SIEMENS EDA

Tanner™ Tools Release Notes

Software Version 2022.2
Document Revision 1

SIEMENS

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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 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

Chapter 1
Configuration and Compatibility

This chapter provides information on compatibility, licensing, and system requirements for this Tanner™ Tools release.

For more information on licensing and system configuration, refer to the *Tanner Tools Administrator's Guide*.

The exact access date is June 2022.

The following issues are described in this chapter:

Windows Support

Tanner Tools are no longer supported on Microsoft® Windows® 7, effective January 2020, coinciding with the end-of-life date for Windows 7.

Tanner Tools 2016.2 are no longer supported as of January 2020.

Additional information on supported platforms is available at "Installation and Application Requirements" in the *Tanner Administrator's Guide*.

RHEL Support

The Tanner 2021.2 release is the last release to support RHEL 6.8. Future major Tanner releases will only support RHEL 7.

Licensing

The Tanner Tools are currently installed with Mentor Standard Licensing version 2018_1 and FlexNet licensing version 11.14.1.3.

If you encounter issues, please install the latest version of licensing software from Support Center.

Shipping Files

If you are loading the third-party compatibility Tcl startup scripts, please update the file in your startup folder to the latest release version in order to allow the bindkeys associated with the custom scripts to be auto-loaded correctly upon startup.

The Tcl startup scripts are *sedit_custom_startup.tcl* and *ledit_custom_startup_tcl*. These scripts are located in the *TannerTools_<version>\FeaturesByTool\S-Edit\BindKeys* and the *TannerTools_<version>\FeaturesByTool\L-Edit\BindKeys* directories.

Broken Links in PDF Documentation - (MG595892)

Due to enhanced security restrictions with web browser PDF plug-ins, some links do not function. Links in HTML documentation are fully functional.

Clicking a link within a PDF viewed in a web browser may result in no action, or it may load the title page of the current PDF manual (instead of the intended target in the PDF manual). The unresolved link behavior occurs in all web browsers on Windows® and Linux®[1]platforms. Because of this behavior, the navigational experience of PDF manuals is compromised. PDF is ideal for printing because of its page-oriented layout.

Use the HTML manuals to search for topics, navigate between topics, and click links to examples, videos, reference material, and other related technical content.

For information about Adobe's discontinued support of Adobe Reader on Linux platforms and your available options, refer to Knowledge Article MG596568 on Support Center.

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1. Linux® is a registered trademark of Linus Torvalds in the U.S. and other countries.

This chapter contains all of the enhancements and corrected defects for this release.

For more information, refer to the individual product manuals available from the InfoHub (**Help > Help and Manuals**) or from Support Center.

Known Problems and Solutions

The following known problems and solutions are present in this release.

- The custom presentation of Library/Cell/View names is available in the L-Edit tool and the S-Edit tool, but is not yet available in the Library Manager tool.

Enhancements for Installer

The following enhancements are available for the installer in this release.

Note - Viewing PDF files within a web browser causes some links not to function. Use HTML for full navigation.

- **ER 39835** — Installing with the -batch command line argument will now install desktop shortcuts without asking for user input.

Enhancements for L-Edit

This section lists the enhancements available in this release of the L-Edit application.

- **ER 29064** — A new Layer Operations menu in the Layer Palette lets one 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.

- **ER 46215** — 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.

- **ER 50938** — 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.

- **ER 53023** — 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.

- **ER 53054** — A button to toggle label selectabilty has been added under the Layer Palette, along with the previous buttons to toggle selecatability of instances, vias, and ports.

- **ER 53058** — A new command **Edit > Select > Select Under Point** selects all objects under a point with a single mouse click.

- **ER 53193** — 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.

- **ER 53574** — L-Edit can be setup for 2-button mouse operation using a new option "Use Alt key to emulate three-button mouse" in **Setup Application > Mouse**.

- **ER 53793** — UPI commands are now available for Alignment Toolbar functions.

- **ER 53976** — The **Enable Rule-Aware Layout** and **Setup Rule-Aware Layout** buttons on the Verification toolbar have been moved to the Object Snapping toolbar, and the Verification toolbar has been renamed to MEMS Verification toolbar.

- **ER 54495** — 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.

Table 2-1. L-Edit Script Order

Program startup scripts run in the following order . . .	Design open scripts run in the following order . . .
1. The bindkey script file, *layout_bindkeys_utf8.tcl*, is loaded from *%appdata%\Tanner EDA* (Windows) or *$HOME/.tanner/config* (Linux). 2. User scripts from *$TANNER_TCL_AUTOLOAD_DIR/ startup.ledit* folder. $TANNER_TCL_AUTOLOAD_DIR is a user defined environment variable containing a path. 3. User scripts from folder in *%appdata%/ Tanner EDA/scripts/startup.ledit* (Windows) or *$HOME/.tanner/config/scripts/ startup.ledit* (Linux). 4. Command line scripts (–t <filename>) and command line TCL commands (–T <"TCL Commands">) – in order they appear on the command line. 5. Command line design open (*lib.defs* open).	1. The *autoLoad.tanner* script from each library folder. 2. Scripts in the *./scripts/open.layout* folder each library folder. 3. Scripts in the *.scripts/open.layout* folder in lib.defs folder. 4. Scripts in *$TANNER_TCL_AUTOLOAD_DIR/ open.layout* . 5. Scripts in *%appdata%/Tanner EDA/ scripts/open.layout* (Windows) or *$HOME/.tanner/config/scripts/ open.layout* (Linux).

- **ER 54732** — 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.

- **ER 54875** — 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.

- **ER 54928** — 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.

Enhancements for Library Manager

This section lists the enhancements available in this release of the Library Manager application.

- **ER 53630 —** 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.

- **ER 53745 —** Enhanced hierarchical copy for cells and library to copy the whole cells.

- **ER 53802 —** Improved performance opening lib.defs in Library Manager.

- **ER 54138 —** Library Manager is now able to show which views are instantiated using the library report, cell report, and view report tcl commands.

- **ER 54458 —** Version control columns in Library Manager are now autopopulated.

Enhancements for Linux

This section lists the enhancements available on Linux in this release.

- **ER 52980 —** anner Tools data in *%AppData%* on Windows is now stored in *$HOME/ .tanner/config* on Linux.

Enhancements for Revision Control

This section lists the enhancements available for Revision Control in this release.

- **ER 55180 —** A TCL Callback interface has been developed for custom Version Control Integration.

Enhancements for S-Edit

This section lists the enhancements available in this release of the S-Edit application.

- **ER 42059 —** 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.

- **ER 47715 —** 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.

- **ER 47616** — The small signal parameter list can now be sorted by clicking on the column header in the table.

- **ER 50358** — Corner setup now allows multiple variables with the same library name. These are netlisted in the same Alter.

- **ER 50939** — 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.

- **ER 52524** — 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

- **ER 53088** — 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.

- **ER 53100** — 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**.

- **ER 53193** — 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.

- **ER 53198** — A TCL function "tanner_new_testbench_proc" now runs, 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.

- **ER 53416** — 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.

- **ER 53728** — 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}
}
```

- **ER 53729** — A new dropdown on a Parameter Variable in the Corners page allows easy selection of parameters defined in the Parameters page.

- **ER 53754** — 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.

- **ER 53800** — Holding the Ctrl Key down when pressing the Add button in the **Setup Simulation > Results** page adds a new entry at the end of the table. Without holding the Ctrl key, the new entry is added below the currently selected row.

- **ER 54494** — 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.

Table 2-2. S-Edit Script Order

Program startup scripts run in the following order . . .	Design open scripts run in the following order . . .
1. The bindkey script file, *schematic_bindkeys_utf8.tcl*, is loaded from *%appdata%\Tanner EDA* (Windows) or *$HOME/.tanner/config* (Linux). 2. User scripts from *$TANNER_TCL_AUTOLOAD_DIR/ startup.sedit* folder. $TANNER_TCL_AUTOLOAD_DIR is a user defined environment variable containing a path. 3. User scripts from the folder in *%appdata%/ Tanner EDA/scripts/startup.sedit* (Windows) or *$HOME/.tanner/config/scripts/ startup.sedit* (Linux). 4. Command line scripts (–t <filename>) and command line TCL commands (–T <"TCL Commands">) – in the order they appear on the command line. 5. Command line design open (*lib.defs* open).	1. The *autoLoad.tanner* script from each library folder. 2. Scripts in the *./scripts/open.design* folder for each library folder. 3. Scripts in the *.scripts/open.design* folder in the lib.defs folder. 4. Scripts in the *$TANNER_TCL_AUTOLOAD_DIR/ open.design*. 5. Scripts in *%appdata%/Tanner EDA/ scripts/open.design* (Windows) or *$HOME/.tanner/config/scripts/ open.design* (Linux).

- **ER 54547 —** The New Library command now requests a technology reference.

- **ER 55176 —** Performance of loading very large schematic views such as parasitic views or digital synthesized views is improved.

Enhancements for Tanner Designer

This section lists the enhancements available in this release of the Tanner Designer application.

- **ER 54598 —** 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.

Enhancements for Waveform Viewer

This section lists the enhancements available in this release of the Waveform Viewer application.

- **ER 54494** — 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.

Corrected Problems for L-Edit

This section lists the fixed defects in this release of the L-Edit application.

- **DR 42964** — The Node Highlighting data folder is now correctly preserved. It is saved in the registry so changing it will not modify technology.

- **DR 43662** — Fixed problem with pin markers in SDL becoming hidden.

- **DR 48049** — Fixed problem where Prevent Violations mode of Rule-Aware layout did not always work.

- **DR 51766** — Fixed "Highlight All" in the SDL Context menu, and renamed it to "Highlight Tree".

- **DR 52254** — Commands entered on the command line are now included in the log file saved to the TANNERLOGPATH environment variable location.

- **DR 53022** — When wire end style is butt, and wire is selected, edit range around the ends should not become half the wire width.

- **DR 53218** — L-Edit now preserves maximized state of cellview windows when opening a design.

- **DR 53271** — The user is now prompted to save unsaved changes to the T-Cell cache when exiting L-Edit.

- **DR 53626** — Zoom level is no longer reduced every time you close and reopen a cell.

- **DR 53768** — TDI no longer checks floorplan and issues an error regarding boundary for synthesis only.

- **DR 53873** — Fixed rotating curve polygon around base point with customized angle.

- **DR 53788** — Removed screen flashing when opening and closing cellview windows when cellview windows are maximized.

- **DR 54005** — Fixed problem saving TDI Floorplan settings.

- **DR 54076** — Instances names are now preserved when copy-and-paste to a different cell.

- **DR 54132** — Fixed problems using the "Preserve my layer colors in registry" option. Fixed problems with "Reset Layer Overrides".

- **DR 54249** — Alignment operations will no longer move locked instances.

- **DR 54386** — LLayer_SetRenderingAttribute now accepts fill-and outline pattern values greater than 15.

- **DR 54414** — Significantly improved performance of "Save All" when there are many views to save by updating UI at the end of saving all cells rather than after saving each cell. Saving after a GDS import is the usual case to see an improvement.

- **DR 54435** — Fixed font usage on Linux so italic and bold text appears correctly. This affected the display of bold font to indicate modified cells, italic font to indicate active net in SDL.

- **DR 54449** — Technology is now marked as modified after GDSII import if a new layer is added as part of the GDS import.

- **DR 54594** — L-Edit Rule-Aware layout no longer gives false errors for geometries in the hierarchy.

- **DR 54692** — LCell_Unreserve with bSaveIfChanged=LFALSE now reverts cell contents when unreserving.

Corrected Problems for Library Manager

This section lists the fixed defects in this release of the Library Manager application.

- **DR 46912 —** Tool works too slowly when in recent list of *lib.defs* exists remote path.

- **DR 49178 —** Linux: Now able to write an alias name after writing path of a library to add.

- **DR 51771 —** Changing the order of libraries in Project Libraries pane should apply on Categories Pane also.

- **DR 51781 —** Copy/Delete/Rename library operations prints errors on X-FAB_AMS_ref_flow design.

- **DR 53219 —** "Workspace info" commands have been added, similar to S-Edit.

- **DR 53231 —** UTF-8 symbols of library and cell names are shown as underscores in several dropdown components of LM dialog boxes.

- **DR 53589 —** There is now a separate checkbox in Appearance ribbon to show/hide l*ib.defs*.

- **DR 53663 —** Drag and drop of a *lib.defs* file into command line open it instead of sourcing as a script.

- **DR 53772 —** Need to auto-refresh newly created, copied, and renamed libraries/cells/ views in managed project.

Note - Viewing PDF files within a web browser causes some links not to function. Use HTML for full navigation.

- **DR 53801 —** Symbolic links to *lib.defs* files no longer result in incorrect relative path expansion.

- **DR 54091 —** Library Manager opens separate S-Edit/L-Edit during opening a view.

- **DR 54338 —** Name validation is now working during copying the category to another library.

- **DR 54447 —** Tool no longer incorrectly shows existing instances like unbound (in red) in Replace Instances dialog box.

Corrected Problems for Linux

This section lists the corrected problems available on Linux in this release.

- **DR 53402 —** Fixed problem using soft link to */home* in the wine configuration directory while opening*lib.defs*.

Corrected Problems for Revision Control

This section lists the fixed defects for Revision Control in this release.

- **DR 48913 —** Library Manager Now auto commits *lib.defs* file after deleting library.

- **DR 49224 —** Library Manager View should not be in Uncommitted state after Revert to latest revision.

- **DR 49730 —** Library Manager SVN:SE+LE: Now able to revert to newer versions after reverting to some old version.

- **DR 50832 —** Library Manager P4+SVN+SOS: Update library now shows newly added categories in Categories Pane.

- **DR 51378 —** S-Edit SOS: When we create a copy of a cell with the "Manage Cell" option checked, S-Edit checks out the parent folder of the copied cell.

- **DR 53028, 53029, 53030 —** Library Manager S-Edit, L-Edit Unicode and special symbols support in Library Manager, S-Edit and L-Edit.

- **DR 53554 —** S-Edit SVN+SOS+P4: Revert is now working during rename of uncommitted views.

- **DR 53580 —** Library Manager *lib.defs* repo lock/unlock concurrent flow is fixed in SVN integration - conflicting state for *lib.defs*.

- **DR 53588 —** Library Manager now auto-refreshes managed *lib.defs* after explicit or implicit modification.

- **DR 53771 —** Library Manager needs to correct implicit commit of managed *lib.defs* during library rename operation.

- **DR 54035** — Library Manager Linux: Tools now recognize the Version Control when loaded lib.defs file is a symbolic link.

- **DR 54804** — S-Edit SVN+P4+SOS: Performance opening designs under revision control is improved.

Corrected Problems for S-Edit

This section lists the fixed defects in this release of the S-Edit application.

- **DR 25620** — S-Edit now preserves maximized state of cellview windows when opening a design.

- **DR 50337** — Update All now recognizes newly added libraries into the *lib.defs* file. Libraries can be added to the *lib.defs* file by L-Edit, Library Manager, or manual edits.

- **DR 52455** — Rotating a symbol to a swapped instance now only copies user modified properties, rather than all properties. Unmodified properties retain their default values.

- **DR 52488** — Fixed problems with **File > Image > Copy to Metafile**.

- **DR 52546** — Fixed **Variable > Move Up/Move down** in **Setup Simulation > Corners**.

- **DR 52940** — Significantly improved performance opening large schematic views written by other tools. Also improved connectivity extraction performance of large designs with inherited connections, resulting in faster design check and netlisting.

- **DR 53180** — Fixed problems in **File > Image > Copy Color Metafile to Clipboard**.

- **DR 53422** — When selecting instances of a symbol in a schematic, if no libraries are selected in the Library Navigator, we no longer modify the library selection.

- **DR 53791** — Removed screen flashing when closing cellview windows when cellview windows are maximized.

- **DR 53815** — The group command now creates a cell in same library as the current cell, rather than the toplevel library.

- **DR 53207** — Fixed application crashes that occasionally happened at the end of a simulation.

- **DR 53145** — The color of small-signal parameter annotations can now be changed.

- **DR 53643. 53856** — Corrected some situations where parameter annotations for OP Results were blank.

- **DR 53705** — Enabled annotation of AFS Model and OP Parameters regardless of the setting for 'Enable Waveform Probing'.

- **DR 53757 —** Improved the display of Command window hotlinks for viewing simulation results files at the end of an AFS or Symphony simulation.

- **DR 53816 —** Hierarchy Navigator is now automatically updated for new or copied views.

- **DR 54334, 53957 —** Corrected situations that caused EZwave and S-Edit to become non-responsive when displaying new plots. Requires AMSV-2022.1 or a newer release.

- **DR 54372 —** Sweeps on the parameter sweep page are now written in the inner loop when writing corners.

- **DR 54377 —** Library names missing from Hierarchy Report have been restored.

- **DR 54420 —** In the Instance dialog box, typing into Cell Name updates the instance name the same as picking the cell name from the list.

- **DR 54633 —** Corrected simulation results annotation which would not display after closing the schematic views, closing S-Edit, and then relaunching to display.

- **DR 54079 —** Names are now required for expressions that are defined on the **Setup Simulation > Results** page.

- **DR 54359 —** A single corner is no longer written out as an altergroup. This improves compatibility with some simulators.

- **DR 54362 — Help > Supported Models** now displays the BSIM3 version number correctly.

- **DR 54505 —** Fixed **Setup AFS Simulation: General > Results Viewing > Subcircuit Probe Level**.

- **DR 54540 —** Corrected the **Setup Simulation > Results** page so that modified Plot Options take affect when a Replot operation is performed.

- **DR 54546 —** Display is now updated after changing hotspot size.

- **DR 54554 —** Adding a library to a design no longer causes S-Edit to revert to its default grid settings.

- **DR 54564, 54610 —** Fixed problems with differential voltage probing when descended into the design hierarchy.

- **DR 54651 —** When netlisting for LVS and S-Edit is already open with a cell different from the one to be netlisted for LVS, the correct hierarchy priority is now used, rather than the hierarchy priority of the active cell.

- **DR 54714 —** Added a new TD column in **Setup Simulation > Results > Calculator Table** for determining whether an expression measurement should be exported to Tanner Designer.

- **DR 54731** — Current probe now works even when selection box on the symbol doesn't enclose the pin.

- **DR 54801** — The Property Navigator now preserves it's scroll position when changing property values.

- **DR 54915** — Resolved some issues that could lead to the error: Network server error (Poco error 10054).

- **DR 54950** — Cached values for subcircuit back annotation now use doubles and are no affected by the DTOS setting. This fixes accuracy problems when summing up subcrcuit currents.

- **DR 55146** — The position of the active tab in the tab order is now preserved when opening a design.

Corrected Problems for T-Spice

This section lists the fixed defects in this release of the T-Spice application.

- **DR 47255** — Resolved a crash which was due to file handle resource limits when running Verilog-A and compact model simulations with highly nested and lengthy parameter sweeps.

- **DR 53828** — When simulating in PSPICE mode (.options compatibility=pspice) corrected the model levels for EKV, level=5, and BSIM3.3, level = 7.

- **DR 54023** — Fixed problem where DC monte=<val> produces a histogram but does not output MC log or measure log.

- **DR 54107** — Fixed a problem with invalid text display (screen trash) in the Simulation Status window.

- **DR 54587** — Corrected the plot outputs VP(), VM(), IP(), and IM() which were wrong (swapped) relative to the selection of option ACOUT = 0 or 1.

- **DR 54863** — Removed an invalid warning message when multiple search option commands are used, which is a valid way to define multiple directories to search for.*lib* and *.include* files.

Corrected Problems for Tanner Designer

This section lists the fixed defects in this release of the Tanner Designer application.

- **DR 53820** — Fixed worksheet names under Linux to not include illegal characters, such as /, which was happening with naming option 'Top parent directory name'.

- **DR 54315** — Improved the display of Sweep Variables on the Measurements table, to include all levels of variable values.

- **DR 54776** — Corrected duplicate table row entries when a Tanner Designer project created under Linux is opened from Windows.

Corrected Problems for Waveform Viewer

This section lists the fixed defects in this release of the Waveform Viewer application.

- **DR 53450** — Fixed unhandled exception error on TCL command [measure risetime/ falltime].

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

Global Customer Support and Success

A support contract with Siemens Digital Industries Software is a valuable investment in your organization's success. With a support contract, you have 24/7 access to the comprehensive and personalized Support Center portal.

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https://support.sw.siemens.com

If your site is under a current support contract, but you do not have a Support Center login, register here:

https://support.sw.siemens.com/register

Documentation

These release notes and the accompanying Tanner Tools documentation are available through multiple resources.

View the Tanner Tools documentation from the following locations:

- Application help through the **Help > Help and Manuals** to invoke the InfoHub documentation portal.

- On Support Center under the **Documentation** tab for Tanner Tools releases.

Third-Party Information

Details on open source and third-party software that may be included with this product are available in the *<your_software_installation_location>/legal* directory.