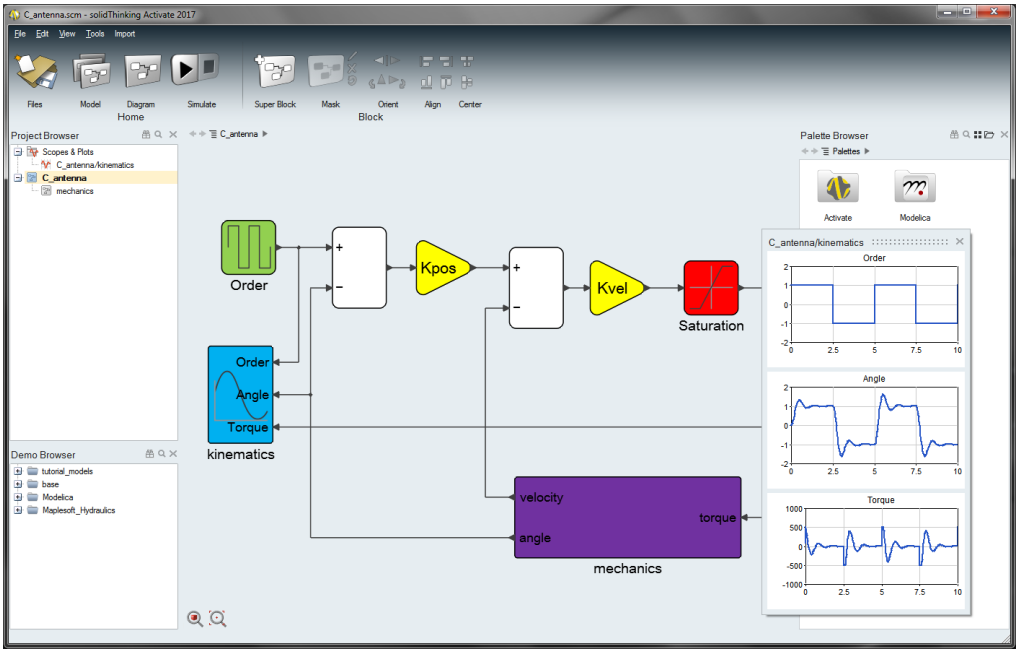
Activate 2017 Release Notes

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 2017** 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 2017, 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 2017.**

MODEL EDITION AND USER INTERFACE

License Wizard *(solidThinking installer only)*	To improve licensing setup with solidThinking license files or server, a License Wizard utility tool is added.
Palette Browser	The Palette Browser is modified and reorganized to place all installed libraries at the top level for easier navigation.
Shortcuts	Added keyboard shortcuts (Set Image and Clear Image)
Modelling	Hide port labels automatically when a block is resized too small

MODELING AND SIMULATION

Physical Component Modeling	• Activate offers 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™. *Note: A C++ compiler is required for this feature.* • With Activate 2017, an option to import Modelica libraries into Activate libraries is added.
Cosimulation with Altair MotionSolve	• Activate handles the cosimulation with MotionSolve using IPC communication. In future releases of MotionSolve, this will allow for executing MotionSolve on remote machines. • Activate 2017 supports multiple MSPLANT blocks inside a model. This feature is in BETA mode for release 2017.
Cosimulation with Altair Flux	• Starting with version 12.2 of Flux, Flux exports a component to be used in Activate for Cosimulation. Activate 2017 includes a new Flux Cosimulation block.

BLOCKS AND LIBRARIES

Block enhancements	• 2DLookup table supports input vector • Adding the continuous transfer function with initial state block • Error message concerning incompatible port sizes have been improved

The following issues have been resolved for **solidThinking Activate 2017**:

FMU export with DOPRI solver selected was incorrect
In some cases, could not create link from explicit port to implicit port

Fixed issue with support of non-ASCII characters
Non-orthogonal link is created when moving an implicit link segment
FMU import doesn't work correctly with boolean data type
Link thickness issue after copy
FMU block can't read FMU2.0 with Annotations correctly
Restore BDE layout on invoke
Can't pick the link between two too close ports to end the link creation
Superblock port label becomes fuzzy when move the block from outside view and undo block move
Split should not remain after delete an implicit link segment
Pause model with End block – Stop button was disabled
Nothing is displayed in file browser when the path contains non-ASCII characters
Better handling of errors in the "Check C code" feature of the C-Custom block
OpenGL errors are generated in the DOS command window when drawing selection rectangle
Removed unnecessary link rerouting after deleting an implicit link segment
Edit value in variable browser (was changing the name, not the value)
Fixed inconsistency on focus in the Property Editor when a scope is selected
Split should not remain after deleting an implicit link segment
Undo redo was not implemented for interface block insertion
Undo in parent diagram should not query twice to accept the operation
The sum block accepted / and *, and the product block accepted + and -, signs. This is no longer allowed.