

## General Information

This update can exclusively be used for the **PSS®SINCAL Platform 12.0**. 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](mailto:sincal@simtec.cc)).

## Additions/Corrections Update 4 (April 25, 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

- Automation of the calculation methods  
Improvements and corrections in the use of virtual databases.
- Short circuit  
Correction of topology check, if interruptions are defined.  
Fixed of bug in determining the surge current for radial network calculations.
- Load flow  
Improved initialization of voltages with rotation and transformation for Newton Raphson load flow.
- PSSE import and export  
Skipping invalid data in the RAW file.  
Exporting transformers with controller at side 2 is now also possible with fixed tap position.

### PSS SINCAL Pipe Networks

- Automation of the calculation methods  
Improvements and corrections in the use of virtual databases.

- Steady-state calculations  
Correction of the interpretation of input data in specifying centrifugal and reciprocating pump data.

### **PSS NETOMAC**

- PSSE import  
Fixed of a problem when reading line data.
- Min/Max evaluations  
Fixed of bug when processing the maxima.plo file.
- INPUT block  
Advanced functionality for reading data values from results file. ASCII files now support more than 20 values.

## **Additions/Corrections Update 3 (March 15, 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**

- Copy & paste  
Under certain configurations during copying the contents of text fields were not adopted correctly in the database.
- Variants  
When variant data were inconsistent in the database, it could come to an infinite loop during loading the network.
- Network browser and results window  
Improved synchronization when you close a window.

### **PSS SINCAL Electrical Networks**

- Protection coordination  
Correction of the tripping time at Ferrari tripping behavior of protection devices.  
Correction for protection route diagrams.
- Arc flash  
Correct consideration for protection devices which are placed at connectors.
- CIM import and export  
Correction of a bug when importing LoadCharacteristics in CIM V12 and CIM V14.  
Improved detection of missing substation data in CIM V16 import.  
Improved export of node data in missing CIM V12 network groups.
- Reliability  
Improvements in network area results.

## PSS NETOMAC

- Models  
Fixed of a bug when accessing block output values of XMAC models.
- VectorFit line model  
Improved integration of PSCAD data with many parallel systems (DeltaT elimination of too large poles).
- Load flow  
Improved accuracy control at G types.
- External DLL  
Correction of an implementation bug.
- Eigenvalues  
Several corrections in the NEVA interface.
- DVG Import  
Correction at importing equivalent series elements (EL1).  
Fixed of a bug when creating global variables with the option "German\_TSO".

## Additions/Corrections Update 2 (January 19, 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

- Legend  
Correction of display errors.
- Feeder  
Fixed of a bug in automatic generation of feeders when opening the network.
- Standard types  
Fixed of a bug when copying standard types.

### PSS SINCAL Electrical Networks

- Protection coordination  
Fixed of a problem with signal transmission.  
Fixed of a problem with time-delayed tripping.  
Limitation of the tripping current I/In in time determination with function.  
Correction tripping time at Ferrari tripping of protection devices.  
Correction impedance and reactance ratio in protection route diagrams.
- Load flow  
Improvement of convergence for difficult networks with a lot of PU generators.
- Verify connection conditions  
Error message, when the procedure is used in an unbalanced network.
- Dynamics  
Transformer neutral points are available now in the NET file (#STP1, #STP2).

- Reliability  
Improved resupply in overload reduction.  
Correction for the resetting of load relocation.  
Overload Capacity Type is now ignored when individual reliability data is switched OFF.
- Harmonics  
Taking into account the short-circuit voltage according to the tap position.
- PSS E Import  
Improved import of two winding transformers.
- Verify connection conditions  
Correct consideration of all transformers supplying in the subnetwork with the generating plant.

### **PSS NETOMAC**

- NEVA  
Correct consideration of PSS controllers.
- PSS E controller  
Improved integration of multiple PSS E User-DLL controllers.
- PSS E import  
Improved import of PSS controllers.
- Stability limit  
An implementation bug has been fixed.
- Models  
New model for MAXEX2 controller.

## **Additions/Corrections Update 1 (December 1, 2015)**

This update contains the following error corrections and additions.

### **PSS SINCAL User Interface**

- Graphics editor  
Correction of a faulty description of the vertical ruler.
- Feeder  
Fixed a bug when the new option "Consider only Primary Substations" was used and there are no primary substations present in the network.

### **PSS SINCAL Electrical Networks**

- Short circuit  
Correction taking into account common star points in the three-pole short circuit. Protection coordination  
Correction in checking the valid loop impedances during tripping distance protection devices.  
Fixed of bug at resetting tripping data.  
Correction at differential protection in combination with three winding transformers.  
Fixed of bug in marking of protection devices that may or may not trip.  
Fixed of a problem with signal transmission transfer trip.

- Contingency analysis  
Correction of an error at GU infeeders.
- Dynamics simulation  
In the EMT simulation now variable serial elements with BOSL models are simulated as R lines.  
Correction of an error in the project template for PSS NETOMAC.
- PSSE Import  
Improvements to the import of power transformers and generators.
- DC Infeeder  
New parameters #LPFP and #LPFQ for BOSL models are available now.

### **PSS NETOMAC**

- Load flow  
Fixed of a bug at calculating power of loads.
- Stability  
Improved consideration of unbalanced transmitters (U line) in positive-, negative- and zero-phase system.
- Calculation control  
The simulation can be braked now to real time with the "real time" option in the configuration file Netomac.cfg.
- Plot definition dialog box  
Fixed of bug in the topology filter for elements.
- Create standard structure  
Improvements in extracting individual file types.
- Diagram for Variants  
Case-insensitive processing of RES files.
- Induction machines  
Fixed initialization issue at machines with variable rotor circles (VARROT).