

General Information

This update can exclusively be used for the **PSS®SINCAL Platform 11.0**. 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 6 (April 27, 2015)

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

Electrical Networks

- Reliability
At connections the line impedance is no longer checked in calculating reliability.
- Protection coordination
The fault observation states are now also stored at faults in branches in the ProtFaultResult table in the database.
- Harmonics
Fixed of bug in the angle of voltage sources.
- Load Profile
Improved memory management for diagram generation.

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- Variants
Fixed of a problem in the setting of global variables at variant calculation.

Additions/Corrections Update 5 (March 26, 2015)

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

Electrical Networks

- Load flow
Fixed of a bug in calculating networks with different frequencies.
Improvements in simulation of static compensators.
- Short circuit
Correction at simulation of current sources in initial loaded short-circuit.
- Dynamics
Fixed of bug in considering current transformer saturation in dynamic simulation.
- CIM 16
Improved import and export of controller data.
Correction when importing short circuit data for infeeders.
- Verify connection conditions
Data of DC-infeeders are added to the Word documentation.
Fixed of a bug in calculation of connection conditions at DC-infeeders.
- Automation
Fixed a memory leak when accessing database objects.

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- Partitions
Fixed of bug in processing partitions. The generators were not correctly assigned to the different partitions.

Additions/Corrections Update 4 (February 27, 2015)

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

- ISO evaluations under 64 bit
Correction of an error when saving the ISO evaluation settings in the PS SINCAL 64 bit version.
Because of this error a broken SIN file was created during saving the network.

Electrical Networks

- Load flow
Profiles and operating point data of DC Infeeders are now correctly processed according to the input format.
Fixed of bug in asymmetric networks in determination of iron and copper losses for power balance.

- Short circuit
Fixed of initialization problem with minimal initial-loaded short circuit.
Fixed of bug at center tapped transformers with star point impedance.
- Protection coordination
Crash when generating protection routes, if there are more than 100,000 routes in the network.
Correction of the protection routes for tripping and pickup.
- Arc Flash
Results according DGUV are now available in the tabular view too.
- Dynamics
Correct modelling of fault connection in unbalanced networks.
Correct output of phase-phase voltages in unbalanced networks.
- Reliability
Correction for reliability index MAIFI.
- Verify connection conditions
Fixed of a bug, when the connection node of the distributed generation system was connected to the network.
- CIM 16
Improved import and export of controller data.
Correction of a bug when importing line data.
Support for SVC.
Improved implementation of SC data import.
Improved import and export of graphics.

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- EXTERN DLL
Fixed of a problem with EXTERN DLLs, created with the Salford Fortran Compiler.
- SIMULINK DLL connection
Enhanced error messages for incorrect implemented SIMULINK DLLs.
- Optimization/identification
Corrections in the process of the control option from the CTL file.
- Load flow
Fixed of bug with partitions in the load flow.

Additions/Corrections Update 3 (January 30, 2015)

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

- Results implementation
Improved implementation of motor start-up, load profile and load development results in the user interface.

Electrical Networks

- Load flow
 - Correction of an error in the diagnostic output of the admittance matrix.
 - Coherent treatment of the model for all conductors of a network element in unbalanced load flow.
 - Automatic control of reactive power at generator with power limit characteristics.
- Short circuit
 - Correction of an error in determining Z1 and Z0 during unbalanced network simulation.
- Reliability
 - Fixed of bug in determining the minimum interruption duration according to IEEE1366 in the evaluation.
- Low-voltage dimensioning
 - Error message after more than 10 fuses in a fuse area.
 - Improved algorithm to detect fuse areas. Fuses without feeding in the reverse network of the fuse are checked in a dedicated fuse area.
- Dynamic simulation
 - Fixed of bug when switching lines.
- Protection coordination
 - Fixed of bug when tripping with teleprotection.
 - Correction in determining the waiting time of protection devices.
- Protection routes
 - The node at the end of a protection route is not graphically highlighted, if the connection is switched off.
- Tap zone detection
 - Enhancement of the network tracing for unbalanced networks. Now, all phases of the connections of network elements are considered properly (especially for YD transformers).
- CIM 16 import
 - Improvements in the implementation.
- DINIS Import
 - Fixes for import of transformers with identical voltages on both sides.
 - Correction of errors in breaker import.

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- Error and warning messages
 - Correction of a wrong warning message at P loads regarding to the reference voltage.
 - New error message at elements with reference voltage equal to zero.
- GNE-V
 - Correction of the voltage when using new sign treatment.
- Automation
 - Correction of an endless loop at non-convergent load flow.
- Block G(S)
 - Internal nodes are created now with 5 digits instead of generated so far with 3 digits.

- BOSL models
Correction of an error when accessing remote node and remote element. At multiple use of BOSL models it was accessed to the wrong nodes or elements.
- Load flow
Fixed of index bug when generating the load flow results.
- Dynamic simulation
Fix of a serious bug when changing the time step for the simulation with a control line in the DIS file.

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- Creating new databases
Correction of a bug in user administration when creating new databases.

Additions/Corrections Update 2 (December 19, 2014)

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

- VecToPic
Fixed of a bug when reading DWG files.
Advanced layer support analogous to DXF in all other formats, too.

Electrical Networks

- Network reduction
Fixed of a bug in three-winding transformers connected to the boundary node of the reduced part of the network.
Correction with the UNDO function. This should be locked after reduction.
- Load flow
Fixed of bug in transformers with Z windings.
Improvement of the transformer control.
- Protection coordination
Correction in handling of power units, which were modeled from a combination of generator and transformer. Here the advanced short circuit calculation was not considered correctly, if an error in the block was simulated.
Fixed of a bug in handling of not tripping zones and considering the waiting time of the zones.
- Protection routes
Impedance and tripping area diagrams: Close area of the respective level for correct display.

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- Load flow results
Importing/exporting results of load flow calculations now only display network group data.

- Plot definition dialog box
Correction of an error in signal definition of saturation data. Here, wrong IDs were generated in the PLO file.
- Excel export
When exporting, the numerical values are now exported in scientific format.
- Controller
The following new standard controls are available: MNLEX1.mac, MNLEX2.mac, MNLEX3.mac, PSS2B.mac, PSS3B.mac, PSS4B.mac, UEL1.mac, UEL2.mac, UnderexLimIEEE2.mac.

Additions/Corrections Update 1 (November 26, 2014)

This update contains the following error corrections and additions.

Electrical Networks

- General
Fixed of a bug in the technology check in unbalanced networks.
- Diagrams
Fixed of a problem with asynchronous generation of diagrams at load profile and load development calculations.
- Load flow
Convergence improvement in load flow when using D0 transformers.
- Protection coordination
Tripping of distance protection devices: Continuing the time of picked up zone and tripping, even if in the following time steps the registered impedance changes to a shorter zone related to the impedance.
- Resupply
Fixed of bug consideration of DC infeeder limits. These were taken into account also, if these were not enabled
- Contingency analysis
Correct treatment of variable shunt elements with load flow type "P and Q scaled".
- Verify connection conditions
Correction of an internal logic error caused that checking of DC infeeders was not possible.
- Dynamic network reduction
Correction of a bug in processing of speed controllers in the reduction.
- Dynamic simulation
When using protection devices in the dynamic simulation, the malfunction is correctly involved.
- DTF import
Improvements at importing boundary injections (BI).
- CIM 14 import
Improvements in the implementation.
- PSS E export
Fixed of a bug when exporting DC infeeders in V32 format.
- Arc Flash
The English texts of the Arc Flash labels were translated for the German reports.

- Reliability
Correction of switching operations log output.

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- Diagram
Fixed of a bug in resolving global variables from RES files in the headers and footers.
Improved RMS post-processing in the diagrams.
- Network licenses in the GUI
Fixed of a bug in the automatic connection to the license server. Until now always the first available group was used. Now the least active group – analogous to PSS SINCAL – is used.
- DTF import
Improvements at importing boundary injections (BI).
- Load flow
Improvement of the convergence.
Improved output of currents in the Tabular View. Now, the amount of the current, the angle and the difference angle of voltage are displayed.
- PSS E import
When importing three-winding transformers the vector group Y0Y0Y0 is used now, if no SEQ file exists. Because only with the SEQ file the vector group can be determined.
- Models
Correction in the license check of old WIND and FACTS models.
- Dynamic network reduction
Correction of a bug in processing of speed controllers in the reduction.
Correction at output in the LOG file: a file named "INPUT_PATH" was created.
- Generally
Correction of a bug in resolving global variables during processing NET files.
- Consideration of saturations
Modified sign correction at determining the residual flux.