

# Simulink® Report Generator 3

Automatically generate documentation for Simulink® and Stateflow® models

The Simulink® Report Generator can automatically create documentation from Simulink® and Stateflow® models. It lets you document software requirements and design specifications and produce reports from your models, all in a standard format.

The Simulink Report Generator also creates Web views that are interactive renditions of your models viewable in a Web browser. You can navigate Web views in the same way that you navigate Simulink models. Web views can be shared with users who do not have MathWorks products installed.

The Simulink Report Generator facilitates information exchange and helps keep your documentation and specifications up to date with your design. It is closely integrated with the MATLAB® Report Generator, providing a single report-generation environment.

## Exporting Web Views

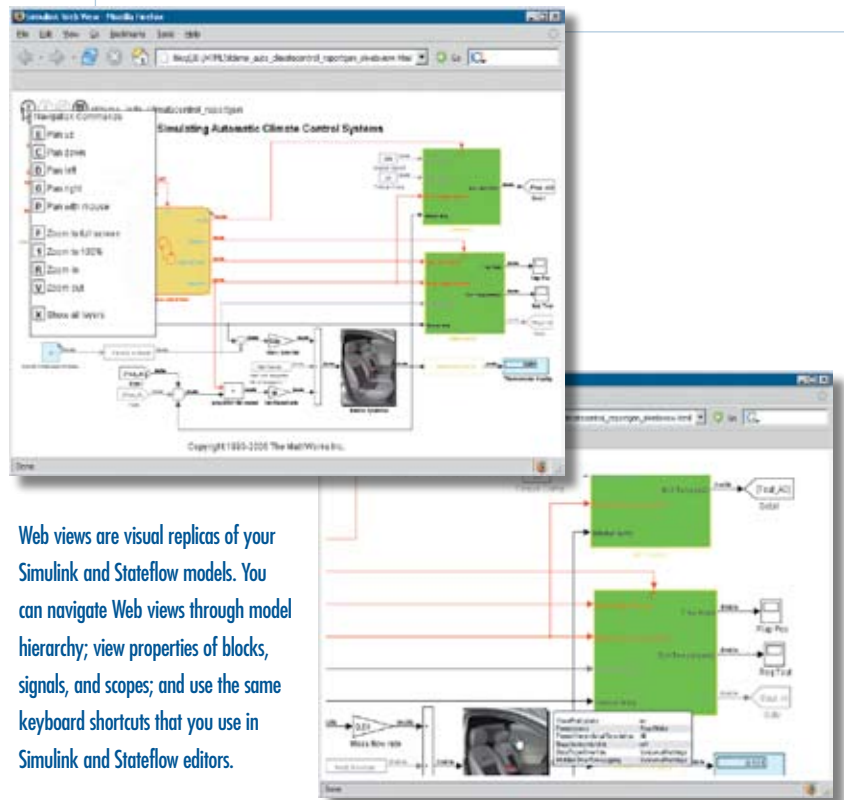
The Simulink Report Generator lets you create Web views of your Simulink and Stateflow models that look exactly the same as models viewed in the Simulink and Stateflow editors. You can use model hierarchy to quickly navigate to a specific subsystem and to view properties of blocks, signals and scopes. You can zoom in and out, pan, and fit to view using the same keyboard shortcuts that you use in Simulink and Stateflow editors. You can share Web views with colleagues, royalty free.

## Documenting Simulink and Stateflow Models

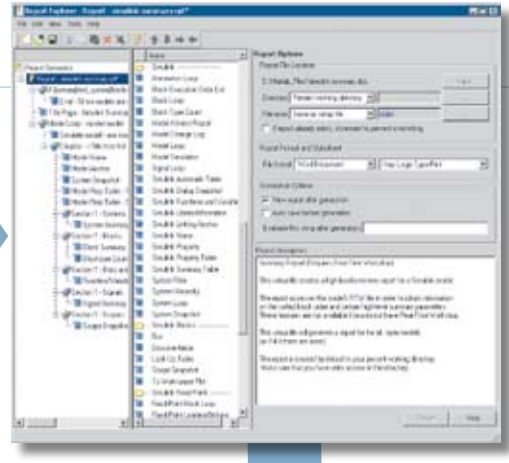
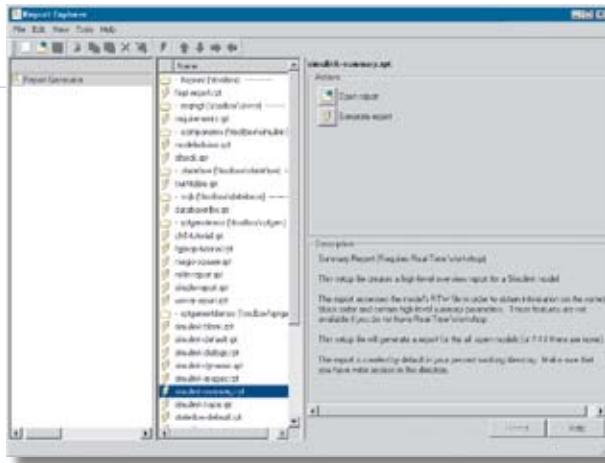
You can control the Simulink Report Generator through the Report Explorer graphical user interface (GUI) or from the MATLAB® command line. You select what you want to highlight in your Simulink and Stateflow models using a setup file—a template that lists in outline form all the components that will be included in your report. Each component specifies an action to be taken in the report, such as capture model structure, parameters, and simulation results.

## KEY FEATURES

- Lets you create interactive renditions of your Simulink and Stateflow models that can be viewed in a web browser
- Enables push-button documentation of Simulink and Stateflow models and simulation results
- Simulates models and executes MATLAB commands within reports
- Enables conditional documentation generation via logical template components, such as IF, THEN, ELSE, and WHILE
- Lets you create and distribute documentation templates using customized style sheets
- Provides extensible components and style sheets
- Creates reports in multiple formats, including HTML, PDF, RTF, Microsoft Word, and XML



Web views are visual replicas of your Simulink and Stateflow models. You can navigate Web views through model hierarchy; view properties of blocks, signals, and scopes; and use the same keyboard shortcuts that you use in Simulink and Stateflow editors.



To generate a report you select a new or existing setup file, add components to the setup file, edit component properties, select one of the available formats, and choose a style sheet.



### Creating Custom Components

The Component Creator makes it easy to write new components or update existing custom components. The component API is fully documented, giving you complete control over run-time and edit-time behavior.

### Simulating Models and Running MATLAB Commands Within a Report

The Simulink Report Generator enables you to simulate models and then capture and document the results as they are created. You can also run scripts in MATLAB to preprocess data for your simulations or post-process data from a simulation and display the results as graphical plots or numerical values.

### Creating Conditional Reports

The logical and flow-control components in the Simulink Report Generator let you create conditional reports based on the information generated during the simulation. For example, if you are running a mathematical simulation and capture data that gives you an out-of-range condition, the report can be automatically modified to document that information.

### Creating and Editing Setup Files and Style Sheets in the Report Explorer

The Report Explorer lets you control the design, formatting, and presentation of your documentation or reports by selecting from the built-in setup files or creating your own. You can drag and drop components from the component list into your setup file, change the order of the

components, and modify component attributes and formatting. The formatting is controlled via a style sheet. You can use several built-in style sheets for each document type, or create a style sheet that meets your own specific requirements. You control page layout, font use, table display, header content, tables of contents, title presentation, and more. Setup files and style sheets can be reused and distributed.

### Generating Documents from your Setup Files

Once you have created a setup file, you can open the model that you want to document and generate your documentation from the Report Explorer. You can create documents in HTML, PDF, RTF, Microsoft Word, and XML formats.

### Required Products

- MATLAB
- MATLAB® Report Generator
- Simulink

### Related Products

- Simulink® Fixed Point.** Design and simulate fixed-point systems
- Simulink® Verification and Validation.** Develop designs and test cases mapped to requirements and measure test coverage

**Stateflow®.** Design and simulate event-driven systems

For more information on related products, visit [www.mathworks.com/products/SL\\_reportgenerator](http://www.mathworks.com/products/SL_reportgenerator)

### Platform and System Requirements

For platform and system requirements, visit [www.mathworks.com/products/SL\\_reportgenerator](http://www.mathworks.com/products/SL_reportgenerator)

### Resources and Support

**ONLINE USER COMMUNITY**  
[www.mathworks.com/matlabcentral](http://www.mathworks.com/matlabcentral)

**DEMOS**  
[www.mathworks.com/demos](http://www.mathworks.com/demos)

**THIRD-PARTY PRODUCTS AND SERVICES**  
[www.mathworks.com/connections](http://www.mathworks.com/connections)

**TECHNICAL SUPPORT**  
[www.mathworks.com/support](http://www.mathworks.com/support)

**TRAINING SERVICES**  
[www.mathworks.com/training](http://www.mathworks.com/training)

**CONSULTING SERVICES**  
[www.mathworks.com/consulting](http://www.mathworks.com/consulting)

**MATHWORKS ACCOUNT**  
[www.mathworks.com/accesslogin/](http://www.mathworks.com/accesslogin/)

#### MATHWORKS OFFICES

US & Canada	+1-508-647-7000
Australia	+61 28669 4700
Benelux	+31 (0) 182-696-700
France	+33 (0) 1-41-14-67-14
Germany	+49 (0) 241-470-750
Italy	+39 (011) 2274-700
Korea	+82 (0) 2-6006-5114
Spain	+34 91-799-1880
Sweden	+46 (8) 505-317-00
Switzerland	+41 (0) 31-950-60-20
UK	+44 (0)1223 226 700

For more information on MathWorks products and services: [www.mathworks.com](http://www.mathworks.com)