

Reactis V2009.2

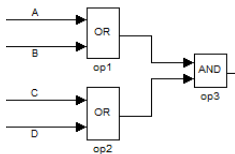
Released July 23, 2009



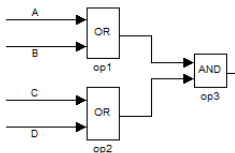
New Simulink Support

- ▶ Initial support for MATLAB R2009a.
- ▶ Accessing Data Store Memory blocks from within Stateflow charts is now supported.
- ▶ Support bus types in Stateflow charts
- ▶ Parameterized links in library references
- ▶ Setting the data type for a machine-global Stateflow variable to *inherited*
- ▶ The & operator can now be applied to array and structure elements as a parameter to an external C function called from Stateflow. For example: `foo(&(a[3]))` and `foo(&b.x)` are now supported if `foo` is an external C function called from Stateflow.

Multi-Block MC/DC



Multi-Block MC/DC

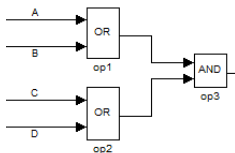


Traditional MC/DC

3 Decisions:

- ▶ *A or B*
- ▶ *C or D*
- ▶ *op1 and op2*

Multi-Block MC/DC



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- ▶ A or B
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- ▶ $op1$ and $op2$

Multi-block MC/DC

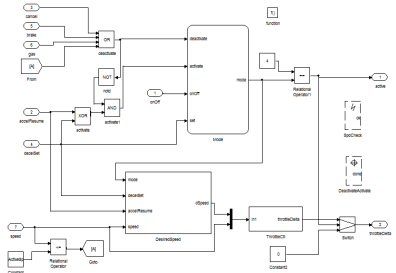
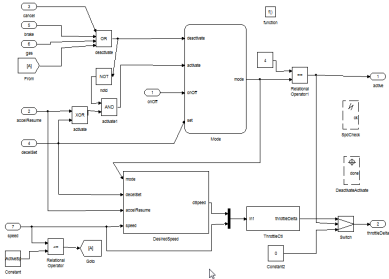
1 Decision:

- ▶ $(A$ or $B)$ and $(C$ or $D)$

Improved Drawing of Simulink Signal Lines

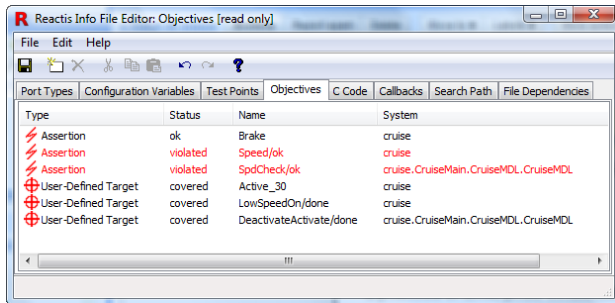
Before

After



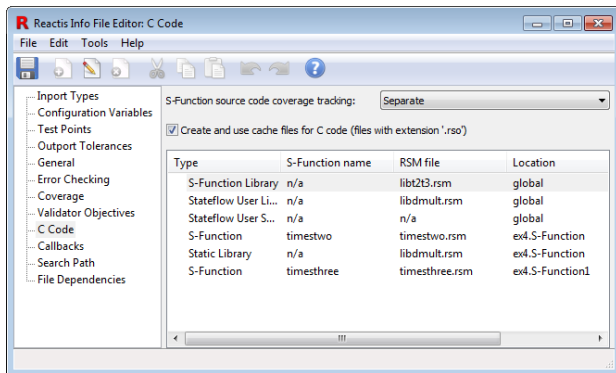
Validator Objectives Tab in RSI File Editor

List and manipulate all assertions, UDTs, and virtual sources in one place



- ▶ Assertion violated/ok? UDT covered/uncovered?
- ▶ Double-click to highlight item in model.
- ▶ Right-click to add, edit, remove item

C Code Tab in RSI File Editor



- ▶ List places C code might appear in model
- ▶ Easily attach same RSM file in multiple locations

Reactis for C Plugin

- ▶ Improved performance and memory consumption
- ▶ Improved coverage by Tester of C code
- ▶ When paused in Simulator, hovering over:
 - ▶ an active function displays the current call stack
 - ▶ a variable will display the location in the source code at which the variable was last modified
 - ▶ a pointer displays the contents of the location pointed to
 - ▶ a macro displays the expanded macro

Navigation Aids

Signal tracing click on a signal to trace it through model

Up-traversing bread crumbs clicking the *up* arrow (or pressing F2) to display the parent of the currently displayed subsystem, Reactis now highlights the subsystem that was previously visible

Find matching pairs double-click on Goto/From or Datastore block to see list of matching blocks.

Other Improvements

- ▶ New backend engine significantly improves performance when running Simulator or Tester on large models
- ▶ In the Reactis Info File Editor, multiple configuration variables can be removed at once
- ▶ Auto-wire Validator objective signals