

General Information

This update can exclusively be used for the **PSS®SINCAL Platform 21.5**, not for other product versions!

Procedure for Installation

- Close all running PSS SINCAL Platform applications.
- Decompress the Zip archive.
- Start the installation using AutoRun.exe or Sincal\SincalSetup.exe. The setup automatically detects the existing PSS SINCAL Platform installation and updates all components.

If you have any questions, please contact **PSS SINCAL Platform Support** (fon +43 699 12364435, e-mail sincal.support.it@siemens.com).

Additions/Corrections Update 6 (October 30, 2025)

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

- Network Browser
An issue with pressing the ESC key has been fixed, which caused the network browser to no longer function correctly.
- Import Workspace
An error when importing background images via the workspace file has been fixed. These images were not saved correctly in the network database.
- Database Manager
Correction of an error when creating pipe networks via automation using the database manager. This always set the network type to "water."

PSS SINCAL Electrical Networks

- Transformer with isolated Neutral Point
Correction of a problem with double-isolated neutral points.
- Power Flow (PF)
 - Correction in the power balance results. Negative charges were not taken into account correctly.
 - Correction of a problem with converters with power prioritization in unbalanced networks. This caused convergence problems.
- Power Flow Results
For loads, the data source was not always correctly displayed in the results.
- Grid Code Compliance Renewables (EEG)

Correction of a problem with adjusting the transformer steps in the module. The start position incorrectly affected other calculations performed in the EEG module.

- **Load Development and Economic Efficiency (LD, ECO)**
An error in preparing and saving the diagram data for load development with and without economic efficiency results has been corrected.
- **Dynamics (ST, EMT)**
Correction of an issue when exporting the network model to NETOMAC with global models that were written to the incorrect section of the NET file.
- **Protection Simulation (OC, SZ)**
 - A bug in the recloser model has been fixed. Cycles were not correctly taken into account in the switching sequence.
 - In the results of the fault observations, it could happen that the fastest tripping time was not reported for the protection device.
- **Protection Routes**
Fixed a problem where changing the pen width via the Options dialog box would update the existing highlight with a pen width that was too small.
- **Graphical Model Builder (GMB)**
Fixed an issue with license verification.
- **CYMDIST Export**
Correction of problems with CYMDIST export for networks with multiple views.
- **CIM16/CGMES 2.4.15 Import**
Extension of CIM import when transferring zero-phase sequence data for a "ShuntCompensator" to SINCAL.

PSS SINCAL Pipe Networks

- **Time series data interface for gas networks (TSDI)**
Correction of an initialization problem with the TSDI data.

Additions/Corrections Update 5 (September 29, 2025)

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

- **Feeder**
Correction of an error in determining the longest distance of a feeder, whereby elements of the type "switch" with a length of 1 m were considered.
- **Variant Comparison**
Correction of an error when creating scenario files from a variant comparison, which resulted in new network elements of the "switch" type not being exported correctly.
- **Import Network State**

Fixed a bug when converting invalid date values, which could cause the program to crash.

- **Diagrams**
Correction of an error when copying data series containing multiple characteristic curves (e.g., LfVoltageCurve for substations and feeders).
- **Graphics Layer**
Correction of an error when saving graphics layers: If only the minimum zoom factor was changed, this was not recognized as "modified" and the new value was not saved.
- **Undockable Windows**
Fixed a bug when closing a undocked network view that could cause the program to crash.

PSS SINCAL Electrical Networks

- **Hosting Capacity (ICA)**
Correction of an error with parallel processing enabled. Renewable energies were not considered in the slow voltage change.
- **Power Flow (PF)**
Correction of a convergence problem in converters in unbalanced networks.
- **Contingency Analysis (CA)**
Fixed a bug in the SQLite definition of the external CA database that caused the filter function in the tabular view of the external DB (only for certain fields – ResultSummary – Base, s_end_Max, s_all_Max, Avg) to not work correctly.
- **Optimal Branching (OT)**
Correction of an error that led to different optimization results being determined.
- **Protection Simulation (OC)**
A bug in the recloser has been fixed. The parameter for selecting the ground was not being considered correctly.
- **Protection Analysis (PSA)**
Correction of an error in the output of currents when frequency protection is considered.
- **CIM16/CGMES 2.4.15 Import**
 - Import of SynchronousMachine.x"
 - Enable zero-phase sequence data for lines when r0/x0/c0 is present
 - Activate zero-phase sequence data for variable serial elements if data is available
 - Transfer of values directly without rounding for variable serial elements
 - Activation of zero-phase sequence data and calculation of ZABNL, ZBANL, and ZABSC (can be activated via CIMConfig.ini, Section Main: TRANSFORMER_ZERO_SEQ=1)

Additions/Corrections Update 4 (August 29, 2025)

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

- **Diagrams**
 - Improved performance when creating/updating diagrams after opening the network model. Previously, all interactive diagrams were completely updated after opening the network model; now only the missing diagrams are generated.
 - Fixed a bug in the display of user-defined signals in diagrams, which meant that depending on the configuration, they were no longer displayed correctly.
- **Feeder**

When selecting the longest path of a feeder, the last element was not selected if it was connected to a terminal. This problem has been corrected.

PSS SINCAL Electrical Networks

- **Protection Devices**

When copying a DI setting via the dialog box, the pickup data was not copied.
- **Optimal Branching (OT)**

Improvement in the algorithm for unbalanced networks in "voltage-based" mode. The maximum voltage is still used for comparison, but the smallest total current (of all phases) is also considered.
- **Protection Analysis (PSA)**

During the pickup security check, recloser zones that are not actually active were considered.
- **Arc Flash (AFH)**

Correction to the display of results in the network graphic. The worst-case results were not always shown.
- **Voltage Curve Diagrams**

Correction of an error that caused incorrect nodes to be included in the route diagram that were not actually part of the route.

Additions/Corrections Update 3 (July 29, 2025)

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

- **Network Browser**

Fixed a problem with updating the pop-up menu when switching between electrical and pipe networks.
- **Copy Add-Symbols**

Correction of an error when copying and pasting additional symbols (protection devices, fault observations, etc.) from other views, where an incorrect graphic layer and object type were stored in the database.

PSS SINCAL Electrical Networks

- **Protection Coordination (OC)**
Corrected a problem with the consideration of the data for pickup phase/ground when entered separately. Now it is possible to specify a pickup in phase for "DI Settings Phase" and a pickup in ground for "DI Settings Ground".
- **Protection Routes**
An error when creating the protection route highlighting has been corrected. This caused several highlights to be assigned the same result ID, meaning that they could no longer be displayed correctly or made visible/invisible.
- **Optimal Branching (OT)**
Extension of the implementation so that supply sources are also possible in the switch area.
- **Feeder Tracing (FEEDER)**
Correction of an error in feeder tracing in unbalanced networks.
- **Operating Point and Time Series Calculation (LP)**
Asynchronous machines and variable shunt elements did not always behave correctly during time series and operating point calculations. Errors occurred when changing the power.
- **Resupply**
An error in the algorithm has been corrected that caused the calculation to run in an endless loop and had to be aborted.
- **Arc Flash Calculation (AFH)**
Correction of a problem with calculations using the DGUV standard, whereby the entered limitation of the clearing time was not taken into account.
- **Verify Connection Conditions (EEG)**
For the variation P/P_{max} , the sign was not correctly taken into account for $\cos\phi_i$.

Additions/Corrections Update 2 (June 26, 2025)

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

- **Formatting Diagrams**
In the Format dialog, the user-defined signals can now also be moved to the area with the predefined signals.
- **Heat-Map**
The visualization types "Power Flow V/V_n " and "Power Flow Deviation V/V_n " were only available if branch results were available in the network model. However, these visualizations only require node results.
- **TSDI Result View**
Fixed a bug when disabling highlighting via the dropdown button in the result view, which did not delete the highlighting in the network diagram.

PSS SINCAL Electrical Networks

- Short Circuit (SC)
The algorithms for dynamic voltage support have been improved so that they continue to function even when only a small amount of short-circuit power is available in the network and the voltage is supported by many converters.
- Verify Connection Conditions (EEG)
Fixed a bug in the automation of the calculation when the directory for the result database in the network model ("xxx_files\DES") did not exist.
- Operating Point Calculation (LP)
Corrected an error when creating diagram pages for voltage profile diagrams when operating points were calculated.
- CIM Import/Export
 - Corrections when processing dynamic data from CGMES 2.4.15:
CIM export: Duplicate controller values
 - CIM import: User-defined controllers were not assigned to the machine
 - CIM Export Geographical (GL-profile)
Correction converting coordinates to Lat/Long when exporting from CIM16 using a background map.

Additions/Corrections Update 1 (May 30, 2025)

This update contains the following error corrections and additions.

PSS SINCAL User Interface

- Supplementary graphics object Line
Correction of an error in drawing the arrowheads.
- Highlight
 - Improved activation/deactivation of temporary result highlighting.
 - Hosting capacity: Fixed a bug when using the "Element Contour" option. Only the first terminal of the network elements was taken into account.
 - Fixed a bug when saving highlights in variants.
- Feeder Evaluation
The entries in the Evaluations and Filters dialog box are now sorted alphabetically for all feeder evaluations.

PSS SINCAL Electrical Networks

- Load
Correction of an issue when updating the base load data from customer data for P_i and Q_i .
- Limits with Characteristic curves
Limits with a voltage greater than 100% were not limited correctly.
- Protection Documentation
 - Corrected a program crash when displaying the pop-up menu in the protection

documentation.

- In the network graphic display of the protection documentation, additional elements for harmonics (frequency characteristics) are no longer displayed.

PSS SINCAL Automation

- Automation of the User Interface
Automatic updating of drop-down lists in the toolbar when calling the automation function Reload() for graphic layers, object types, network levels, etc.
- Automation of the Calculation Modules
An error has been corrected that occurred when switching multiple times between the physical and virtual databases.