General Information

This update can exclusively be used for the **PSS®SINCAL Platform 18.5**. It can't be used with 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 2 (July 5, 2022)

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

- Multi-User Master Database
  Correction of an error in the metamodel, which caused setting values of protection devices to be synchronized incorrectly.
- Restore Backup Copies
  Extended diagnosis (via registry setting DEBUG\ExtendedRecoveryCheck = 1) if the backup copies cannot be restored. With the registry setting, all files are checked individually and output in the error message.
- Automation of the Calculation Methods
  CreateElement(): Correction of an error related to virtual databases when searching the elements/nodes by name.
- Annotations in Network Diagram
  Correction of an error in the visualization of Ti (establishment date) and Ts (shutdown date) in pipe networks.
- Diagram View
  Correction of an error processing the diagram data when using custom data series.
- Graphic Element Container
  Improved performance when filling the dialog in large networks.
- Import Network State
  Enhancement when importing network states that the symbols of the elements are automatically updated and visualize changed element data, e.g. types at the converter or the valve position in pipe networks at the valve.

- Synchronize in Views
  Fixed a problem with synchronizing changes in open views.

PSS SINCAL Electrical Networks

- Protection Coordination
  - Correction of an error in determining converter currents on terminals.
  - Correction of an error in determining loop impedances for train networks.
- Short Circuit
  - Correction of an error in the rotation of currents in two-phase networks.
  - Extension of dynamic voltage support with input data characteristic I = f(V). Balanced elements feed unbalanced if all connected elements are unbalanced and connected to the same phases.
- Harmonics
  When using impedance characteristic with absolute values, the shunt branches of lines were not initialized.
- Dynamics Simulation
  Correction of an error in the output of signals, which caused the plots of "All signals of a controller", "All machine variables" and "All network variables" not to output information about the underlying signal.
- BOSL Models
  Correction of a problem with the binding of the unbalanced dynamic power flow results for models with type "BOSL(dyn)".
- Distance Protection Devices SEL311L1 & EASERGY P3
  Correction of a problem when determining the tripping area for SEL311L1 and EasergyP3. The tripping area was adjusted with an incorrect transformer factor.

PSS SINCAL Rohrleitungsnetze

- Multiple Calculations
  Correction of a problem with license verification in district heating and gas networks.

PSS NETOMAC

- Project
  Correction of an error when loading project files.

PSS SINCAL Merge and PSS SINCAL Merge Pipe

- New Version 18.5.1
  The overview of all changes can be found in the version log directly in the installation directory of the tool.

Additions/Corrections Update 1 (May 31, 2022)

This update contains the following error corrections and additions.

PSS SINCAL User Interface

- Report View
  Correction of an implementation problem with the report control.
- Thermal Destruction Analysis
  Advanced context menus in the results view.
- Dialog Plot Definition for Dynamics
  - Correction of a display error when resizing the dialog.
  - Correction when filling the topology lists for voltage signals.
- Visibility and coloring of network elements based on establishment and shutdown dates
  - Fixed a performance issue when determining which elements to update.
  - Change the processing order for coloring/visibility with the following priority: Shutdown elements, future elements, elements out of service (incl. consideration of all stored in/out of service states).
- Element symbols in the network diagram
  Fixed a bug when drawing symbols that caused all symbols to always be rotated, even if they were defined as "fixed".
- Catalogues
  Fixed an error when processing node positions in catalogue entries, which caused nodes to always be positioned at 0/0.
- Multi-User Master Database
  Correction of an error in the metamodel, which caused setting values of protection devices to be synchronized incorrectly.

PSS SINCAL Electrical Networks

- Contingency Analysis
  - Resupply: If there were no valid resupply actions, an incorrect network state was used for result generation.
- Operating Point Calculation
  Correction of an error when calculating operating points. The power flow data of controlled elements was not reset correctly.
- Time Series Calculation
  - Correction of an error when generating results for breakers. No results were generated when calculating the worst cases.
  - Correction of a problem with using the "Marked" option for result storing. If only one terminal of the network elements was configured to store results, the results were not deleted after processing.
- Network development
  - Correction of an initialization error when activating island mode. For supply sources with power flow type P and Q, source voltage and voltage angle were not initialized.
  - Correction of an error whereby supply sources that have not yet been established with the islanding option have also been switched to "slacks".

- Harmonics
  For coupling data with predefined frequency dependence, a quality of X/R constant = 5.0 was not used – as described in the documentation.

- Fuse Dimensioning
  Correction of a program abort caused by faulty protection devices.

- Protection Coordination
  Correction of a problem with tripping of UI-pickup in undirected time.

- Protection Routes
  Correction of an initialization error in the protection route calculation. Line subdivision ratios were not set/updated. Due to the wrong factors, the voltage adjustment was not performed correctly.

- Coupling Data
  - Extended checks for lines coupling data and enhanced messages in case of modeling problems.
  - Correction of display problems in the protection route diagrams for lines with coupling data.
  - Correction of a problem in protection coordination whereby a fault on a line with coupling data was shown as "isolated".

- Continuous Transformer Control
  Correction of a problem in determining the desired voltage with controller at the end node and upper limit voltage identical lower limit voltage.

- VoltVar Optimization
  When calculating with factors/operating points not equal to 1, there were errors in the calculation.

- Dynamics Simulation/Dynamic Power Flow
  - Global models were initialized multiple times, which led to errors.
  - Inherent models were incorrectly used when calculating the power flow help in the PSS SINCAL power flow.

- CIM Import
  Correction of an error while determining the controller data of ShuntCompensator.

- CYMDIST Import
  Fixed a problem when format tokens were not defined in uppercase.

PSS SINCAL Pipe Networks

- Standard Types
  The "Diameter" field was not synchronized to the browser when it was changed.

- Steady-state calculation
  Correction of a problem with pressure regulator with specification of an internal pressure drop characteristic.

- Valves in Heating Networks
  Closed valves have given implausible results when a subnetwork was isolated.

PSS NETOMAC

- IEC DLL
  Correction of a problem when creating the interface MAC file for IEC DLLs. For DLLs with inputs/outputs in arrays, the parameters in the MAC file were not generated correctly.