	<b>New Features and Changes</b>	<b>Version Compatibility Considerations</b>	<b>Fixed Bugs and Known Problems</b>	<b>Related Documentation at Web Site</b>
<b>Latest Version V3.2 (R2007a)</b>	Yes Details	No	Bug Reports Includes fixes	Printable Release Notes: PDF  Current product documentation
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	Yes Summary	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	Yes Summary	No bug fixes	No
V2.1 (R14+)	Yes Details	No	No bug fixes	No
V2.0 (R14)	Yes Details	Yes Summary	"Known Problems" on page 23	No
V1.3 (R13)	Yes Details	No	No bug fixes	Yes

## About Release Notes

Use release notes when upgrading to a newer version to learn about new features and changes, and the potential impact on your existing files and practices. Release notes are also beneficial if you use or support multiple versions.

If you are not upgrading from the most recent previous version, review 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 New Features and Changes, Version Compatibility Considerations, and Bug Reports for V1.1 and V1.2.

## New Features and Changes

These include

- New functionality
- Changes to existing functionality
- Changes to system requirements (complete system requirements for the current version of MATLAB® Report Generator and Simulink® Report Generator are at the MathWorks Web site)
- Any version compatibility considerations associated with each new feature or change

## Version Compatibility Considerations

When a new feature or change introduces a known incompatibility between versions, its description includes a **Compatibility Considerations** subsection that details the impact. For a list of all new features and changes that have compatibility impact, see the “Compatibility Summary for Report Generator” on page 27.

Compatibility issues that become known after the product has been released are added to Bug Reports at the MathWorks Web site. Because bug fixes can sometimes result in incompatibilities, also review fixed bugs in Bug Reports for any compatibility impact.

## **Fixed Bugs and Known Problems**

MathWorks Bug Reports is a user-searchable database of known problems, workarounds, and fixes. The MathWorks updates the Bug Reports database as new problems and resolutions become known, so check it as needed for the latest information.

Access Bug Reports at the MathWorks Web site using your MathWorks Account. If you are not logged in to your MathWorks Account when you link to Bug Reports, you are prompted to log in or create an account. You then can view bug fixes and known problems for R14SP2 and more recent releases.

The Bug Reports database was introduced for R14SP2 and does not include information for prior releases. You can access a list of bug fixes made in prior versions via the links in the summary table.

## **Related Documentation at Web Site**

**Printable Release Notes (PDF).** You can print release notes from the PDF version, located at the MathWorks Web site. The PDF version does not support links to other documents or to the Web site, such as to Bug Reports. Use the browser-based version of release notes for access to all information.

**Product Documentation.** At the MathWorks Web site, you can access complete product documentation for the current version and some previous versions, as noted in the summary table.

## Version 3.2 (R2007a) Report Generator

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 are:

- “Simulink Web View Enhancements” on page 4
- “SVG Format Support in System Snapshot and Stateflow Snapshot Components” on page 4

### 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

### SVG Format Support in System Snapshot and Stateflow Snapshot Components

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



## Version 3.1 (R2006b) Report Generator

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 are:

- “New Components for Real-Time Workshop” on page 5

### **New Components for Real-Time Workshop**

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

#### 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 and any custom files you specify as part of your model.

## Version 3.0.1 (R2006a+) Report Generator

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

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

## Version 3.0 (R2006a) Report Generator

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	Yes—Details labeled as <b>Compatibility Considerations</b> , below. See also Summary.	Bug Reports Includes fixes	No

New features and changes introduced in this version are:

- “Simulink Models Can Be Exported as Web Views” on page 7
- “Model Loop Component Reports on Libraries” on page 9
- “Model Advisor Results Reported by New Component” on page 9
- “User Interface and Performance Enhanced” on page 9
- “Empty Columns Removed from Summary Tables” on page 9
- “XML File Format Changed” on page 9

### Simulink Models Can Be Exported as Web Views

You can now create a Web view of a Simulink model or Stateflow diagram. A Web view is an interactive rendition of the model or diagram 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 Simulink Report Generator. 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 may not have MathWorks products installed.

For details, see “Exporting Simulink Models to Web Views” in the MATLAB 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/>.
- Internet Explorer with the Adobe SVG Viewer plug-in. To obtain the Adobe 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 Adobe SVG Viewer plug-in:

- In panning mode, the cursor does not change.
- On a Japanese 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 in Simulink Report Generator 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 in Simulink Report Generator 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.

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.

## **XML File Format Changed**

The format of XML files has changed in V3.0 (R2006a).

## **Compatibility Considerations**

In V3.0 (R2006a), Report Explorer and the `rptconvert` command can convert XML files produced by Report Generator in V2.3.1 (R14SP3) and previous versions. However, in V2.3.1 (R14SP3) and previous versions, Report Explorer and the `rptconvert` command cannot convert XML files produced by Report Generator in V3.0 (R2006a).

## Version 2.3.1 (R14SP3) Report Generator

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
Yes Details below	No	Bug Reports Includes fixes	No

New features and changes introduced in this version are:

- “Stylesheets Modify PDF Headers and Footers” on page 10

### Stylesheets Modify PDF Headers and Footers

This release adds support for modifying the content of headers and footers in PDF reports. This feature is implemented using stylesheet cells and cell groups. A *cell group* contains one or more stylesheet cells. A *stylesheet cell* is a set of values that determine the content of a particular portion of the header or footer for a page.

Two cell groups, **Header Content** and **Footer Content**, are available for PDF reports. You can use templates to specify XML code that defines the content for a header or footer.

## Version 2.3 (R14SP2+) Report Generator

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 are:

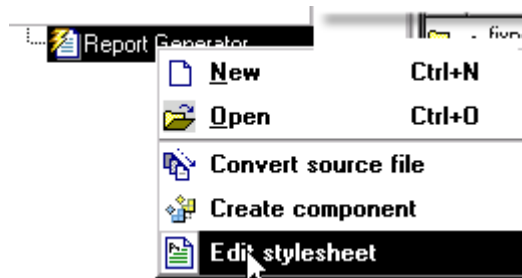
- “Stylesheet Editor” on page 11
- “Table Cell Spanning” on page 12
- “Generating Microsoft Word Documents as .doc Files” on page 12
- “Dialog Snapshot Components” on page 13
- “Annotation Loop Component” on page 13
- “Improved Graphical User Interface” on page 13

### Stylesheet Editor

You can use the Stylesheet Editor to customize the formatting of your HTML, PDF, and Word documents. For example, you can specify fonts, paper layout, table presentation, as well as other characteristics of your final report.

Customizing reports by editing stylesheets gives you the flexibility to create reports that conform to corporate style guidelines and requirements.

To open the Stylesheet Editor, right-click **Report Generator** in the Outline pane of the Report Explorer and then click **Edit Stylesheet** on the shortcut menu, as shown:



For more information about using the Stylesheet Editor, see “Creating and Using Customized Styles” in the Report Generator documentation.

## Table Cell Spanning

You can use Report Generator to create advanced table layouts for MATLAB, Simulink, Stateflow, and Handle Graphics® property tables. The advanced layouts include cells that span multiple rows or columns.

## Generating Microsoft Word Documents as .doc Files

You can use Report Generator to generate reports that are saved as Microsoft Word documents with the .doc extension. You can also convert XML source files that are generated by Report Generator to .doc files.

The reports you create are easier to distribute via e-mail, to share with others, and to manage.

You must have Microsoft Word installed to use this feature, and you must be using Report Generator on a PC system.

To use this feature select **Word Document** from the **Stylesheet** drop-down list in the Convert Source File dialog box, as shown:



**Convert Source File**

The Source File Converter transforms DocBook XML source files created by the Report Generator into a formatted document, such as HTML, RTF, or PDF.

Conversion Options

Source file:

File format:

Stylesheet: Acrobat (PDF)  
Rich Text Format

View re

## 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 Report Generator documentation.

## Annotation Loop Component

You can include Simulink annotations in your reports. A Simulink annotation is a text area 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 MATLAB Report Generator documentation.

## Improved Graphical User Interface

This version of Report Generator has the following changes and improvements to the graphical user interface:

- The File Converter has a **Source File** drop-down list. Click **Browse** to navigate to a directory to select a source file. The default directory is the current directory.
- In the File Converter, you can select a stylesheet from the drop-down list and click **Edit** to open the Stylesheet Editor.

- Report Generator has an improved mechanism for detecting and displaying errors that occur when you attempt to add a component that makes the style hierarchy invalid. Users of earlier versions may notice that Report Generator issues warnings for components that had no problems in earlier versions. In this release, warning messages contain instructions about how to fix the problem.
- There is an improved user interface for searching according to property/value pairs in Simulink System Loop and Block Loop components.
- The Figure Screen Capture component has been improved to capture window decorations such as menus, title bars, and toolbars.

## Version 2.2 (R14SP1+) Report Generator

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	Yes—Details labeled as <b>Compatibility Considerations</b> , below. See also Summary.	No bug fixes	No

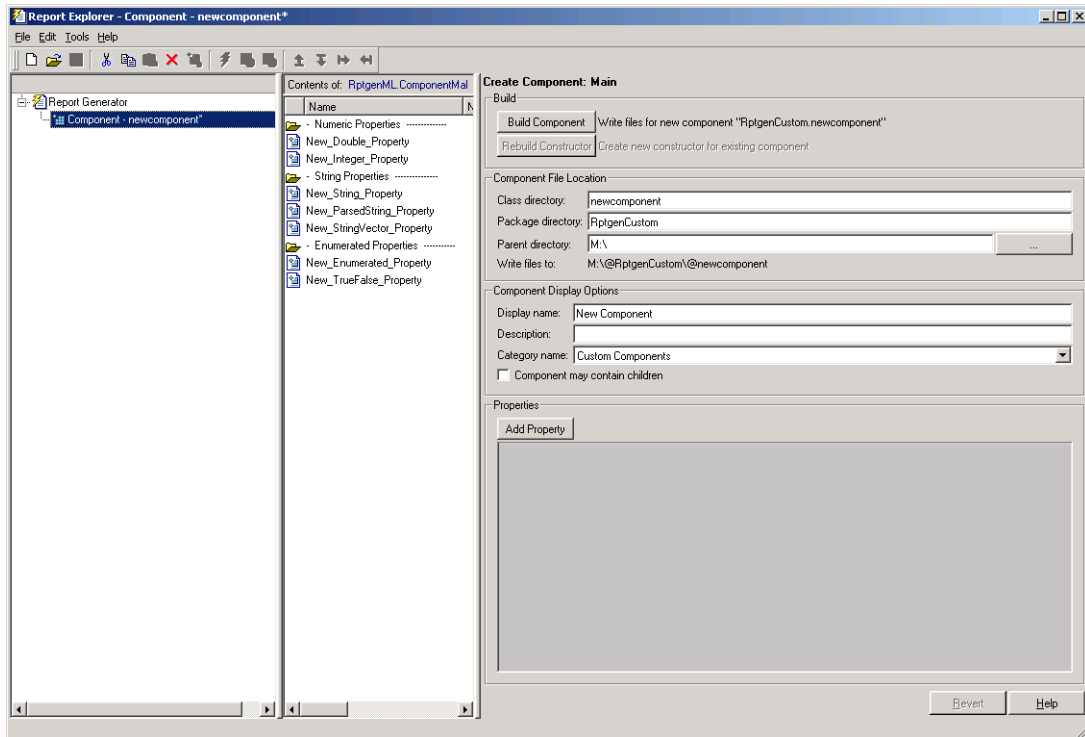
New features and changes introduced in this version are:

- “Component Creator” on page 15
- “64-bit Linux Platforms Supported” on page 17

### Component Creator

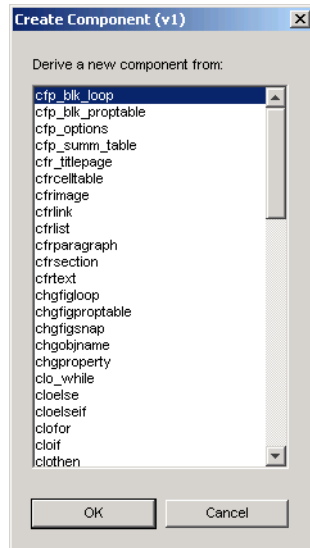
Report Generator Version 2.2 provides the Component Creator, a tool which allows you to create custom components. The Component Creator had previously been available in Report Generator Version 1, and is now being introduced in Version 2 of the product.

With the Component Creator you create a “skeleton” object, that is, the Component Creator sets up just the raw structure of the component. You create additional required executable M-code by editing one or more files that the Component Creator produces. A picture of the Component Creator, showing its three panes, as follows:



## Compatibility Considerations

Components created with Report Generator Version 1 can be imported and used in Version 2. If you want to derive a component from an existing Version 1 component, the Report Explorer presents you with a list of components from which you can choose a component to modify. The list of components is similar to the following:



## 64-bit Linux Platforms Supported

Report Generator now supports 64-bit Linux platforms.

## Version 2.1 (R14+) Report Generator

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 are:

- “Improvements to Images” on page 18
- “Improved PDF Support” on page 18
- “Support for Non-English Systems” on page 18
- “Japanese PDF Reports Require Font Registration” on page 19
- “Enhancements for Simulink Components” on page 19
- “Commands to Customize Simulink Reports” on page 19

### Improvements to Images

This version includes scaling and alignment control for high-quality bitmap Handle Graphics images.

### Improved PDF Support

Improved PDF support includes:

- PDF stylesheet support for custom page headers and footers
- PDF title page stylesheet customization

### Support for Non-English Systems

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

## Japanese PDF Reports Require Font Registration

For Japanese PDF support, you must register the file location of a Japanese language font with Report Generator. If generated PDF documents contain unrecognizable characters, you must register that font. To register a font, use the `setPref` function:

```
RptgenML.setPref('rptgen.body.font.family.fontfile',  
'c:\winnt\fonts\msgothic.ttf');
```

This preference setting persists between sessions and only needs to be set once. If the preference is not set, a warning appears during PDF generation that the font must be set.

## 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 output handle. Note that none of the set methods set the current reporting context like a loop.



## Version 2.0 (R14) Report Generator

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	Yes—Details labeled as <b>Compatibility Considerations</b> , below. See also Summary.	“Known Problems” on page 23	No

New features and changes introduced in this version are:

- “Updated User Interface” on page 21
- “Change to %<<varname>> Notation” on page 22
- “Improvements to Components” on page 22
- “New Components” on page 23

### Updated User Interface

The user interface has been enhanced to let you do the following:

- View, create, and edit setup files
- Generate reports
- Convert XML source files to various outputs, including HTML and RTF

### Compatibility Considerations

The original version of Report Generator is still available and can be accessed via the MATLAB command line. To open the previous version of the Report Generator interface, enter `RptgenML.v1mode(true)` at the command line. To use the new version of the Report Generator interface, enter `RptgenML.v1mode(false)` at the command line.

The previous version switch is session-dependent. To always use the previous version of Report Generator, add `RptgenML.v1mode(true)` to your `startup.m` file.

## **Change to %<<varname>> Notation**

The %<<varname>> notation imports text with no collapsed representation.

## **Improvements to Components**

These components have been improved:

- Looping components intrinsically create sections and anchors.
- Handle Graphics Property and MATLAB Variable components provide increased control over output formatting.
- All summary tables support manual property names and column widths.
- Chapter/Subsection component can manually set the chapter number.
- Image component supports captions.
- Table component can override collapsed representation.
- Title Page component can be used without Chapter components.
- Figure Snapshot component supports titles and captions.
- Nest Setup File component can import multiple files by name.
- 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.

- Documentation component can import HTML and RTF documents.

## **New Components**

These components have been added:

- Axes Loop
- Axes Snapshot
- Handle Graphics Object Anchor
- Handle Graphics Summary Table
- Object Loop
- MATLAB Property Table
- To Workspace Block
- Requirements Table
- Stateflow Machine Loop
- Stateflow Object Loop
- Stateflow State Loop
- Stateflow Auto Table
- Stateflow Hierarchy
- Stateflow Property

## **Known Problems**

This release has these known problems.

- “Editing Workspace Variable Names in List Component” on page 23
- “Script Generation Fails for Property Tables” on page 24
- “Report Explorer Appears Blank” on page 24

## **Editing Workspace Variable Names in List Component**

When editing the workspace variable names in the List component, you must enclose the workspace variable name in single quotation marks. (216777)

### **Script Generation Fails for Property Tables**

The Generate M-File... option in the Report Explorer creates a script that causes an error if the setup file contains any property table components. The scripts are valid, but the code libraries which they call are broken. (217678)

### **Report Explorer Appears Blank**

While using Report Generator, the Report Explorer might appear blank with no visible content. If this happens, create a new setup file. The list of components or setup files should appear in the Options palette. (210869)

## Version 1.3 (R13) Report Generator

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 are:

- “Table Column Widths Can Be Specified” on page 25
- “Text Can Be Imported from RTF and HTML Files” on page 25
- “Stateflow Notes Supported” on page 25
- “Component Inserts Text from Doc Blocks” on page 25
- “Simulink and Stateflow Components Improved” on page 26

### Table Column Widths Can Be Specified

In the Cell Table component, you can now specify table column widths.

### Text Can Be Imported from RTF and HTML Files

The Import File component can now import formatted text from RTF and HTML source files.

### Stateflow Notes Supported

Simulink Report Generator now supports Stateflow Notes.

### Component Inserts Text from Doc Blocks

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

## **Simulink and Stateflow Components Improved**

Simulink and Stateflow 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.

## Compatibility Summary for Report Generator

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>Latest Version V3.2 (R2007a)</b>	None
V3.1 (R2006b)	None
V3.0.1 (R2006a+)	None
V3.0 (R2006a)	See the <b>Compatibility Considerations</b> subheading for this new feature or change: “XML File Format Changed” on page 9
V2.3.1 (R14SP3)	None
V2.3 (R14SP2+)	None
V2.2 (R14SP1+)	See the <b>Compatibility Considerations</b> subheading for this new feature or change: “Component Creator” on page 15
V2.1 (R14+)	None
V2.0 (R14)	See the <b>Compatibility Considerations</b> subheading for this new feature or change: “Updated User Interface” on page 21
V1.3 (R13)	None