

Reactis V2011

Released June 23, 2011



New Simulink Support

- ▶ MATLAB R2011a
- ▶ Function-Call Split block
- ▶ Rate Limiter block
- ▶ Enumerated types in S-Functions and Legacy Code blocks

New Tester Launch Dialog

How long to run? →

- ▶ time
- ▶ steps
- ▶ random/targeted steps

Reactis Tester: cruise.mdl

Preload Files:

File	Prune	Use Virtual Sources
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Add Remove

Run for:

hours minutes

20000 steps

5 tests in random phase

100 steps per random test

19500 steps in targeted phase

Coverage Objectives:

<input checked="" type="checkbox"/> Conditional Subsystems	<input checked="" type="checkbox"/> Decisions
<input checked="" type="checkbox"/> Branches	<input checked="" type="checkbox"/> Conditions
<input type="checkbox"/> Lookup Targets	<input checked="" type="checkbox"/> MC/DC
<input checked="" type="checkbox"/> States	<input checked="" type="checkbox"/> MCC
<input checked="" type="checkbox"/> Condition Actions	<input checked="" type="checkbox"/> Boundaries
<input checked="" type="checkbox"/> Transition Actions	<input checked="" type="checkbox"/> User-Defined Targets
<input checked="" type="checkbox"/> CSEPT	<input checked="" type="checkbox"/> Assertion Violations

Additional Parameters:

Output File: cruise.rst

Help Load Defaults ↑ ↓ Create Suite Close

Separate Tolerance for Each Output

The screenshot shows the Reactis software interface. On the left, the 'Error/Warning Details' window lists several warnings: 'Model fails test 1 at step 47, output 'throttleDelta'', 'Model fails test 1 at step 48, output 'throttleDelta'', 'Model fails test 1 at step 49, output 'throttleDelta'', 'Model fails test 1 at step 50, output 'throttleDelta'', 'Model fails test 1 at step 51, output 'throttleDelta'', and 'Model fails test 1 at step 52, output 'throttleDelta''. Below this list, a text box explains: 'When executing test 1 step 47, response of model on output 'throttleDelta' differs from value in test suite: Model: -0.000341592830223328, Test suite: 0.000658407, Difference: 0.00099999830223328, Relative Tolerance: 1E-05 (from Settings Dialog), Absolute Tolerance: 1E-05 * -0.000341592830223328 = -3.41592830223328E-09'. Buttons for 'Highlight', 'Save', and 'Ok' are visible.

The main window shows a schematic diagram with components like 'Solenoid', 'LampSpeed', 'Active', 'Brake', and 'Active_0'. A smaller window titled 'Differences for output: throttle...' displays a graph with the y-axis ranging from -1.20e-003 to 1.20e-003 and the x-axis from 0 to 60. The graph shows a green line that stays near zero until step 30, then drops to approximately -0.0008 and rises to approximately 0.0008 by step 50.

When running tests, Reactis flags output differences between model and test suite.

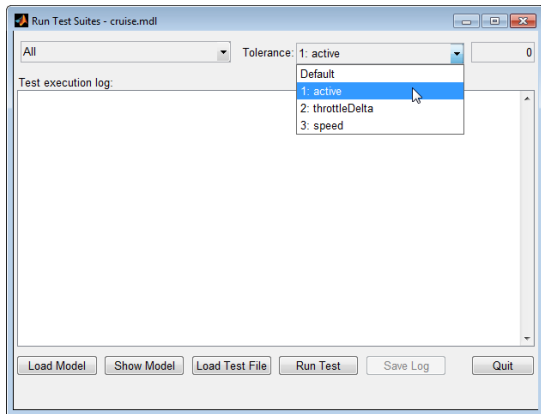
Tolerance

Old: global

New: different

tolerance possible for each output

Separate Tolerance for Each Output



Tolerances flow through to runtests

Model Search

The screenshot displays the Reactis software interface for a file named "cruise.mdl (R2010b) - cruise.rsi". The interface includes a menu bar (File, Edit, View, Simulate, Test Suite, Validate, Coverage, Window, Help) and a toolbar with various navigation and simulation controls. On the left, a project tree shows the hierarchy: "cruise" > "SL CruiseMain" > "SL CruiseMDL" > "DeactivateActivate", "DesiredSpeed", "Mode", "SpdCheck", "ThrottleCtl", "Plant", "LowSpeedOn", "Speed", and "Configuration Variables".

The main workspace shows a logic diagram with several components: inputs "3 cancel", "5 brake", "6 gas", and "[A] From"; logic gates "OR", "NOT", "AND", and "XOR"; and outputs "activate", "notd", "activate1", "onOff", "set", and "Mode". A search dialog box titled "Search in CruiseMDL" is open, showing the search term "brake" and options for "Match whole word only" (unchecked), "Match case" (unchecked), and "Direction" (set to "Down").

Copy System Path

The image shows a screenshot of the Reacis software interface. The main window displays a system diagram for 'cruise.mdl (R2010b) - cruise.rsi'. The diagram includes components like 'CruiseMain', 'CruiseMDI', 'cancel', 'OR', 'deactivate', 'NOT', 'activate', and 'mode'. A context menu is open over the 'CruiseMDI' component, with 'Copy System Path' selected. In the foreground, a Notepad++ window titled '*new 2 - Notepad++' shows the text 'cruise/CruiseMain/CruiseMDI' on line 1. A context menu is also open over this text, with 'Paste' selected. The Notepad++ status bar shows 'length: 27 |ir Ln: 1 Col: 28 Sel: 0'.

Other Items

- ▶ Extract subsystem option to not extract trigger mechanism when extracting
- ▶ Improved model initialization performance subsystem