

General Information

This update can exclusively be used for the **PSS®SINCAL Platform 12.5**. It can't be used with other product versions!

Procedure for Installation with Update Wizard

- Close all running PSS SINCAL Platform applications
- Decompress the Zip archive
- Starting the Update Wizard. It automatically detects the existing PSS SINCAL Platform installation and updates all components.

Procedure for Manual Installation with Update Files

Attention: Administrator rights are necessary to supply the update!

- Close all running PSS SINCAL Platform applications
- Decompress the Zip archive
- Copy the directories/files into PSS SINCAL Platform installation directory
- Start the program PSS Tool and then press the button "Register" in the tab "Administration"

If you have further questions, please contact the **PSS SINCAL Support** (phone +43 699 12364435, e-mail sincal@simtec.cc).

Additions/Corrections Update 4 (September 6, 2016)

This update contains all the additions of the previous updates and on top of that the following error corrections and additions.

PSS SINCAL Electrical Networks

- Load flow
Fixed of a problem in transformer control with negative additional voltage.
- Short circuit
Fixed of a bug when creating the results of the observation branches. The nodes were not properly set. As a result, multiple results were generated for same node.
- Protection coordination
The rated currents of the differential protection devices were not properly identified. Thus the current sum was calculated wrong and false tripping could occur.
Correction for signals of user-defined tripping areas with individual zone names.
The E3333 error message is now generated also for transformers, if there are several fault observations on a transformer.
- Protection routes
Consideration of "Treatment of transformers" option only when creating protection routes.

- Check protection settings
Modified functionality to check the current selectivity. Now, the current set on the protection device must be either less or equal than the protection device laying before in load flow direction.
- UCTE import
Advanced import of transformer controllers. Incorrect transformer controllers are (in relation to Side 1) detected in the UCTE file and imported correctly.

PSS NETOMAC

- Load flow
Until now determining the network area transfer was limited to 2000 branches. This limit has been removed, i.e. now, results of any number of transfer branches can be supplied.
Improved load flow convergence.
- DVG import
New registry-switch to control importing of switched off transformers (by default they are connected via breakers):
[\[HKEY_CURRENT_USER\SOFTWARE\Siemens\NETOMAC\12.5\Simulation\]](#)
"DTFAddBreaker"=dword:00000000

Additions/Corrections Update 3 (August 4, 2016)

This update contains all the additions of the previous updates and on top of that the following error corrections and additions.

PSS SINCAL Electrical Networks

- Short circuit
Provide results for in-feeder with internal reactance.
- Protection coordination
Fixed of bug in handling of include networks.
Fixed of a crash when calculating the damage curve.
Improved generation of input data diagrams. When input data are faulty, the generation of input data diagrams is no longer completely canceled.
Enhanced implementation at splitting lines with switched off terminals.
- Protection routes
Only when creating the protection routes consider treatment of the transformers.
- Load development
Fixed of a bug at initialization of load increase values. The absolute factor and factor PQ were not verified and not considered in the calculation. Thus, the results for the associated date points were not generated.

PSS NETOMAC

- XMAC models
Fixed of a problem with concurrent use of many XMAC models.
Fixed a problem with RATELIM block.

- Simulink models
Correction of implementation problems.
- DVG import
Fixed of bug in reducing numerical values due to the NETOMAC input format.
Fixed of problem with name generation when using the option "GERMAN TSO".
- Frequency response calculation
Fixed of initialization problem at VOTHSG block.

Additions/Corrections Update 2 (July 1, 2016)

This update contains all the additions of the previous updates and on top of that the following error corrections and additions.

PSS SINCAL User Interface

- Joining lines
So far, in joining lines always the network level preselected in the view was assigned to the new common line. This behavior now was changed in this way that the network level from the master element of the amount of selection is used.
- Master database
Correction of a problem which under certain constellations has led to an endless loop during publishing changes.

PSS SINCAL Electrical Networks

- Check protection device settings
Fixed of bug in the CSV export of test results.
Improved display of routes with branches.
Correct name for signals of user-defined tripping areas with individual zone names.
- Harmonics
Correction of the angle at unbalanced results – total values.
Correction of harmonics voltage at Harmonics divisible by 3.
- Automation of calculation methods
Improved integration of parameters for OpenEx() function. The parameters (Datafile, User, ...) defined previously are now used at OpenEx().
- CYMDIST import
Fixed of a bug in determining the line impedances, if network data are not specified in the metric system.
General improvements in importing: support for DC elements and infeeders.
- DINIS import
Corrections when generating graphics data for infeeders with transformers.
- CIM import
For the CGMES 2.4.15/CIM 16 version the import was extended to better support modellings differing from the standard.
- Excel import
Correction in importing operating point values and profile values in electrical networks.

- Verify connection conditions
In unbalanced networks results at the connection point were provided only for the conductor L1. This has been corrected.
- Network reduction
Now in PSS SINCAL 12.5 a completely new implemented static network reduction is available, which includes extensive improvements, especially in the reduction of SC data. The new network reduction is available parallel to the existing and can be activated optionally with the registry key:
[\[HKEY_CURRENT_USER\SOFTWARE\Siemens\SINCAL\12.5\Simulation\]](#)
"NRED_SINCAL"=dword:00000001

PSS NETOMAC

- Load flow
Improved convergence in the load flow, if parallel PV types are topologically very close to each other and then the angle rotations influence each other strongly.
- Create standard structure
Improving the function, when very "old" NETOMAC files are used. Now automatically unique signal numbers are generated when creating plot definitions.
- Malfunction of transformer in EMT and stability
It is now possible to malfunction also a transformer. The errors in the DIS file with the S ID are now processed in relation to the element. This means that elements, which are modeled internally with several branches, can be processed.
- Optimization
Fixing of a bug when using secondary constraints in the optimization.
- BOSL
Fixed of a bug in GNE outputs.
- Source editor
Improvement in block operations in the editor.
UCTE Import
Fixed problem with line reactance at import.
- Arc voltages
Correcting problems with switching operations by means of CON_SWIT.

Additions/Corrections Update 1 (May 29, 2016)

This update contains the following error corrections and additions.

PSS SINCAL User Interface

- Catalogue
Fixed a bug when pasting items from catalogues which were created with an old version of the product (< 11.x).

PSS SINCAL Electrical Networks

- Verify connection conditions
Fixed of a problem in calculation of the allowable voltage change. The voltage profile diagrams were not correct.
- Load flow
Improvements in the continuous tap position adjustment algorithms.
Newton Raphson: calculation with different main voltages, if there is no convergence.
- CIM import
Improved processing of dynamic models.
- Calculation automation
Fixed of problem with ChangeVariant() function in conjunction with virtual database. Results from virtual database have been stored using SaveDB() always with VariantID = 1 in physical database
- Protection coordination
Fixed of a bug in reset load flow data.
Fixed of display bug at tripping areas in the R/X graph.
Fixed of problem when creating protection routes as well as limit on 250 routes per protection device.

PSS NETOMAC

- Graphical model editor
At some blocks user inputs were overwritten with default values after loading the model. This error has been corrected.
- XMAC models
Improved sorting in feedbacks.
Improved integration of Simulink blocks.
- Models
Fixed an error when processing predefined variables like #SIMMODE, #APPUSR, #SN, ...
- VectorFit line models.
Improved connection of PSCAD data. Too large eigenvalues are now filtered dynamically to prevent a divergence in the dynamics simulation.