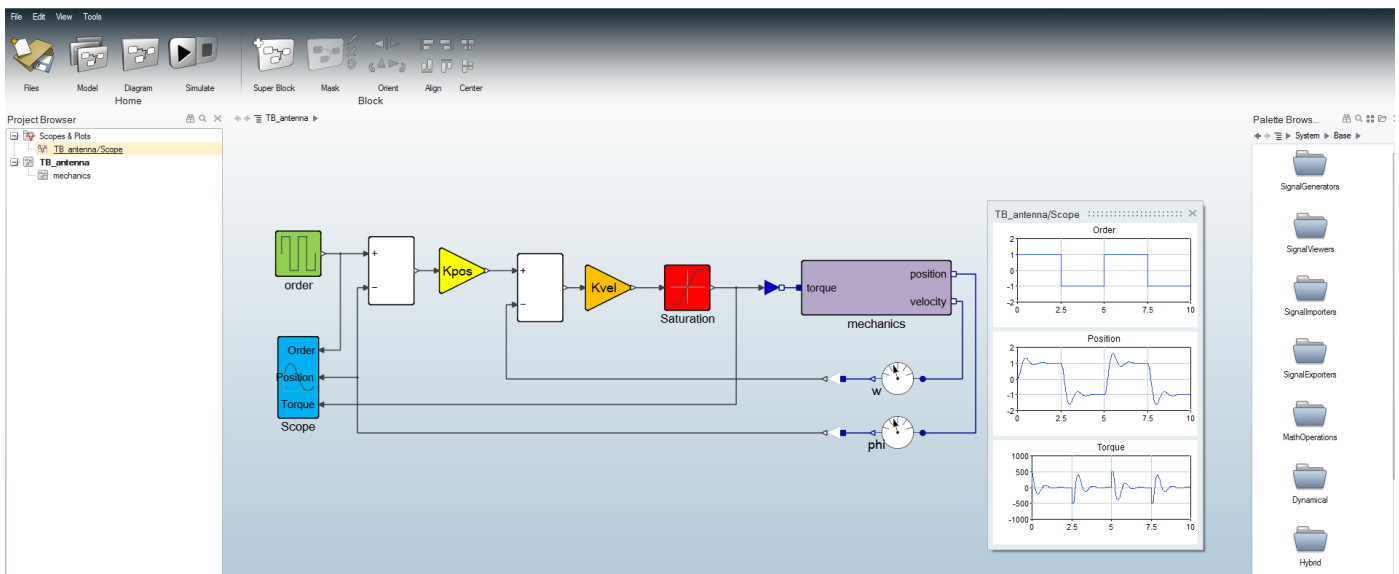


Activate 2016.3 Release Notes

INTRODUCTION

solidThinking Activate enables product creators, system simulation and control engineers to model, simulate and optimize multi-disciplinary systems. By leveraging model based development, ensure that all design requirements are successfully met while also identifying system level problems early in the design process.



The release of **solidThinking Activate 2016.3** offers exciting features including:

- Powerful modeler and simulator for continuous and discrete models
- Robust handling of signal-based as well as physical models: In release 2016.3, the physical component modeling is improved by using a Modelica Engine powered by Maplesoft™ and a library of blocks based on Modelica Standard Library 3.2.1.
- Comprehensive set of block libraries
- Support for Functional Mock-up Interface
- Co-simulation with Multi-body Dynamics
- Library Management

PLATFORM SUPPORT

Platform		
OS	Version	Architecture
Windows	10/8.1/7	x86_64

The following features and enhancements have been added for **solidThinking Activate 2016.3**

MODEL EDITION AND USER INTERFACE

Automatic interfacing	Connecting directly explicit and implicit blocks is now possible. Activate will automatically add an interface block.
License Wizard (<i>solidThinking installer only</i>)	To improve licensing setup with solidThinking license files or server, a License Wizard utility tool is added.
Tooltips	Display block information as tooltips
Shortcuts	Added Keyboard shortcuts for SplitVertical, SplitHorizontal, SplitWindow, New Window actions
Editor	Add a CTRL+ and CTRL- to zoom the HML Editor text.
Palette Browser	Palette Browser Auto Grid size needs to align the text and image to bottom.

MODELING AND SIMULATION

Physical Component Modeling	Activate 2016.3 offers a new Modelica support and a block library based on the Modelica Standard Library 3.2.1. This enables use of Modelica blocks in Activate model. This Modelica Engine is powered by Maplesoft™. <i>Note: A C compiler is required for this feature.</i>
Missing Libraries	Improved messages when running models with missing libraries.

BLOCKS AND LIBRARIES

Mux and Demux	Removed the limit (32) on the numbers of ports for Mux and Demux blocks.
Modelica	<ul style="list-style-type: none"> In addition to the new block library based on Modelica Standard Library 3.2.1, FromModelica and ToModelica blocks are added. VectorScalar and ScalarVector blocks are added to help extraction/insertion from/to a vector in Modelica blocks
Signals	Block SignalType is added to get type and size of the signals.

The following issues have been resolved for **solidThinking Activate 2016.3**:

Port naming issue (implicit ports)
Application may close when delete an implicit split
Simulation slower when mouse hover over run button
AMD processor computer: Palette browser icons are missing
Should not allow switching model when running simulation
Parameters Scrollbar not shown when the block dialogs have several tabs
Slow response to close a block dialog with a lot of parameters
Application closed if MotionSolve model refers to a missing file
Undo resize of block with implicit ports may result in unconnected link
Issue after undo operation on resize of rotated block
Delete a port in superblock and undo in the parent diagram
Redo superblock masking doesn't expose masked superblock parameters
Palette browser flickering when closing or splitting diagram views
FromTextFile - Edit button issues
FromTextFile blocks not generating output as expected
Floating link created by undo redo
FMU export doesn't work when destination directory contains non-ASCII character
Changing scope legend font in property editor doesn't work
Palette browser opens in the next session even if it is closed in the previous session
Undo in parent diagram should not undo port name changes in superblock
Ctrl-z should warn when no undo available
Optimization and Linearization editor should not be closed when pressing ESC or ENTER key
Should support undo for C Block generation
Adjust the smallest width of palette browser to display two columns of blocks
Minimum width is imposed after hiding and showing the palette browser
Support drag operation of models in Demo Browser to open them
Reverse color doesn't work for ScopeXY and AnimXY blocks
Split view flashes when closing model

Activate 2016.2 Release Notes

The following features and enhancements have been added for **solidThinking Activate 2016.2**

MODEL EDITION AND USER INTERFACE

Localization	Japanese language is supported in the User Interface.
Model Report	A Model Report Generator feature has been added to create a complete, navigable, HTML Report including views of all the diagrams and all the results.
Demo Browser	A dedicated Browser which is dynamically populated by all models and script files found the the demos folders of each installed library has been added.
Palette Browser	Direct access to block help and improved navigation.
Model Recovery	A mechanism to save automatically save models and allow for recovery has been implemented.

MODELING AND SIMULATION

Compiler	Improved handling of the Temporary directory
Functional Mockup interface	Better error messages for blocks that cannot be exported to FMU.
Co-Simulation	Improved diagnosis of issues (such as missing files) when running cosimulation.

BLOCKS AND LIBRARIES

Block Addition	ToCSV block is added to write CSV files.
Block Enhancement	Counter, ModuloCounter and EdgeTriggerblocks are improved.

The following issues have been resolved for **solidThinking Activate 2016.2**:

Various fixes to the FMU export
Fixes for cases where floating links were created on block deletion
Fixed display issues with palette browser and screen capture (seen on AMD processor machines)

FMU exported from Activate failed in FMU checker in some rare cases
Floating link is created when delete a port in superblock and undo in upper diagram
Issue when deleting an implicit split
Issue with links on implicit flipped blocks
Counter block doesn't handle integer overflow
Floating link is created if delete a split connected with implicit links
Floating link if do "Fit To Text" on rotated block
Text fuzzy after move a block in some cases
Greek alphabet rho and theta cannot be correctly displayed after file save
Code generation for SwitchCase block doesn't produce the same result
Cannot generate code for Extractor block
VariableFreqSine FMU export issue
FMU export of ContTransFunc fails in compliance check
Issue with asinh (in Coselica) block when using tcc compiler
Impossible to use Japanese characters for file names for open/save
Footer color of scope in property editor uses invalid font
Navigator bar doesn't display the model name completely after renaming the model with a longer name
Improve error message for FMU export when no supported compiler is installed
Slow moving of blocks
Additional ports should be labeled when check reinitialize parameter of DiscreteIntegrator
Simulation function code parameter of UserFunction blocks
FromCSV doesn't process data at duplicate time steps
Model validation failed when model name contains non ASCII characters
User should not be allowed to generate code for MSPlant block
Annotation issue when Arabic language is used
Certain colors cannot be picked in color palette
Ctrl+D and Ctrl+T doesn't work in floating diagram
Issue when editing annotations in floating diagram
Auto masking a bypassed superblock generates an error
Fuzzy texts can be displayed when entering and leaving a superblock
Reverse color issues for scope blocks
Divide by zero error when a constant divided by a signal activated by clock
Cannot open or run an HML file from file browser

Model cannot be opened after saved with non-ASCII block name

Activate 2016 Release Notes

The following features and enhancements have been added for **solidThinking Activate 2016**

MODELING AND SIMULATION

Hybrid Simulator	Modeling and simulation of models using both continuous and discrete-time blocks
Events Handling	A comprehensive way to create and manipulate activation events offering a powerful control on the model behavior.
Powerful compiler and simulator	An extended list of solvers available for all types of models.
Functional Mockup interface	Support for FMI 2.0 standard (import and export, model exchange and co-simulation).
Co-Simulation	Dedicated co-simulation interface with Multi-body Dynamics

BLOCKS AND LIBRARIES

System Library	Activate offers a large set of blocks (continuous and discrete-time).
Custom blocks	Create custom blocks in C or HML language. With the physical component modeling support provided by the Coselica add-on, custom Modelica blocks can be created.
Library Manager	To create, edit and manage libraries and block palettes.

MODEL EDITION AND USER INTERFACE

Multi model management	Activate can load and manipulate multiple models, with multiple views of one or many models, for faster edition and navigation.
User Interface	Modern user interface with quick and intuitive edition capabilities, link creation, super block creation. Multiple browsers with search and filter capabilities are used for models and block libraries.
Plots and Scopes	Results of simulations, on various models, are exposed in scopes and user plots.

Learn more at solidThinking.com/Activate | 6 |

