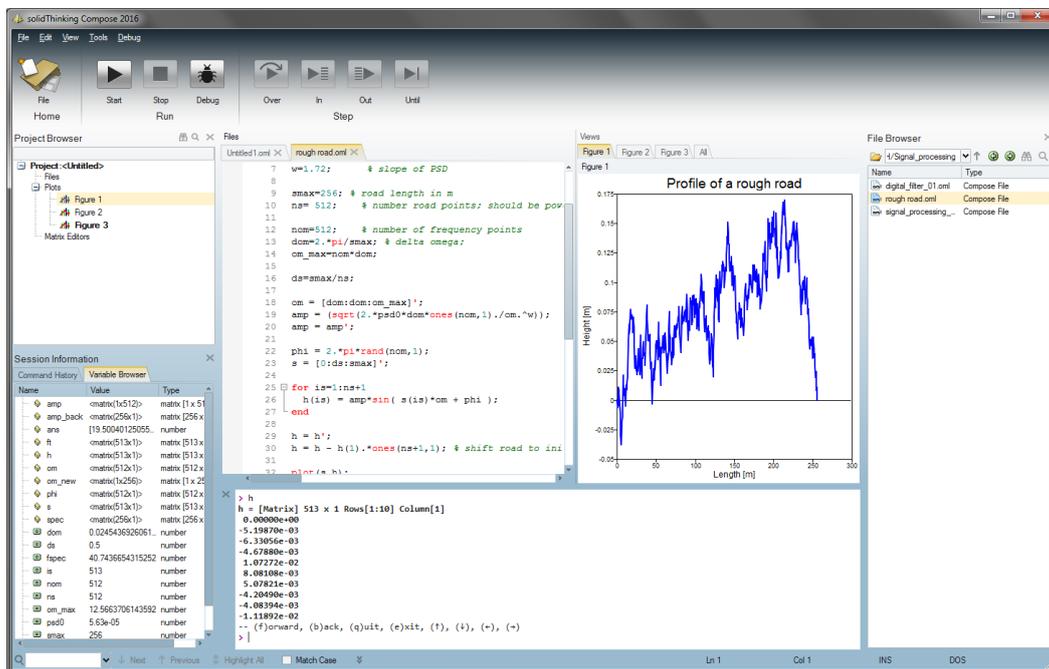


Compose 2016.3 Release Notes

INTRODUCTION

solidThinking Compose is a high level, matrix-based numerical computing language as well as an interactive & unified programming environment for all types of math. Whether you're looking to solve matrix analysis, differential equations, perform signal analysis or robustly study control design, Compose not only offers its users with a modern, comprehensive set of tools to enable rapid development but also offers a powerful engine and an interactive debugging environment for streamlined troubleshooting.



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

- High-level matrix-based interpreted language for numerical computing
- Integrated development environment for authoring and debugging all types of math including multi-language support
- Extensive math libraries
- Built-in connectivity to pre/post-process engineering and Computer Aided Engineering (CAE) data
- Interactive command line interface
- Batch oriented language
- Rich plotting, with floating plots
- Multidimensional matrices support (new in 2016.3)

PLATFORM SUPPORT

Platform		
OS	Version	Architecture
Windows	10/8.1/7	x86_64

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

MATH & SCRIPTING SUPPORT

Open Matrix Language (OML)	<ul style="list-style-type: none"> • Support for multidimensional matrices (creation, extraction) • Enhanced handling of the <code>pause</code> command • Improved performance (time and memory) when handling reallocation in cells and matrices
Functions	<ul style="list-style-type: none"> • Functions: <code>interp2</code>, <code>flip1r</code>, <code>kron</code>, <code>deg2rad</code>, <code>rad2deg</code> are added. <code>interp1</code> has been enhanced • Tolerances parameters are added to <code>fmincon</code> function • <code>load/save</code> functions can handle ASCII files • Function to save plots (2D and 3D) to file
CAE Readers	<ul style="list-style-type: none"> • The commands to handle CAE data are extended (<code>readmultvectors</code>, <code>readvectorbuilder</code>, <code>extract</code>). • <code>readfiletoc</code> command is added.
Plotting	<ul style="list-style-type: none"> • Stem plots are supported. • Command to define number of ticks on axis is added • Option to specify size and position of a figure is added

USER EXPERIENCE

License Wizard (solidThinking only)	To improve licensing setup with solidThinking license files or server, a License Wizard utility tool is added
Display	Improved pagination ; improved indentation of blocks in the editor
Completion	TAB key used for function of path/filename completion in the command window and editor

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

<code>readvectorbuilder()</code> can close the application with some .h3d files
Performance decreased with <code>hist()</code>
Issue when accidentally using complex cell index
Performance issue with cells
Debugger issue when handling undefined variable
<code>readvectorbuilder()</code> cannot handle Time Step
Issue when run <code>figure()</code> and <code>set()</code> functions together
Application closed in console mode when ending pagination in certain cases

Illegal assignment unexpected error
saveas() does not work properly for 3D plotting
interp2() does not return expected value
Figure and editor are hidden simultaneously for floating plots
Unexpected newline in printf()
Missing function tolerance in optimset
Outline mechanism did not recognize try-catch group
fgetl() returned to an extra carriage return
struct2cell indexing issue
Incorrect indices matrices in output of 'unique'
Editor doesn't auto indent the script on 'if', 'for' 'while', 'try', 'catch' control keywords
Performance issue of plot3 command
Matrix extraction does not work for booleans
find does not return the correct empty matrix
interp1 error issue when using unsupported option
Error message does not mention which file caused the error
Application can close on paginating nested cell twice
Global variables issue in recursive functions
normcdf(-inf) should be equal to 0
Allow multi-return assignment to struct values
Use the toc value as a value for comparison
Two Inf values in unique() should be considered to be the same
User is prompted to save plot when saving project even though there is no plot
OML command window performance decreased when there is long history
Error message does not contain which line leads an error
Result returned by strsplit is not consistent
Memory leak during matrix pagination
Outline in the editor does not handle if-elseif-else-end block properly
Extra right curly bracket display when printing varargin

bitand() does not support negative vector
printf() output is displayed incorrectly in OML window
Error in unsaved script does not show the line number
chol gives wrong result for lower option
ctrl + middle mouse cannot change font size in OML command window
readvector command should default to read the first subcase
Allow comment on same line as function definition
Cell array creation issue
Issue in left division when handling Nan

Compose 2016.2 Release Notes

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

MATH & SCRIPTING SUPPORT

Open Matrix Language (OML)	Comprehensive matrix-based math & scripting language
Functions	fir1, impz, fft2, saefilt95, saefilter, fliplr, iso6487, besself, besself3, saveas functions have been added
Scripting	Compose 2016 supports multiple languages including OML and TCL

USER EXPERIENCE

Floating Plots	Plots can either be docked in the Plot Area or can be floating
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The following issues have been resolved for **solidThinking Compose 2016.2**:

Issues in pagination of cells and structs in OML command window have been fixed
Fixes for OML syntax for for, if and switch commands
Issues in the CAE readers commands have been fixed

Compose 2016 Release Notes

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

MATH & SCRIPTING SUPPORT

Open Matrix Language (OML)	Comprehensive matrix-based math & scripting language
OML Libraries	Support for a large set of mathematical functions for various domains including statistics, algebra, signal processing & optimization
Scripting	Compose 2016 supports multiple languages including OML and TCL

USER EXPERIENCE

Edition & Execution	The Integrated Development Environment (IDE) in Compose comes with a fully featured script editor. The modern script editor is intuitive to use and supports various productivity options including command completion, syntax highlighting, smart indentation, collapsible sections, variable browser, file browser and a multi-view, interactive environment
Debugging	Powerful debugger with options to easily monitor variable values via watch window, track paths traced while executing scripts via call stack window and display all breakpoints in the debugging session via the breakpoints window
Plotting & reporting	<ul style="list-style-type: none"> • Support for various 2D & 3D graphs • Graph properties and attributes can be modified easily and interactively with context menus to set plot titles, labels, axis labels, legends & tick mark labels • Zoom and pan support • Report generation