Reactis V2023
Released June 30, 2023

Run-Time Error Assertions (RTE Assertions)

- ▶ Simulink models can produce run-time errors, e.g. integer overflow or divide-by-zero
- ▶ Reactis now generates RTE assertions to check for absence of such errors
- ▶ RTE assertion categories:
    - ▶ Integer overflow
    - ▶ Integer division by zero
    - ▶ Inf/NaN
    - ▶ Indexing
- ▶ Static analyis flags some assertions as `impossible to violate`
- ▶ Tester attempts to pick inputs to violate assertions

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Newly Supported Simulink Features

- ▶ MATLAB R2023a.
- ▶ Fixed-point data types in Sqrt block.
- ▶ Number of sub-table selection dimensions setting in Interpolation block.
- ▶ Support the MaxStep solver setting for models using a variable-step discrete solver.
- ▶ Setting that allows simulation and test generation to continue if Speed is selected by automatically substituting Precision instead.
- ▶ Support functions `realmax` and `realmin` in Embedded MATLAB code.

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Other Improvements

► The `When detecting subnormal floating-point values` setting in Reactis can now be configured to automatically flush-to-zero any subnormal values computed by the model.