

# Reactis V2013.2

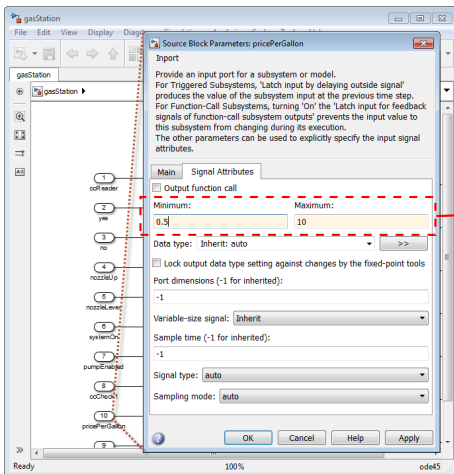
Released December 17, 2013



# 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



Reactive Info File Editor: Inport Types

File Edit Tools Help

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

# 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.