

The Reactis Communicator

To : Reactis Users
From : Reactive Systems, Inc.
http://www.reactive-systems.com/
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This is the fourth installment of "The Reactis Communicator", a low volume mailing list for conveying information about Reactis, RSI's embedded software design automation tool suite. Reactis enables users to deploy model-based software testing to dramatically reduce the costs of testing embedded control software. The tools are designed for use in conjunction with the Simulink® and Stateflow® modeling and simulation environments offered by The MathWorks, Inc.

If you are no longer interested in receiving information about Reactis, please see the instructions below for removing yourself from the list and we apologize for the intrusion.

We are pleased to announce the availability of Version 2003b1 of Reactis, the first beta release of the upcoming V2003 release. Numerous enhancements including an improved user interface, several new features, support for new Simulink blocks, performance improvements, and bug fixes have been made since the V2002.1 release. Thanks to all Reactis users who have provided valuable feedback that has been incorporated into the new version. The changes are summarized below.

Reactis V2003b1 is available immediately and runs on the Microsoft Windows® and Linux® platforms. Reactis is priced at US \$5000 per year per concurrent license. Free 30-day evaluation licenses are available.

New features since V2002.1 include the following.

1. Models load much more quickly.
2. The user interface has been reorganized and improved in several ways
 - The Simulator window is now the top-level window.
 - All other components of Reactis, such as Tester, can now be invoked from Simulator.
 - Multiple Simulator windows may now be opened concurrently.
 - Some dialogs have been eliminated to avoid excessive overlay of windows and dialogs.
3. The Info File editor has been improved.
 - A GUI is now available for construct type specifications.
 - A Copy-and-Paste capability was added.
4. The "transition action" coverage measure has been modified. The metric no longer tracks transition segments with no transition action.
5. Improved coverage tracking reporting is now available.
 - In Simulator, when hovering over an already covered target (e.g. transition, state, branch), the test and step in which the target was covered is now displayed.

- In Simulator, the menu item **Coverage -> Show List** now produces a list of all covered targets together with the test and step number in which they were covered. Clicking on the column headers will resort the list. Double-clicking on a row will highlight the associated target in the Simulator window.
 - Users may now print models (or portions thereof) from Simulator. Coverage information displayed at the time of printing will also be highlighted in the printout.
 - In the Test-Suite Browser the distribution of values that ports assume during a test or set of tests may now be displayed graphically.
 - In scopes, values may now be plotted as points as well as line graphs.
6. Table heights in the Info File Editor and the Test-Suite Browser may now be manually adjusted.
 7. Keyboard shortcuts for many menu items have been added.

Support has been added for the following new Simulink blocks and features

1. C and C++ S-Functions (preliminary)
2. Duplicate values at ends of 1d lookup tables
3. “Model post-Load Function” and “Model initialization function”
4. Demux blocks where number of output ports is smaller than size of input vector
5. Simulink block type “Assign”
6. Simulink block type “Hit Crossing”
7. Simulink block type “Direct Look-Up Table”
8. Simulink block type “Look-Up Table (n-D)”
9. Simulink block type “PreLook-Up Index Search”
10. Simulink block type “Interpolation (n-D) using PreLook-Up”

The following bugs have been fixed:

1. Fixed “encountered invalid type in FcnXXXTuple” bug.
2. Accept \wedge operator in “Fcn” blocks.
3. Fixed “too many type variables” bug.
4. Fixed “incomplete string” error that occurred for some models.
5. Fixed several parse errors when parsing MDL files.
6. Fixed “unable to resolve type...” error caused by certain feedback loops involving function-call sub-systems.
7. Fixed ”vector size too small for index...” error that occurred for some rare types of feedback loops involving multiplexers and demultiplexers.
8. Fixed bug in Discrete-Time-Integrator that produced ”NaN” output on the step following an input of ”inf” (now outputs inf).
9. Properly handle values of checkboxes and popup boxes in Mask Dialogs.

10. Workspace variables initialized by Simulink mask parameters now visible in Stateflowcharts.

11. In Simulator, hovering over a wire that leaves a demultiplexer/bus selector produces correct value

Regards,
The Reactis Team

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