Reactis V2013

Released August 14, 2013

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New Simulink Support

- Initial support for R2013a
- Support for .slx Format
  - Introduced in R2012a to replace .mdl format
  - XML-based format
- Support Simulink *configuration set reference* concept

Multiple Condition Coverage (MCC)

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No Short-Circuiting

A	B	C	Decision
F	F	F	F
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F	T	F	F
F	T	T	F
T	F	F	F
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Short-Circuiting

A	B	C	Decision
F	x	x	F
T	F	x	F
T	T	F	F
T	T	T	T

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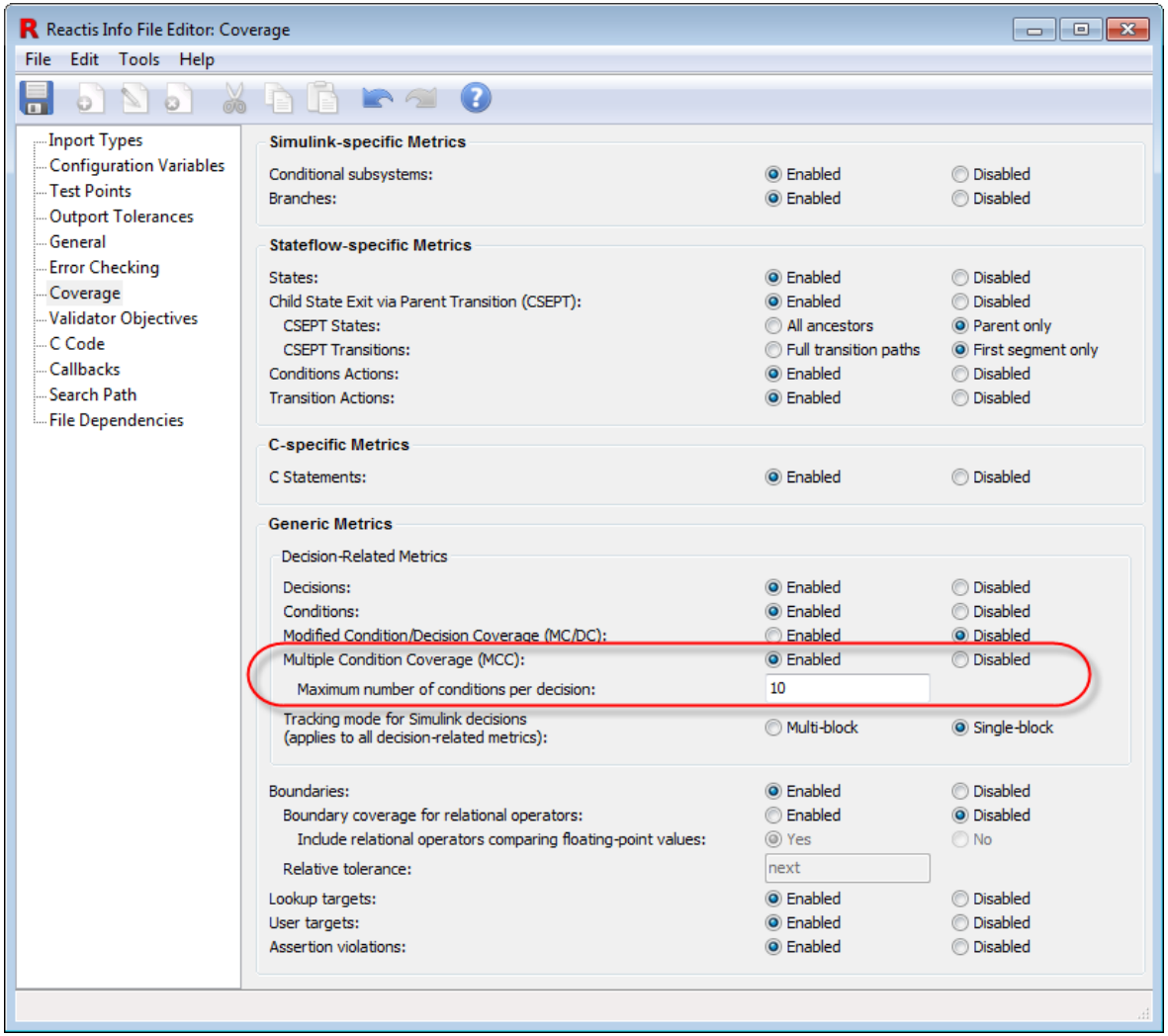
MCC Now Supported by Reactis



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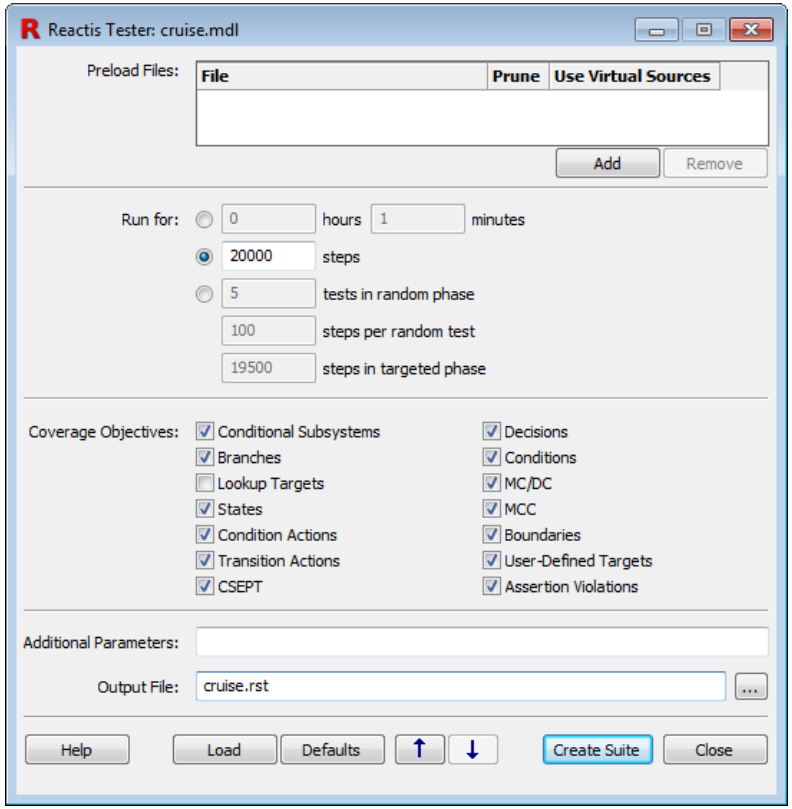
MCC Support in Reactis Tester



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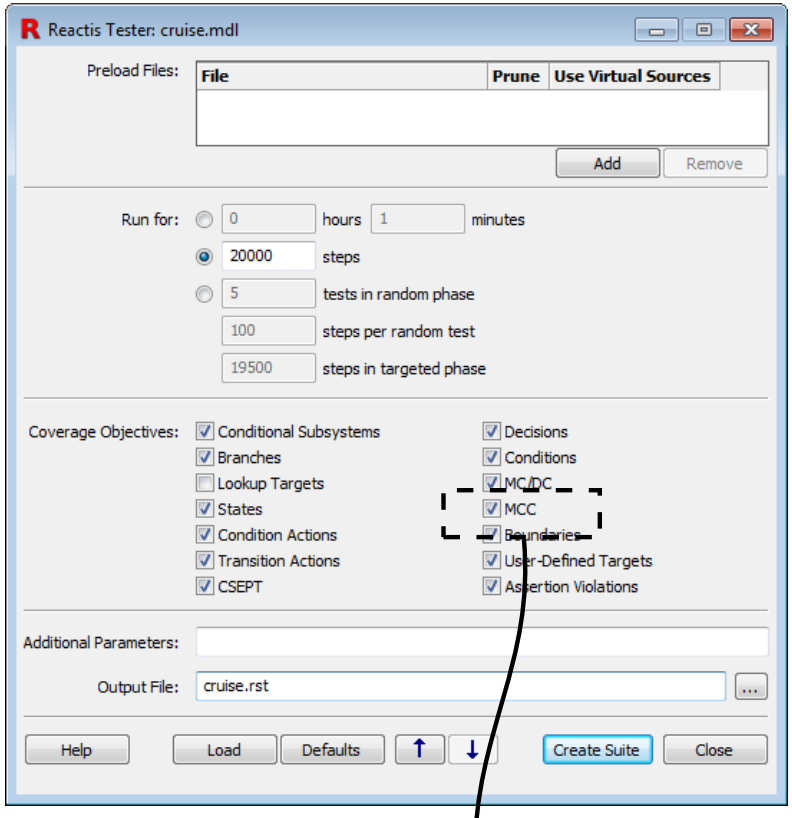

Tester attempts to cover MCC targets

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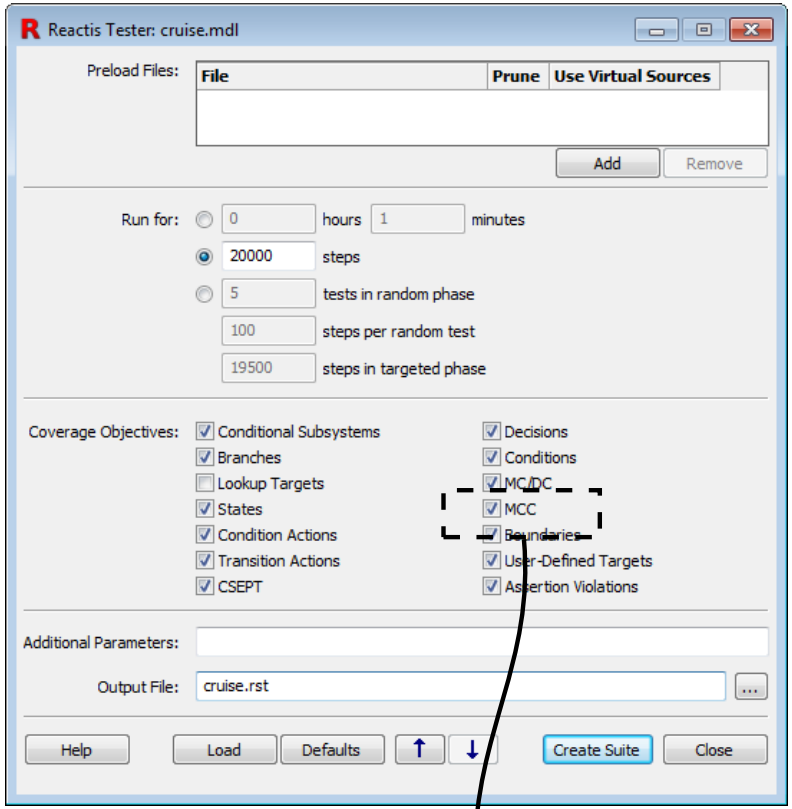

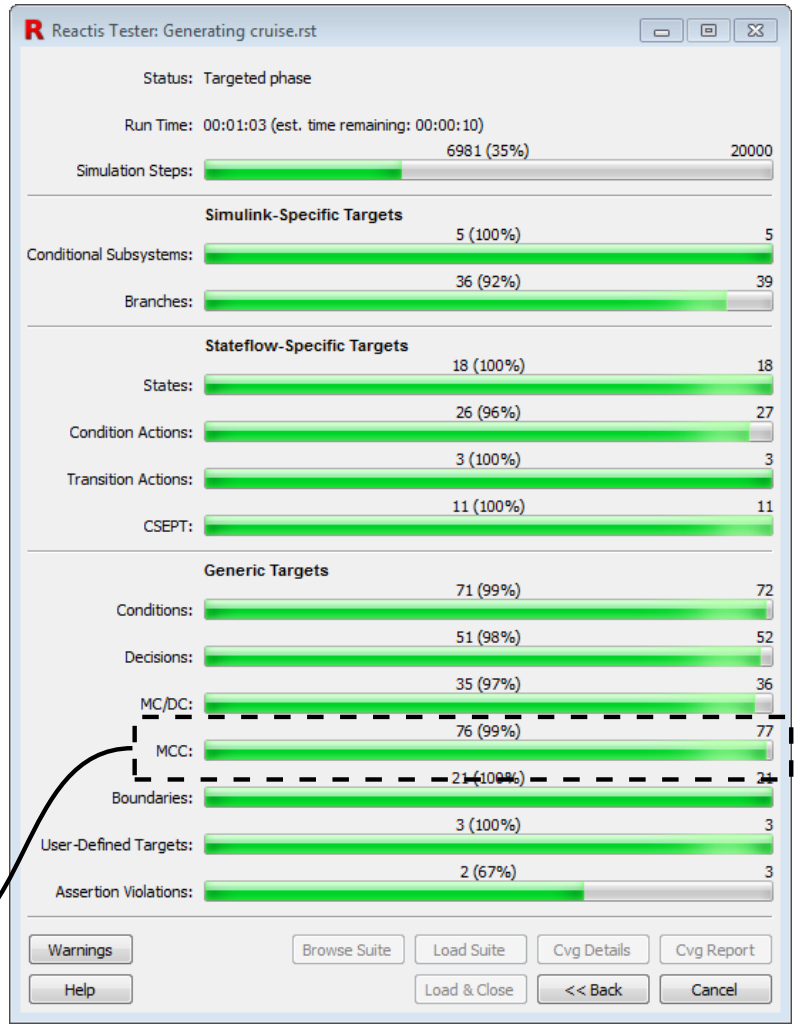

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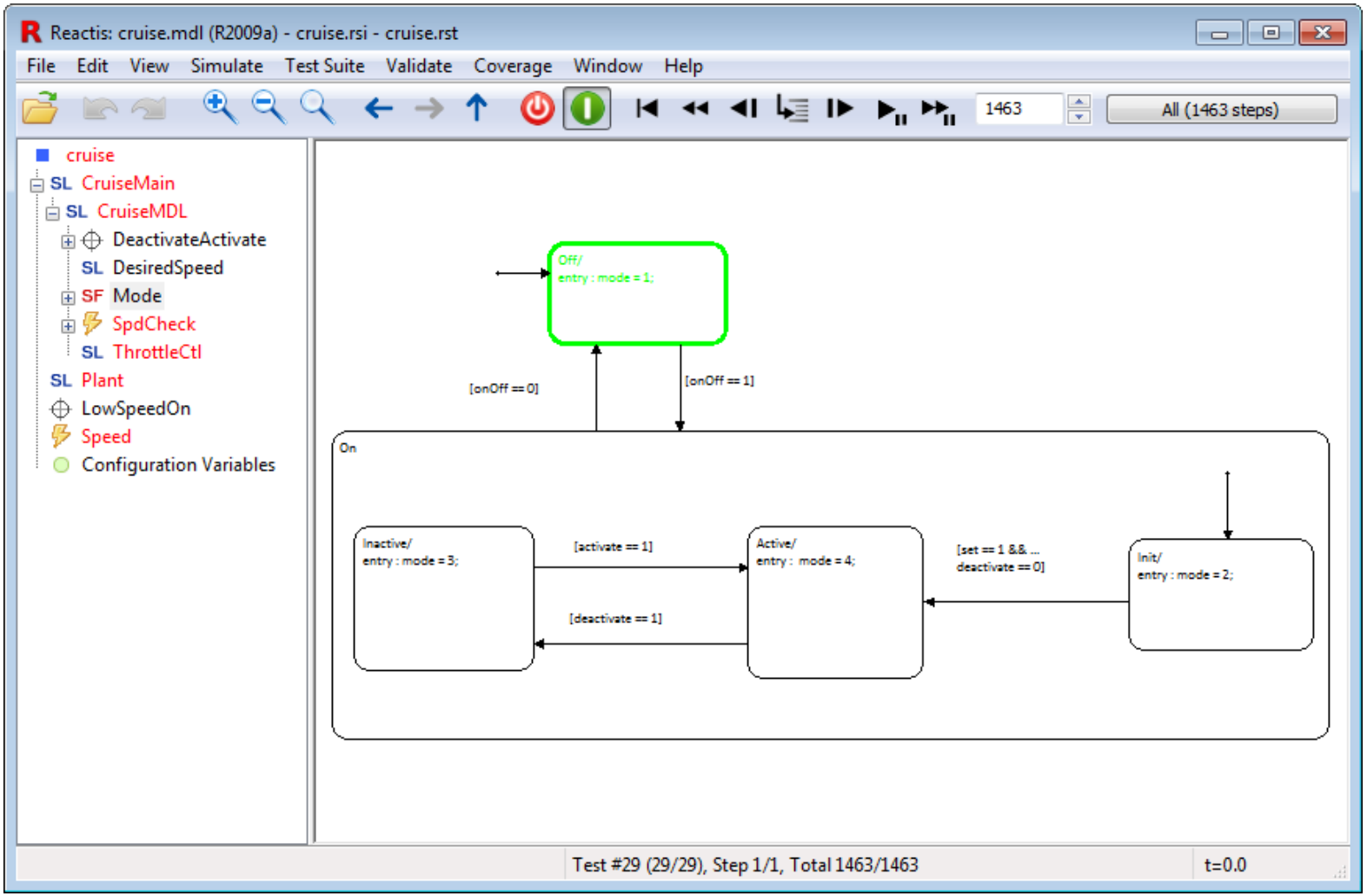
Tracking MCC in Simulator



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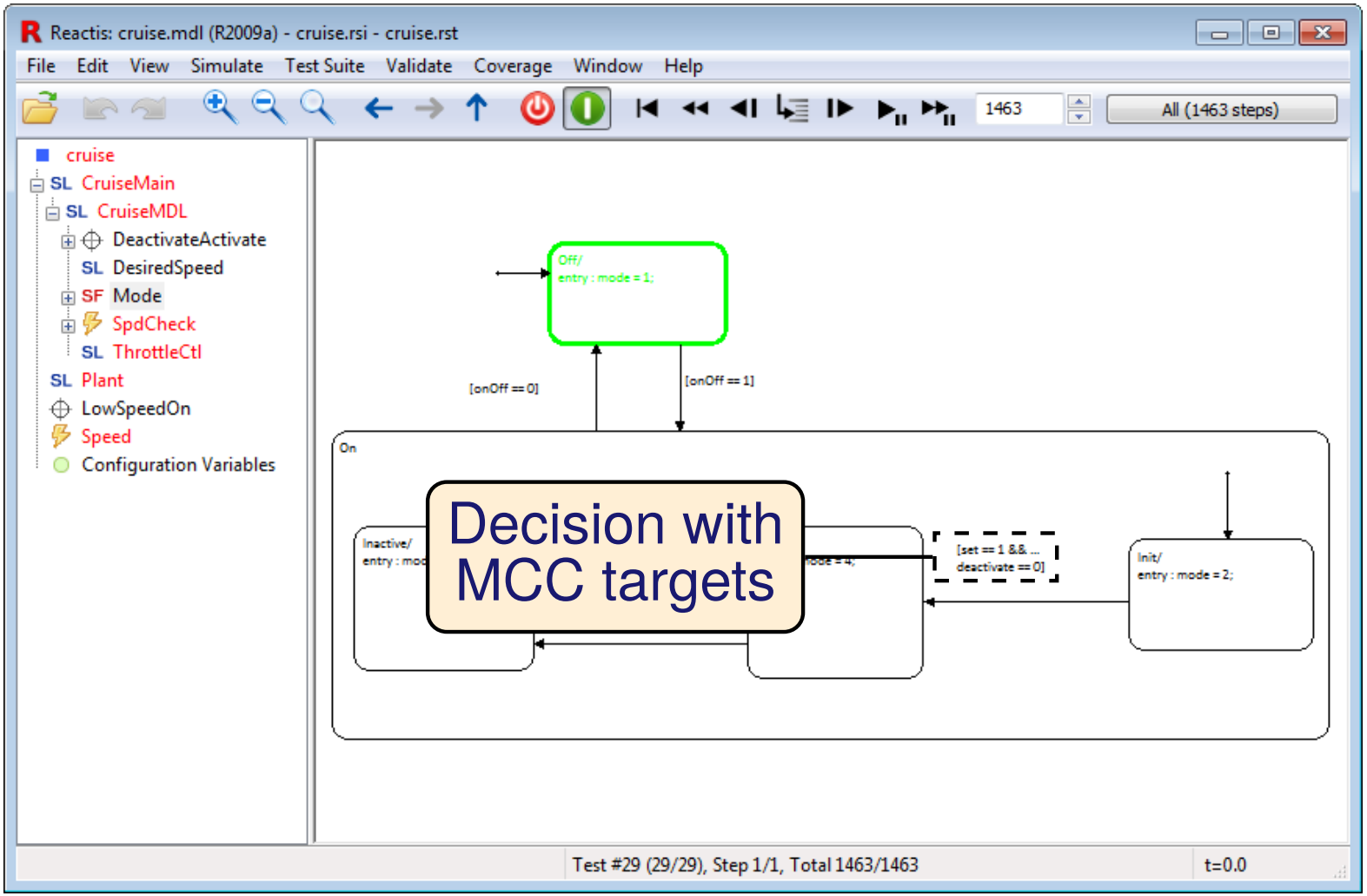

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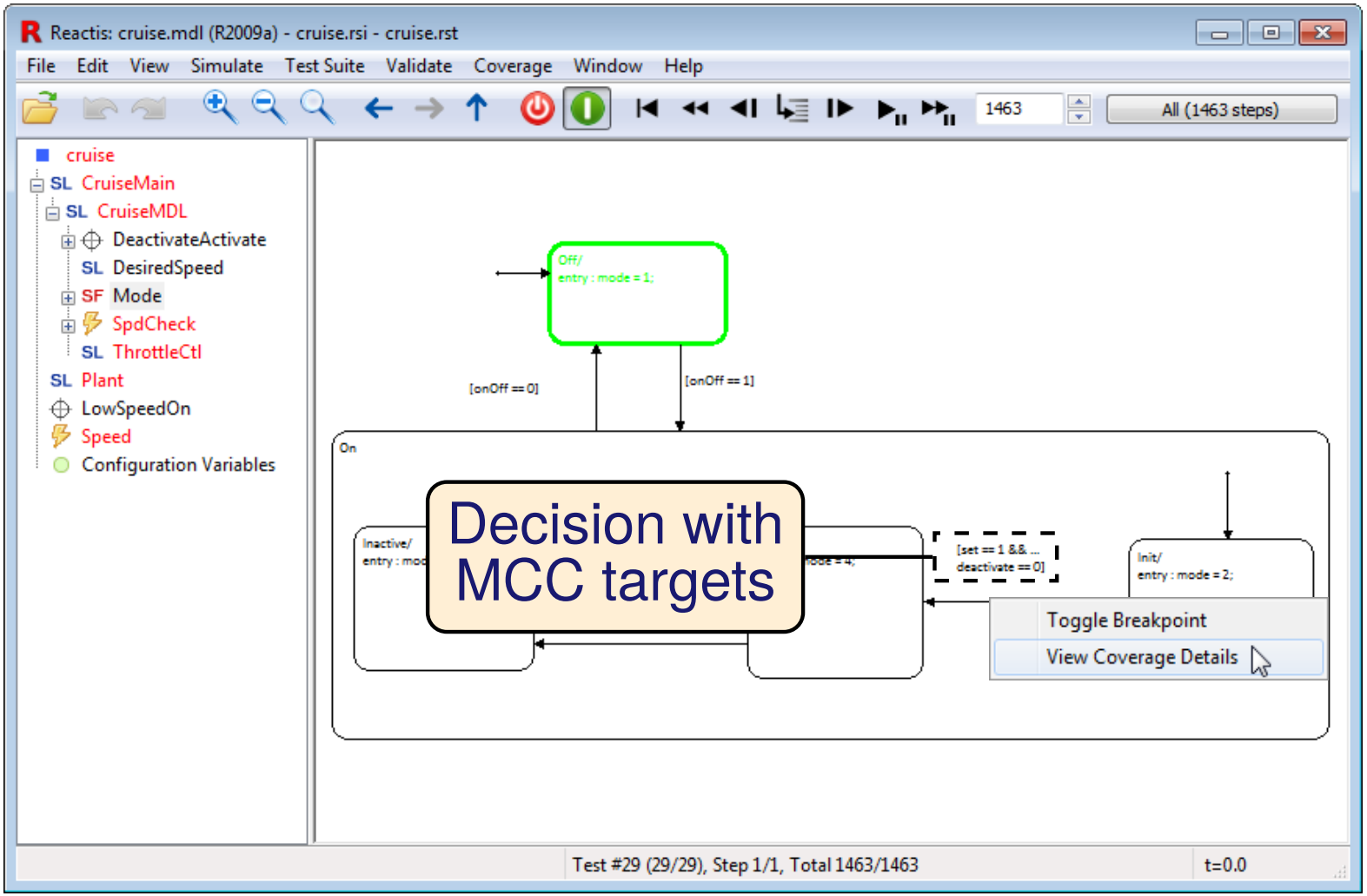

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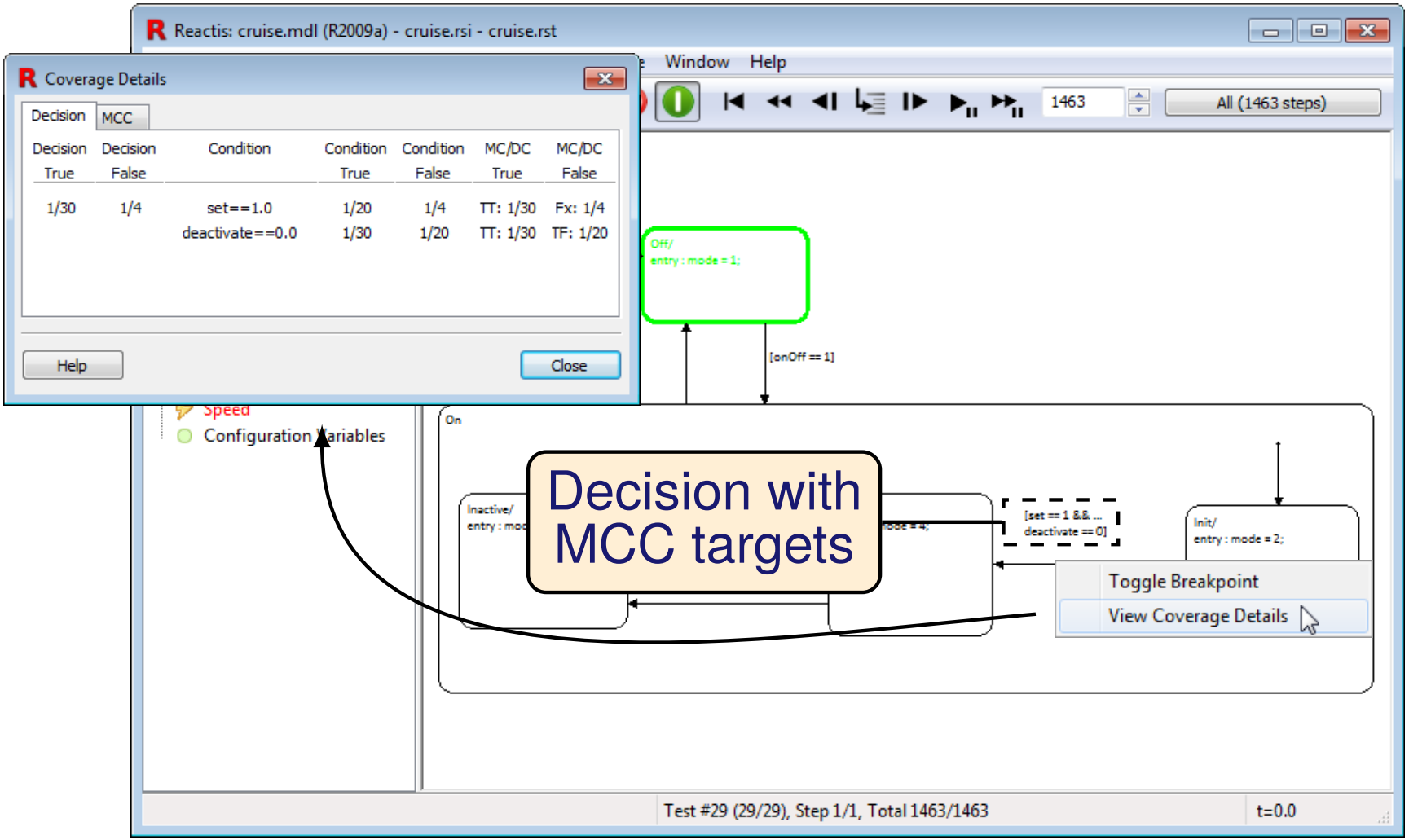

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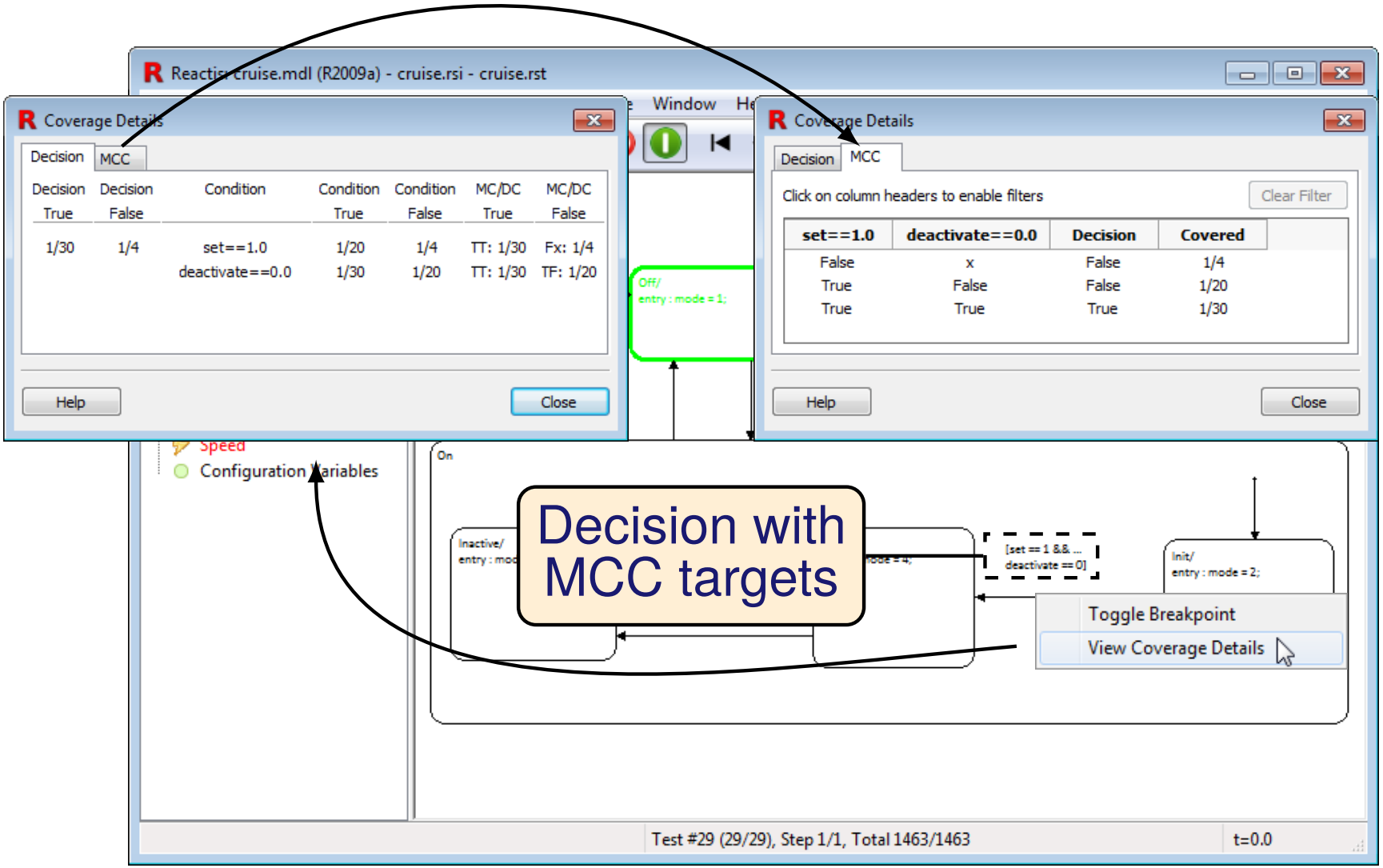

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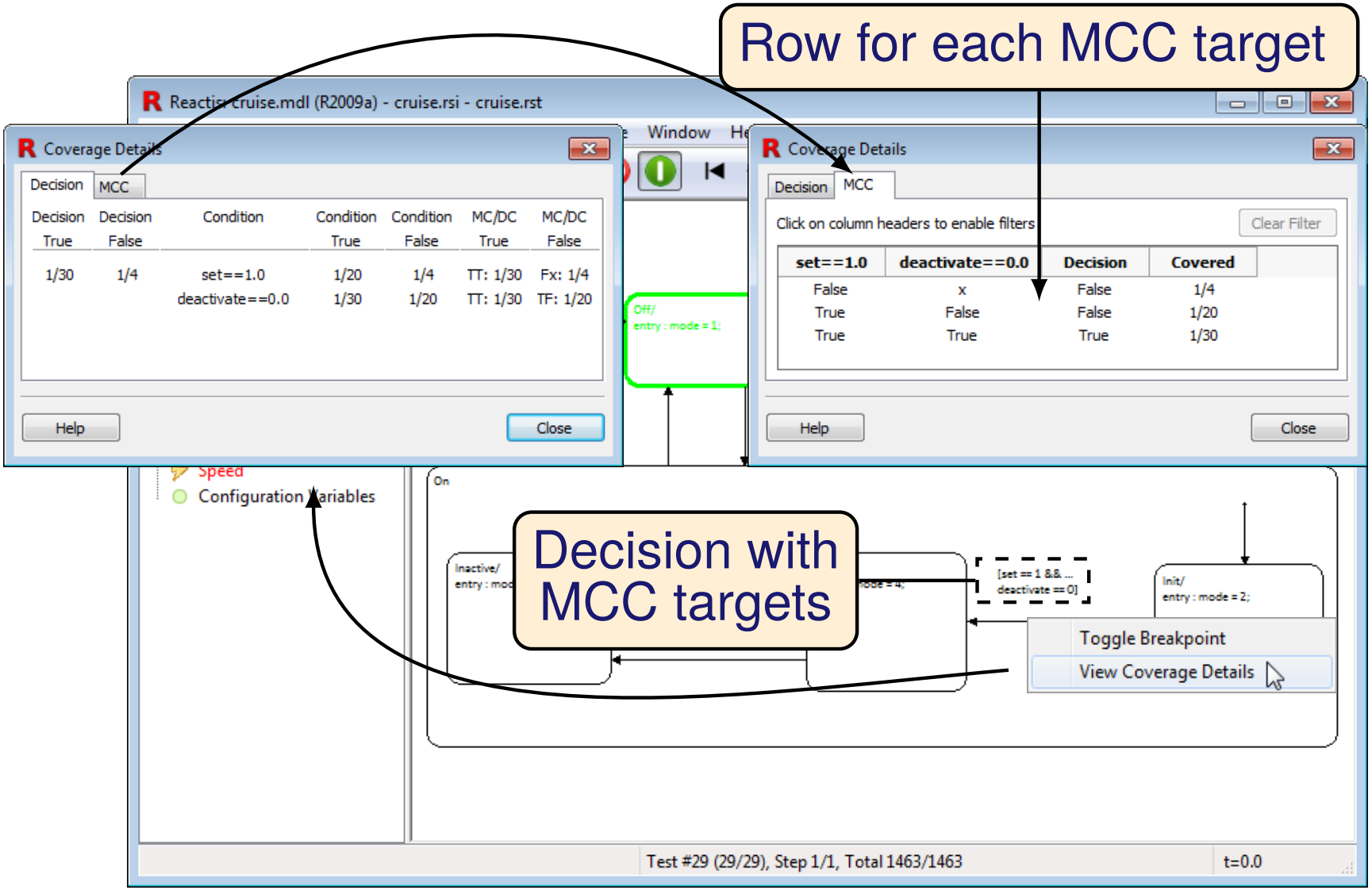

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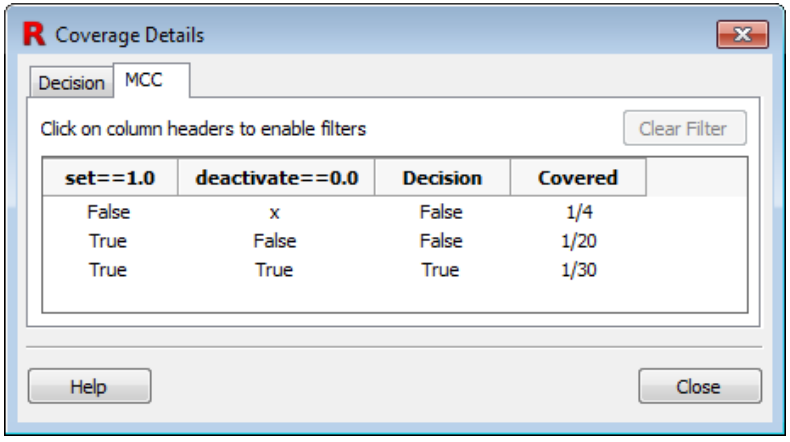
MCC Filtering



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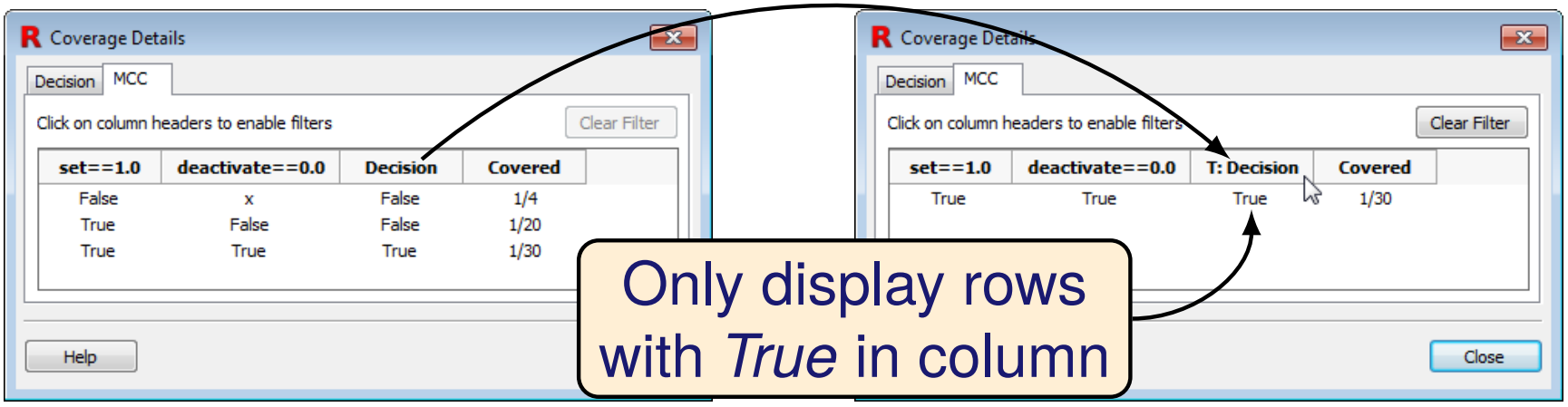
MCC Filtering

Click column header



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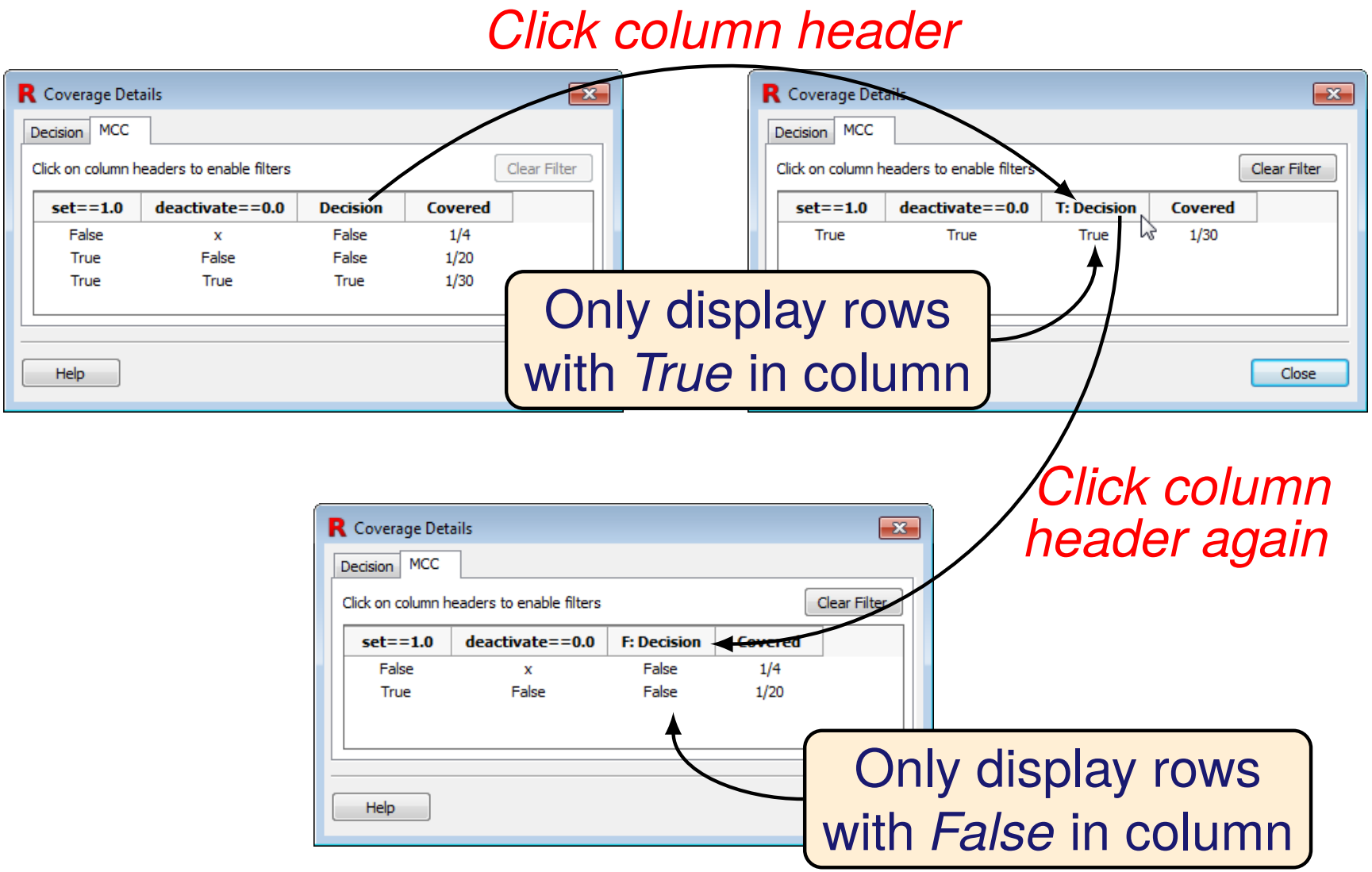

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MCC Considerations

- Decision with n conditions has 2^n MCC targets.
- When short-circuiting is enabled, many fewer MCC targets. Number is between MC/DC (n+1) and 2^n.
- Even if 100% MCC is not goal, MCC coverage details can be helpful in obtaining MC/DC.
- In model-specific settings (*Edit* $\rightarrow$ *Coverage...*), can set upper-bound on number of conditions in a decision; if exceeded MCC will not be tracked.

Text Search Enhancement

Text search now searches Simulink annotations

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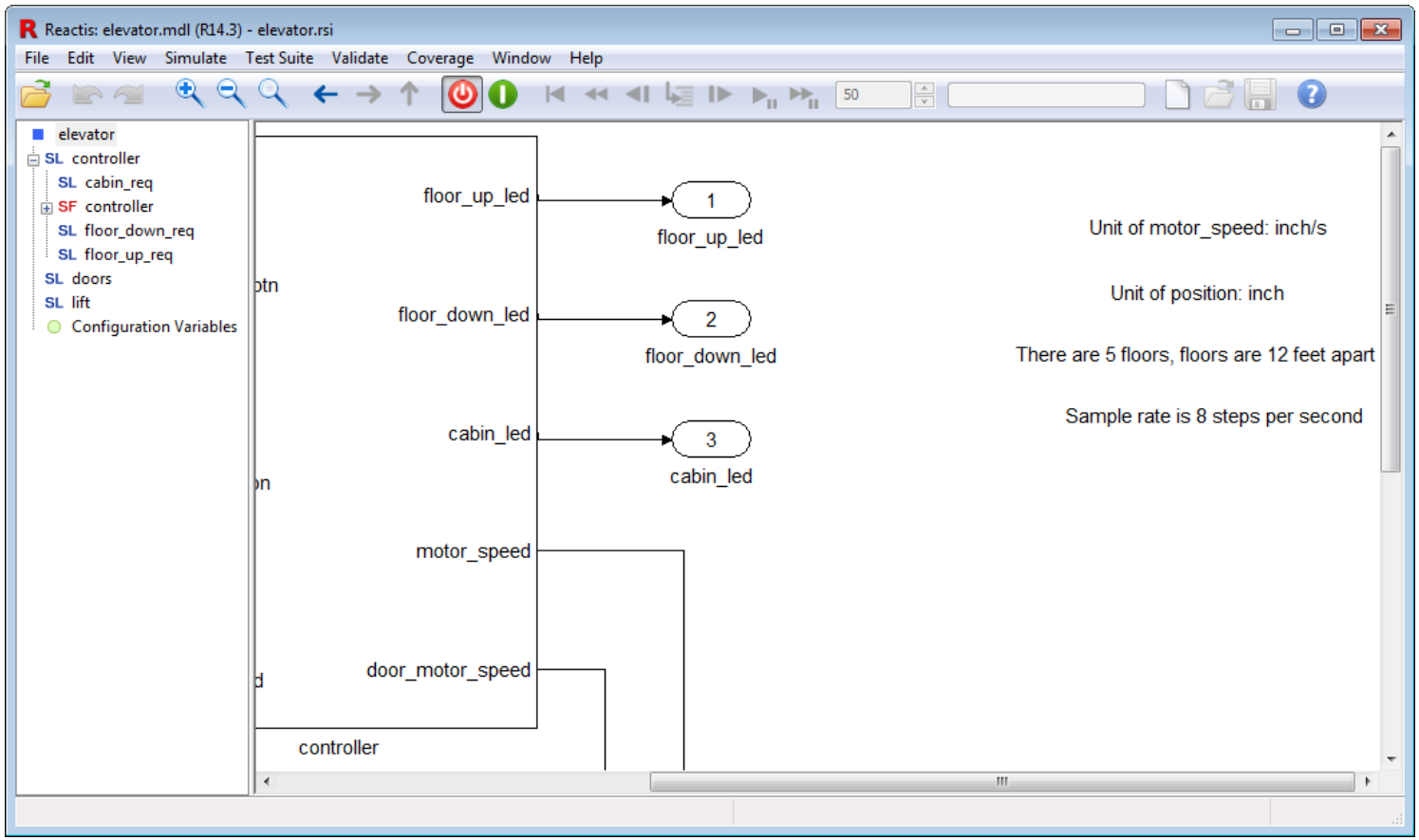

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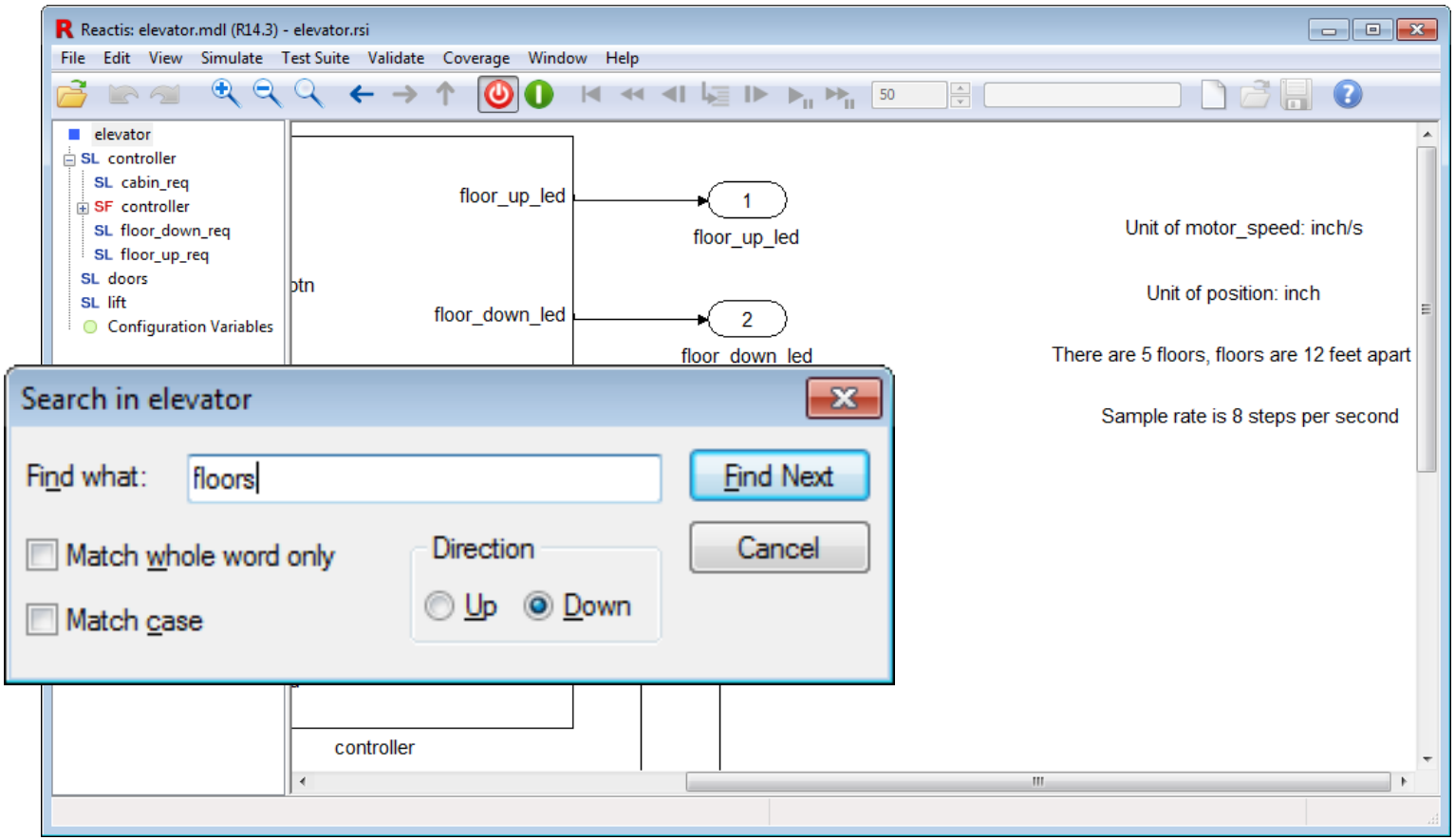

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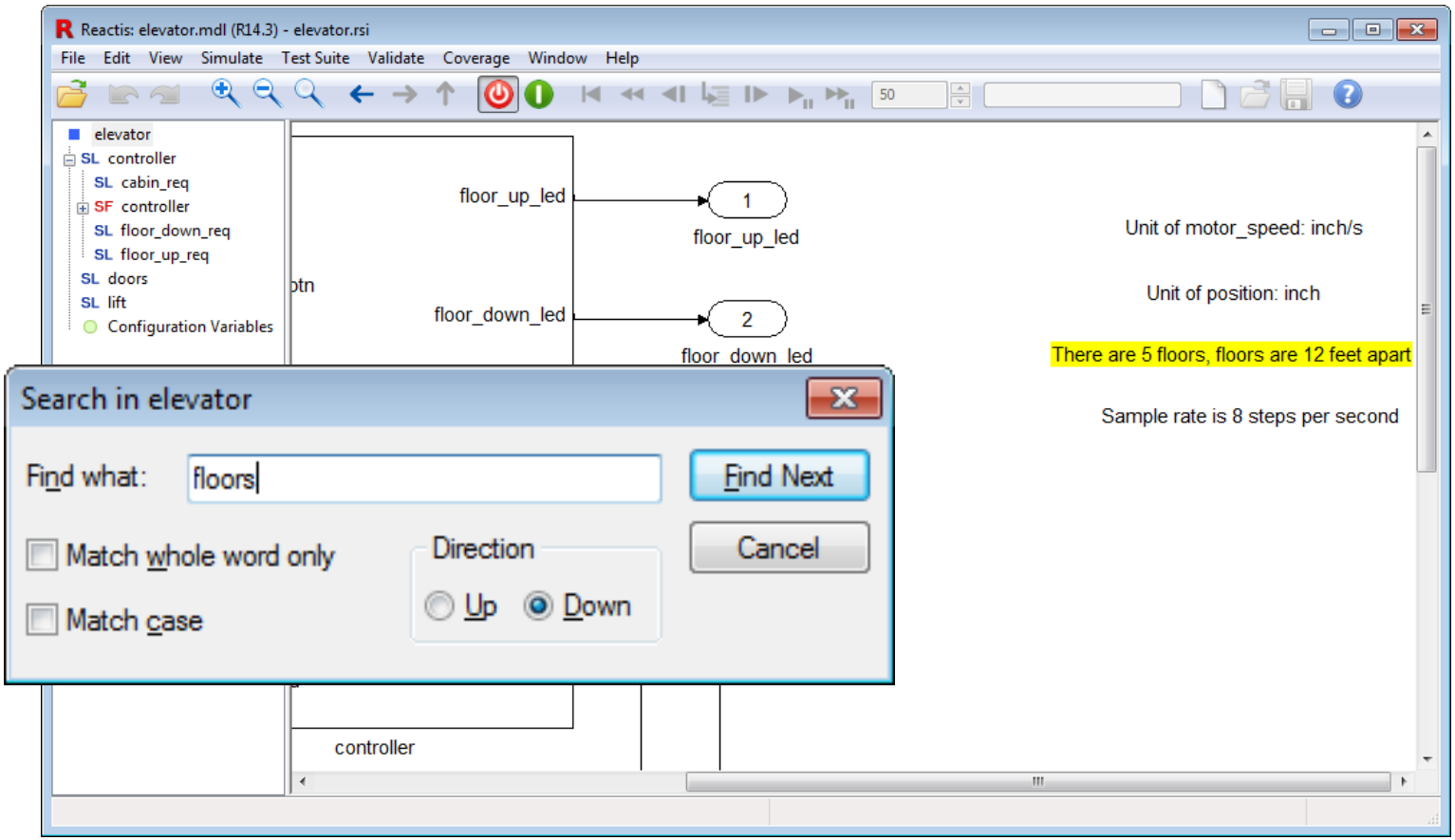

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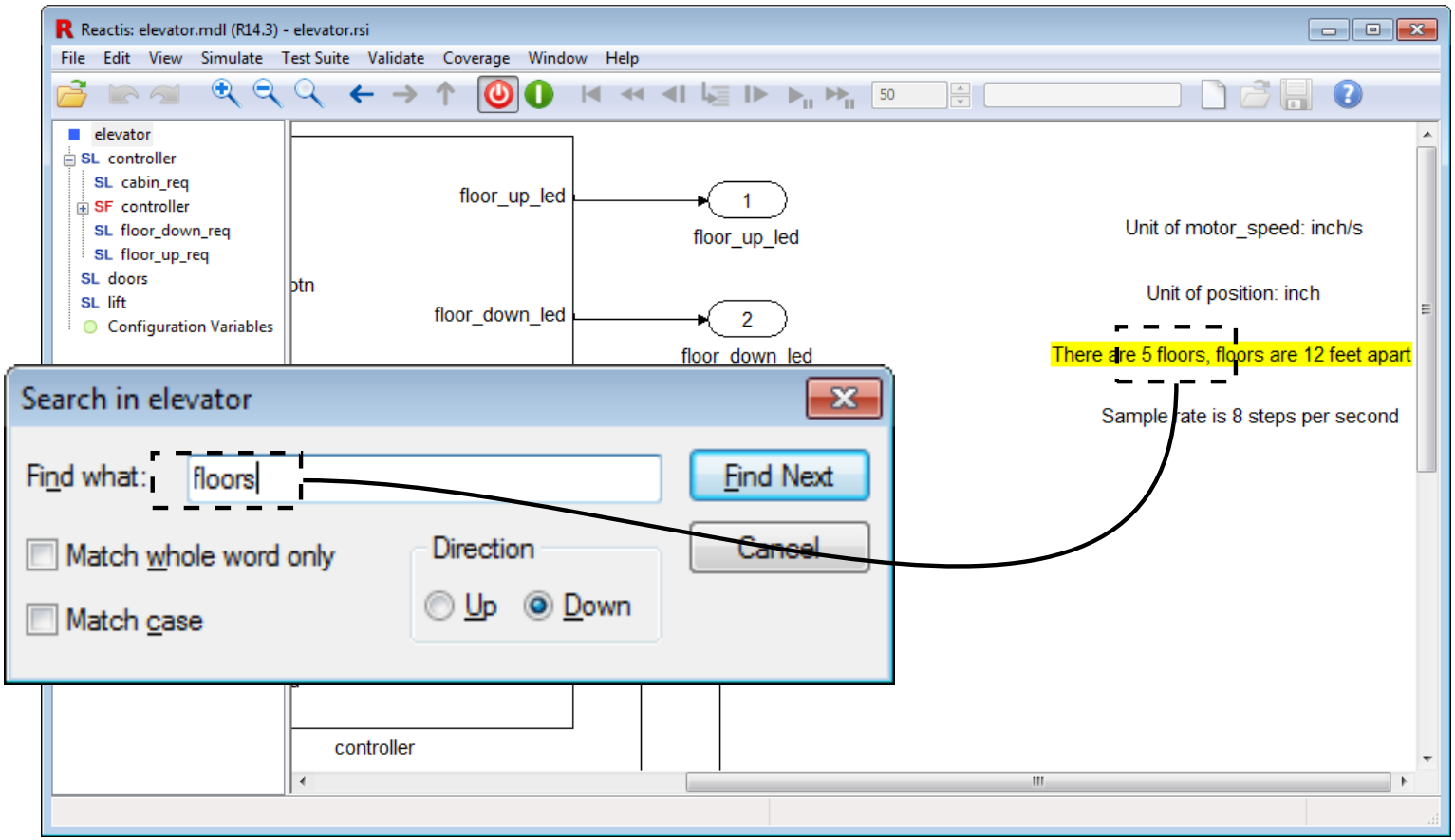

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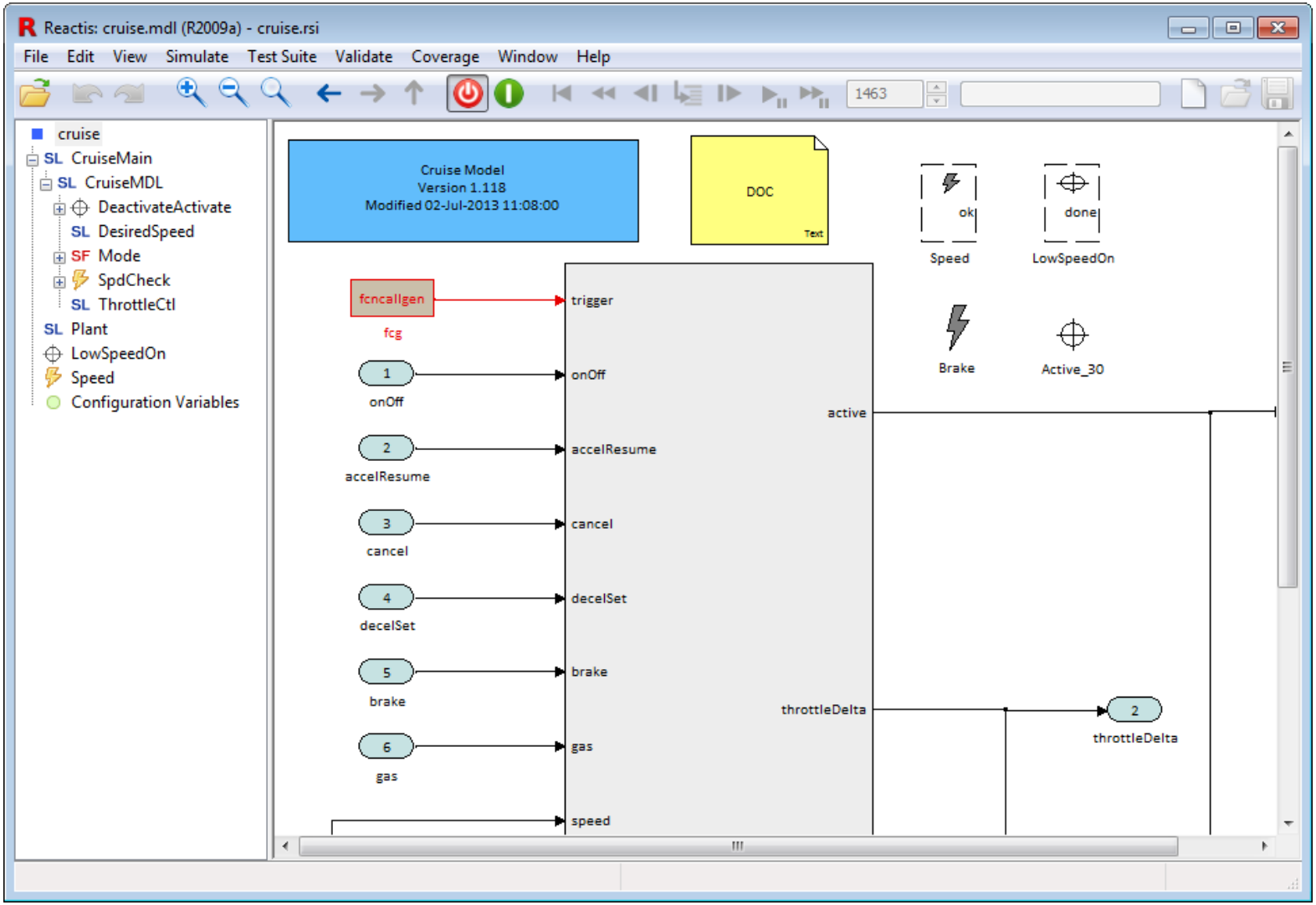
Display Simulink Block Colors



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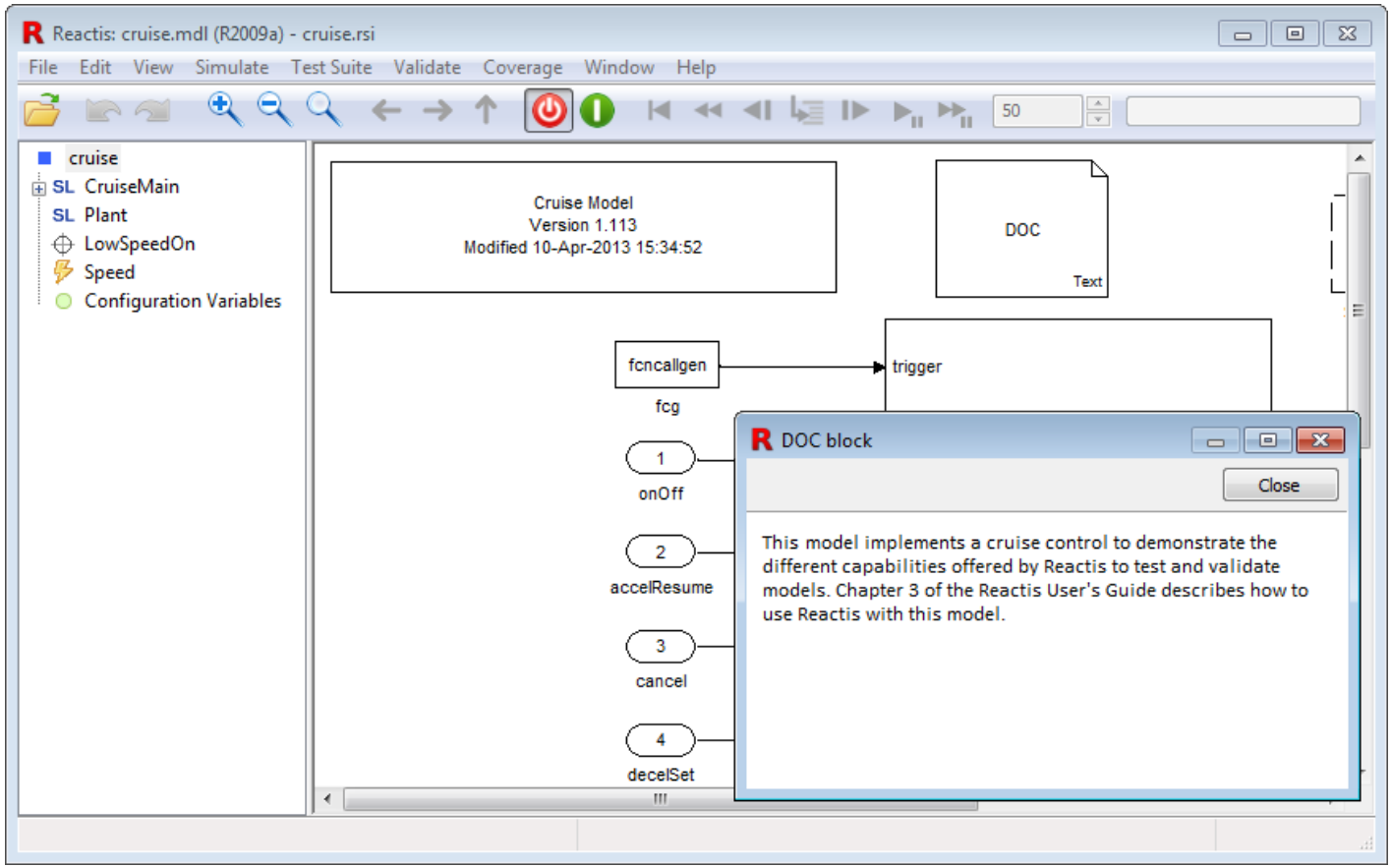
Display Model Info and Doc Block Content

Display contents of Model Info and Doc blocks



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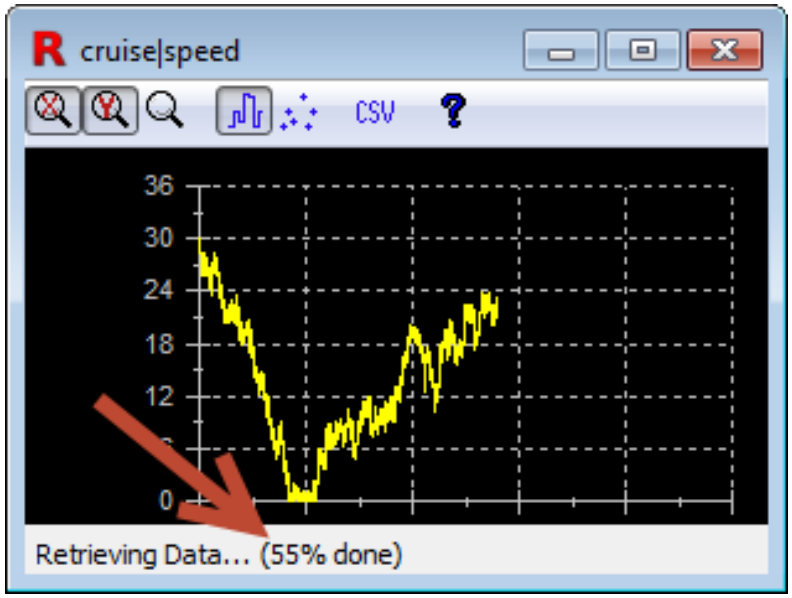
Show Progress when Opening Scope



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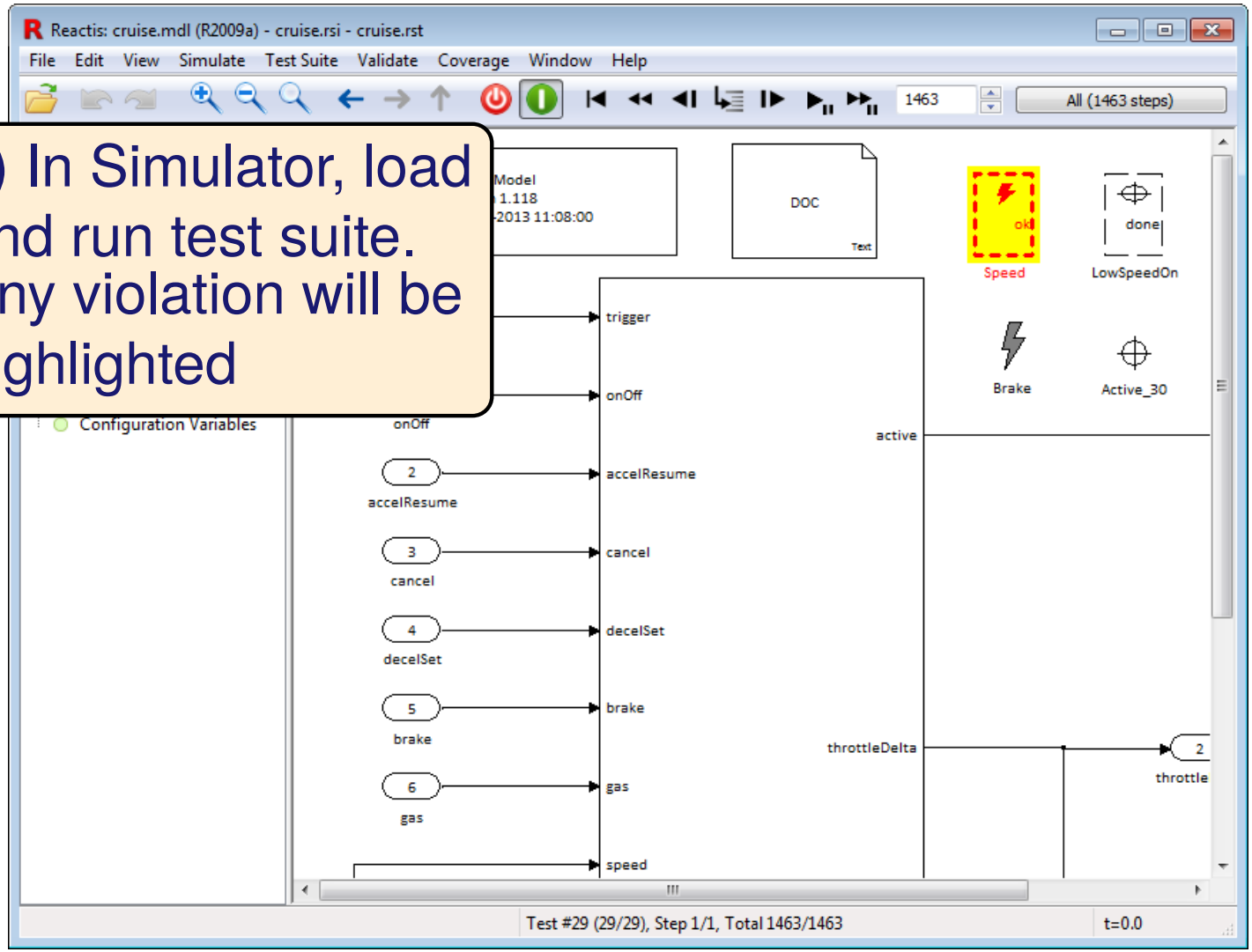
Run-to-Violation



1) In Simulator, load and run test suite. Any violation will be highlighted

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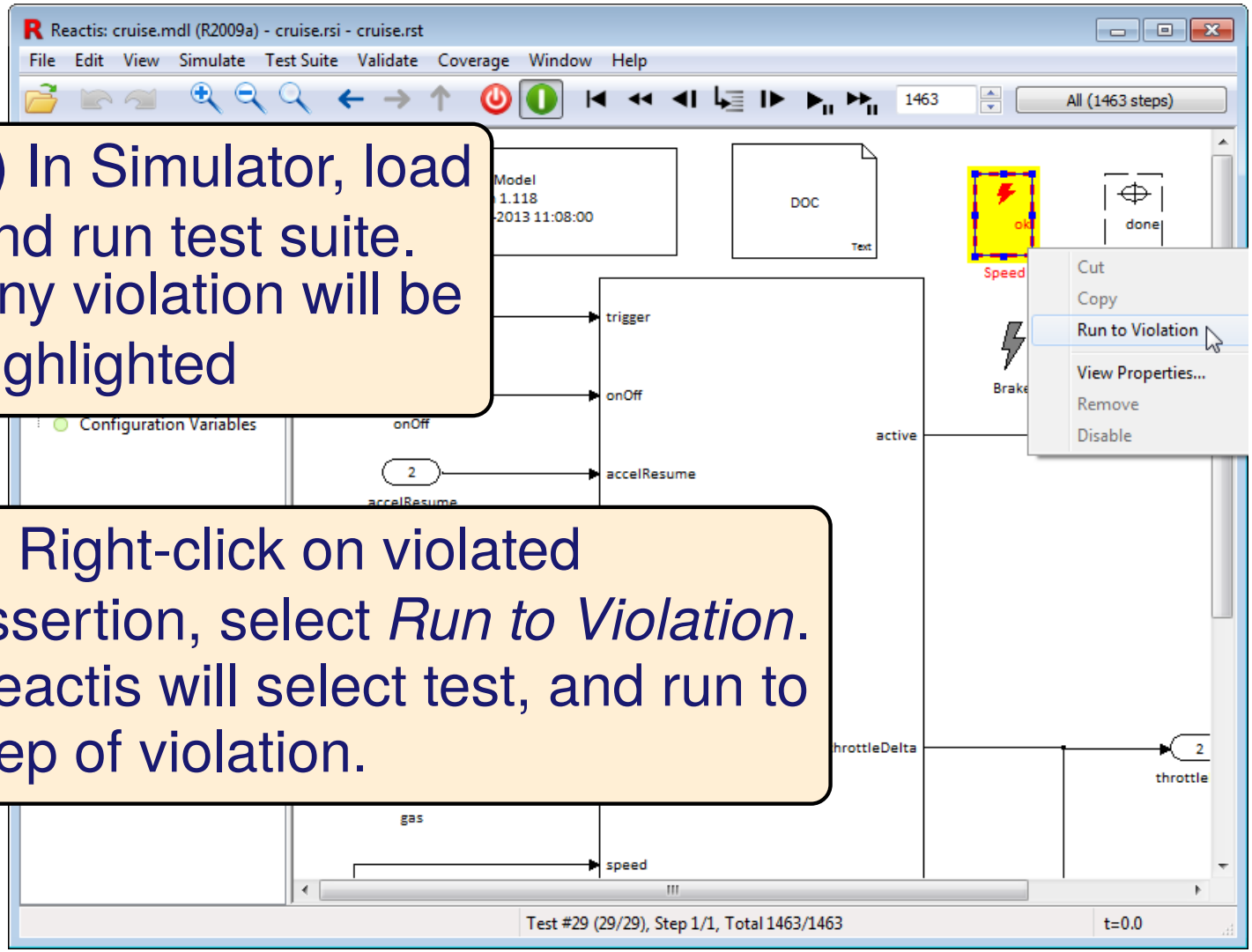

1) In Simulator, load and run test suite. Any violation will be highlighted

2) Right-click on violated assertion, select *Run to Violation*. Reactis will select test, and run to step of violation.

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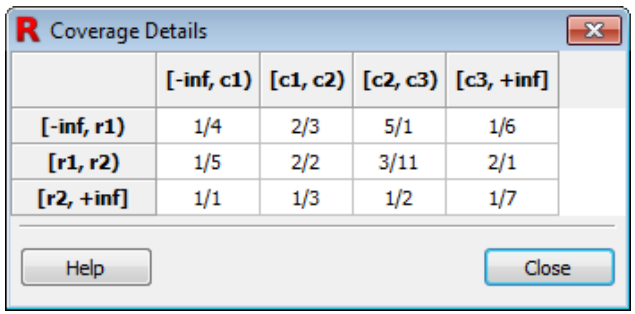
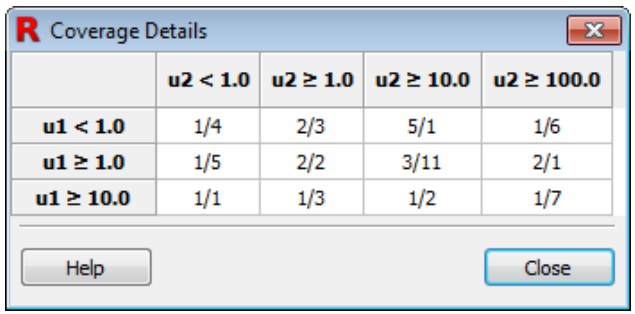
Lookup Table Enhancements

- Enhancements to N-d lookup tables, Pre Lookup, Interpolation
  - Track coverage
  - Support more type combinations
- In coverage reporting, show breakpoint values



Old



New

- Tester gets better coverage for lookup tables

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API Functions to Export Coverage Reports

- *rsTesterWithReport* produces a coverage report after a Tester run
- *rsSimRunSuiteWithReport* produces a coverage report after running a test suite in Simulator

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