

SIEMENS EDA

Tanner™ Tools Release Highlights

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Document Revision 1

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Revision History

Revision	Changes	Status/ Date
1	Modifications to improve the readability and comprehension of the content. Approved by Lucille Woo. All technical enhancements, changes, and fixes are listed in this document for all products in this release. Approved by Barry Dyne.	Released June 2022

Author: In-house procedures and working practices require multiple authors for documents. All associated authors for each topic within this document are tracked within the Siemens documentation source. For specific topic authors, contact the Siemens Digital Industries Software documentation department.

Revision History: Released documents include a revision history of up to four revisions. For earlier revision history, refer to earlier releases of documentation on Support Center.

Table of Contents

Revision History

Chapter 1

New Features 2022.2	7
L-Edit	7
Library Manager	9
Revision Control	9
S-Edit	9
Tanner Designer.....	12

Chapter 2

Installation and Authorization Codes	13
Authorization Codes	13
Version	13
Licensing	13

Chapter 3

Support and General Information	15
Global Customer Support and Success	15
Broken Links in PDF Documentation - MG595892	15

Third-Party Information

Chapter 1

New Features 2022.2

This document provides a high-level summary of this release.

It includes a summary of the new features in this release, any authorization code changes required, any major installation changes, and any transitioning issues you should be aware of before installing. Additionally, any last minute issues found in the final stages of testing are included.

For a detailed list of new features, refer to the *Tanner Tools Release Notes* available from the InfoHub or on Support Center.

L-Edit	7
Library Manager	9
Revision Control	9
S-Edit	9
Tanner Designer	12

L-Edit

The following new features are available in this release of the L-Edit tool.

Layer Operations

A new Layer Operations menu in the Layer Palette lets you easily select or delete objects on the layers selected in the Layer Palette. Instances containing the specified layers can also be selected. Deletion of objects on the specified layers can be done in the active cell, in the hierarchy of the active cell, or in all cells.

Selection Manager

A Selection Manager in L-Edit lets you easily see the list of objects selected, highlight the selected objects on layout, remove objects from the selection list, and delete selected objects from layout.

Library/Cell/View Name Presentation

The format of the Library/Cell/View name when referencing a view is now customizable. You can choose from four preset choices on the **Setup Application > Format** dialog box, or you can customize your own format with a small tcl function.

GDS Import/Export Warnings

The number of warnings issues by GDS/OASIS import and export is now limited to 100 warnings of each type. This can significantly improve performance for designs with large numbers of warnings.

New Label Selectability Button

A button to toggle label selectability has been added under the Layer Palette, along with the previous buttons to toggle selectability of instances, vias, and ports.

Select Under Point Command

A new command **Edit > Select > Select Under Point** selects all objects under a point with a single mouse click.

Performance Improvement Loading Libraries With Many Cellviews

Performance populating the list of cellviews in a library in the Library Navigator when opening a *lib.defs* file can now be improved by creating an index of the cellviews in the library. This can produce significant performance improvements for very large libraries on a network drive. The script for creating the index file is called *mkindex.py* and is located in the LinuxUtils folder. This feature is suitable for static libraries in which the list of views do not change

Calibre RealTime Runset Support

The Calibre Realtime integration from L-Edit now supports the runset feature. To use the runset feature in Calibre RealTime, you need to upgrade to Calibre 2022.2_15 or later.

Add Wire Section to Push Wires Aside

The **Draw > Add Wire Section** command now lets you draw a rectangle to push selected wires aside to make room for other objects. The wires wrap around the rectangle maintaining their spacing as the rectangle is resized.

Run Custom Scripts on Tool Startup/Shutdown and Design Open/Close

Running a custom TCL script on program startup/shutdown, and database open/close is now supported in all tools. Scripts may be located in a “scripts” folder in the database folder, in *%AppData%\Tanner EDA* (Windows), *\$HOME/.tanner/config* (Linux), or in a folder given by an environment variable *\$TANNER_TCL_AUTOLOAD_DIR*.

Separation of User Preferences and Technology

User preferences and technology have been separated. User preferences are now saved in the registry and not in technology, and modifying user preferences will no longer mark the tech as modified. Settings in the Setup Design dialog box are user preferences. In the Setup Technology

dialog box, the **Rule Aware Layout** and **Node Highlighting** tabs also contain user preferences inside a groupbox labeled Settings.

Library Manager

The following new features are available in this release of the Library Manager tool.

Run Custom Scripts on Tool Startup/Shutdown and Design Open/Close

Running a custom TCL script on program startup/shutdown, and database open/close is now supported in all tools. Scripts may be located in a “scripts” folder in the database folder, in *%AppData%\Tanner EDA* (Windows), *\$HOME/.tanner/config* (Linux), or in a folder given by an environment variable *\$TANNER_TCL_AUTOLOAD_DIR*.

Hierarchical Copy

Enhanced hierarchical copy for cells and library to copy the whole cells.

Performance Improvements

Improved performance opening *lib.defs* in Library Manager.

Show Instantiated Views

Library Manager is now able to show which views are instantiated using the library report, cell report, and view report tcl commands.

Revision Control

The following new features are available in Revision Control in this release.

TCL Callback Interface

A TCL Callback interface has been developed for custom Version Control Integration.

S-Edit

The following new features are available in this release of the S-Edit tool.

Schematic P-Cells

Schematic P-Cells are now supported. For example, parameters on a symbol can be used to update the number of pins on the symbol, and the underlying schematic will be automatically generated.

L-Corner Wire Drawing Mode

L-Corner drawing mode draws an L-shaped wire from the last vertex. L-Corner mode now preserves the direction of the segment as you move the mouse away from a vertex, allowing you to easily connect two points with a minimum of clicks. You can press the L key to flip the orientation of the L while drawing the wire.

Corner Setup Enhancements

Corner setup now allows multiple variables with the same library name. These are netlisted in the same Alter.

Library/Cell/View Name Presentation

The format of the Library/Cell/View name when referencing a view is now customizable. You can choose from four preset choices on the **Setup > Preferences > Format** page, or you can customize your own format with a small tcl function.

Parasitic PEX/xACT Netlist Import

S-Edit is now able to import PEX/xAct netlist views and create a schematic view containing both the intentional and parasitic devices. A cellmap file is used to provide the mapping to the correct symbols. Device properties from the netlist are applied .

Add Voltage, Current, and Differential Probe from Results page

Three new buttons are added to the **Setup Simulation > Results** page for adding voltage, current, and differential probe signals to the signals table. Pressing these buttons allows addition of multiple signals at one time by clicking on each signal on the schematic.

Setup Number of Significant Digits Displayed

The number of significant digits or decimals displayed in annotations on schematic views can now be controlled using new number format settings on **Setup > Preferences > Format**.

Performance Improvement Loading Libraries With Many Cellviews

Performance populating the list of cellviews in a library in the Library Navigator when opening a *lib.defs* file can now be improved by creating an index file of the cellviews in the library. This can produce significant performance improvements for very large libraries on a network drive. The script for creating the index file is called *mkindex.py* and is located in the LinuxUtils folder. This feature is suitable for static libraries in which the list of views do not change.

TCL Function to Populate Testbenches on Creation

A TCL function "tanner_new_testbench_proc" is now run, if defined, when a new testbench is created (from the <New> item in the Setup Simulation "Testbench" droplist) that allows the

testbench to be prepopulated with desired setup. The TCL function is passed FOUR arguments: lib cell view testbench, and is documented on the “New Testbench” dialog box.

Differential Probing

Reference probe on the Simulation Toolbar has been changed to differential probe. In differential probe mode, the user clicks 2 nets for each probe created. The first net is the positive net and the second click is the negative net.

TCL Command to Populate Corners Setup

A new command "workspace setactive -corners" makes it easier to populate the corners matrix. This command clears out existing corner data, and then accepts a single Tcl argument that is a "list of lists". The first list is the list of corner names; subsequent lists each define a single row. For example:

```
workspace setactive -corners {
  {c1 c2 c3}
  {library {c:\tmp\test.lib} FF SS {FS SF}}
  {variable V1 1.0 1.1 1.2}
  {variable V2 {} 0:10:100}
  {temperature T1 30 40 50}
}
```

Easy Selection of Parameters in Corners Setup

A new dropdown on a parameter variable in the Corners page allows easy selection of parameters defined in the Parameters page.

EZWave Plot Options Setup

A Plot Options dialog box is now available via the context menu on the Plot Options column in the Results page in Setup Simulation. This dialog box provides a user interface to set various Plot Options such as titles, axis formats, line styles, and so forth.

Results Page Editing Enhancements

Holding the Ctrl Key down when pressing the **Add** button in the **Setup Simulation > Results** page will add a new entry at the end of the table. Without holding the Ctrl key, the new entry is added below the currently selected row.

Run Custom Scripts on Tool Startup/Shutdown and Design Open/Close

Running a custom TCL script on program startup/shutdown, and database open/close is now supported in all tools. Scripts may be located in a “scripts” folder in the database folder, in *%AppData%\Tanner EDA (Windows),\$HOME/.tanner/config (Linux)*, or in a folder given by an environment variable \$TANNER_TCL_AUTOLOAD_DIR.

Technology Reference for New Library

The New Library command now requests a technology reference.

Performance Improvements

Performance of loading very large schematic views such as parasitic views or digital synthesized views is improved.

Tanner Designer

The following new features are available in this release of the Tanner Designer tool.

Run Custom Scripts on Tool Startup/Shutdown and Design Open/Close

Running a custom TCL script on program startup/shutdown, and database open/close is now supported in all tools. Scripts may be located in a “scripts” folder in the database folder, in *%AppData%\Tanner EDA* (Windows), *\$HOME/.tanner/config* (Linux), or in a folder given by an environment variable *\$TANNER_TCL_AUTOLOAD_DIR*.

Chapter 2

Installation and Authorization Codes

The installation process consists of installing the MGLS (Mentor Graphics Licensing System) software, the license file, and the product software and documentation.

Authorization Codes	13
Version	13
Licensing	13

Authorization Codes

No changes to authorization codes are required for this release. You may request your existing authorization codes by opening a non-technical Service Request on Support Center.

For additional information on licensing, refer to the *Licensing Mentor Graphics Software* manual.

Version

Tanner Tools is no longer supported on Windows 7, starting January 2020. This coincides with the end-of-life date for Microsoft Windows 7. Tanner Tools 2016.2 is no longer supported as of Jan 2020.

Licensing

Tanner Tools are currently installed with FlexNet licensing version v11.14.1.3/MGLS version 2018_1.

If problems are encountered users install the latest version of FlexNet PCLS licensing software from [Support Center](#).

Chapter 3

Support and General Information

Application and online help is available from technical support and documentation.

Global Customer Support and Success	15
Broken Links in PDF Documentation - MG595892	15

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<https://support.sw.siemens.com>

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