

Reactis V2013.2

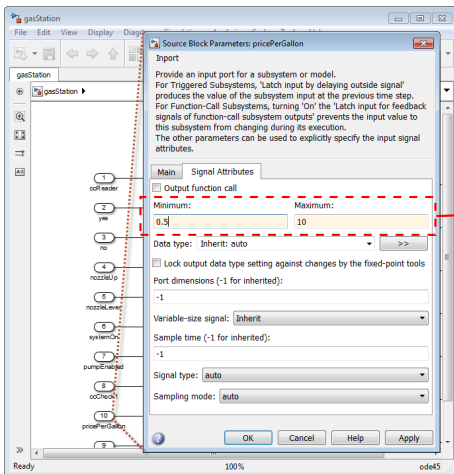
Released December 17, 2013



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 |
| T | F | F | F |
| T | F | T | F |
| T | T | F | F |
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| T | F | T | F |
| T | T | F | F |
| T | T | T | T |

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.