

Reactis V2013.2

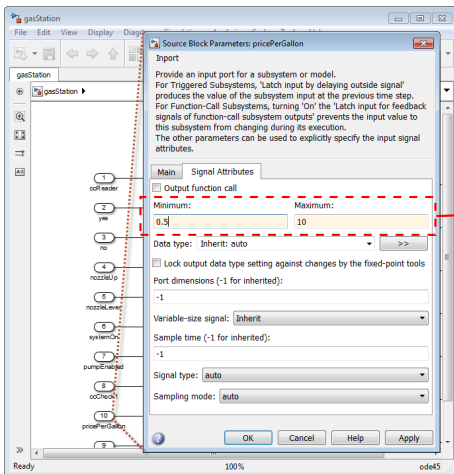
Released December 17, 2013



New Simulink Support

- ▶ R2013b.
- ▶ Stateflow charts containing Simulink functions.
- ▶ Absolute time temporal logic in Stateflow. Keywords sec, msec, usec in temporal logic expressions. E.g. after(3,sec).
- ▶ Extended subset of Embedded MATLAB.
 - Integer types: uint8, int8, uint16, int16, uint32, int32
 - Bit operations: bitset, bitget, bitand, bitor, bitxor, bitcmp, bitshift
 - Other functions: true, false, intmax, intmin
- ▶ Additional settings of Multiport Switch block.

Import Inport Ranges



The screenshot shows the 'Reactis Info File Editor: Inport Types' window. It displays a table of import types with columns for 'Import Types', '#', 'Port Name', and 'Type'. A red arrow points from the 'Import' section of the dialog box to the 'Import Types' table.

Import Types	#	Port Name	Type
Configuration Variables	1	ccReader	uint32
Test Points	2	yes	boolean
Output Tolerances	3	no	boolean
General	4	nozzleUp	boolean
Error Checking	5	nozzleLever	double[0,0,1,0]
Coverage	6	systemOn	boolean[false, true:4]
Validator Objectives	7	pumpEnabled	boolean
C Code	8	ccCheck1	uint32
Callbacks	9	ccCheck2	boolean
Search Path	10	pricePerGallon	double[0.5,10,0]
File Dependencies			

Min/Max values imported from:

- ▶ *Signal Attributes* section of inport parameters
- ▶ Simulink.Signal object attached to signal emerging from inport

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No Short-Circuiting

A	B	C	Decision
F	F	F	F
F	F	T	F
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
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MCC Now Supported by Reactis for C Plugin

- ▶ V2013 added MCC tracking for Simulink and Stateflow
- ▶ V2013.2 C Plugin tracks MCC for C code in S-Functions and Stateflow custom code

Reactis for C Plugin Enhancements

Stub file generator. Produces source file that contains definitions of missing functions and variables.

Support for C99 compound literals.

E.g. `(float[2]) {2.7, 3.1}`

Improved error messages. Errors due to missing typedef names and typedef names which conflict with a variable or function name are distinguished from ordinary syntax errors.