

PSS[®]SINCAL

Data Management

Open Database Structure

One of the most important characteristics of PSS[®]SINCAL is that all the data are completely transparent. This means that all the data you need for the network planning are stored in a relational database. You can use either the Microsoft Access or ORACLE database systems to store the data.

Database as Central Storage Media

Unlike other network planning systems that are only filled when you "export", PSS[®]SINCAL uses the database as the central storage medium for all your data.

You can access the input and output data with standard methods at any time, even if you are not working with PSS[®]SINCAL.

You can use the database to define and visualize individual evaluations in PSS[®]SINCAL. You will not have any problems with using one of your own solutions to process input and output data.

The complete PSS[®]SINCAL database – all relations, their attributes, units, limit values, selection values, etc. – is completely documented. This documentation is available in the PSS[®]SINCAL online help at any time.

Relational databases make it easy to connect to geographic information systems (GIS). Our partners provide ready solutions for such connections and they can be individually customized.

Libraries for Equipment

PSS[®]SINCAL lets you use libraries for different network equipment such as protective devices or cables. These libraries are, like the other data management tools, also real relational databases.

PSS[®]SINCAL automatically provides you with extensive libraries. Or, if you wish, you can, of course, also create your own libraries that you optimally adapt to your specific needs. You can either work on the libraries directly with the PSS[®]SINCAL user interface or use your own tools and programs to fill the library.

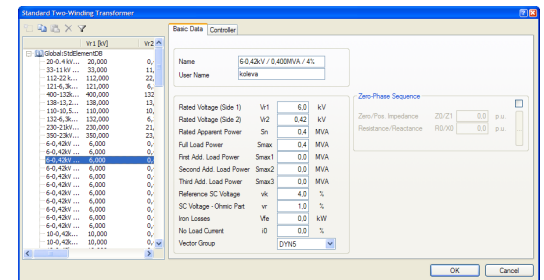


Figure 1: Editing standard types

Extensive Importing and Exporting Abilities

PSS[®]SINCAL has a number of ways to import network data and graphics from other programs. The most important import functions include:

- Importing from Excel
- Importing DVG data exchange format
- Importing UCTE
- Importing IEC 61970 CIM model
- Importing HUB files
- Importing graphics
- Importing PSS[®]E

In addition to the numerous import functions, PSS[®]SINCAL also has a number of ways to export in standard formats:

- XML export
- DVG export

Siemens PTI – Software Solutions

Answers for energy.

SIEMENS

- UCTE export
- IEC 61970 CIM export
- PSS®NETOMAC export
- PSS®E export
- Exporting graphics
- Exporting to Google Earth (KML)

Importing Excel

PSS®SINCAL lets you import the network data of all PSS®SINCAL network elements from an Excel workbook. The complete structure of a network (including the complete diagram) can be imported from the Excel workbook.

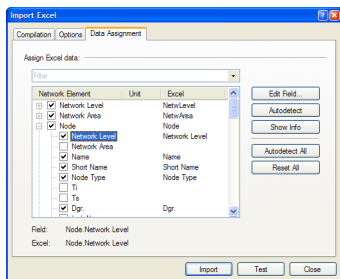


Figure 2: Assigning data from an Excel source file

To set import parameters, PSS®SINCAL has a special dialog box that lets you assign Excel data to PSS®SINCAL network elements with ease. These are stored in a XML file and can be used for importing again at a later time.

UCTE Import and Export

Networks in UCTE data format (Version 1 or Version 2) can be imported into PSS®SINCAL. There is even a function for exporting network data in UCTE data

format. Since UCTE format does not contain any graphic information, only network data can be exchanged.

IEC 61970 CIM Import and Export

The CIM data model was developed to exchange the universal network data of energy suppliers. The model consists of a number of predefined objects organized into different packages.

PSS®SINCAL has functions for both importing CIM data and exporting into CIM format. In addition to exchanging network data, the program can even exchange the graphic network structure. PSS®SINCAL currently offers Versions 10, 11 and 12.

Importing Graphics

A wide range of bitmap, vector and Pic graphics can be imported into PSS®SINCAL as "background images". PSS®SINCAL displays them to scale under the actual network. This lets you, for example, place maps behind a PSS®SINCAL network. Simply draw over these graphics to create a network.

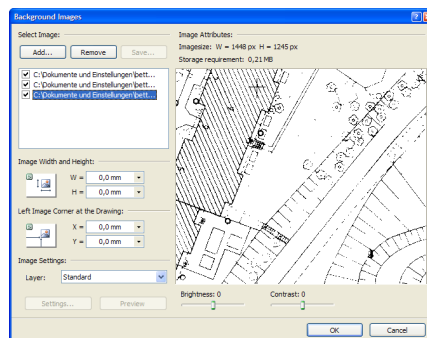


Figure 3: Importing a background image

PSSE Import and Export

Networks in PSS®E formats V27, V29, V30 and V31 can be imported into PSS®SINCAL. When these are imported, all input data from the PSS®E file are converted for further use in PSS®SINCAL. This includes the zero sequence data.

In addition to network data, PSS®SINCAL can import network graphics from DRW and LOC formats. There is even a function for exporting all PSS®SINCAL network data in PSS®E format.

Exporting to Google Earth (KML)

PSS®SINCAL lets your export the basic structure of a geographic PSS®SINCAL network diagram to a KML (Keyhole Markup Language) file. This KML file can then be imported into Google Earth or Microsoft Virtual Earth. PSS®SINCAL displays the exported graphics as an "overlay" of the actual world projection.

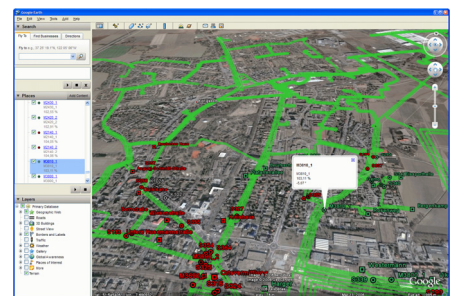


Figure 4: Network exported to Google Earth

Published by and copyright © 2009:
Siemens AG
Energy Sector
E D SE PTI
Freyeslebenstrasse 1
91058 Erlangen, Germany

www.siemens.com/energy/power-technologies

Siemens Energy, Inc.,
Power Distribution, T&D Service Solutions
Siemens Power Technologies International
400 State Street
PO Box 1058
Schenectady, NY 12301-1058

Siemens Transmission and Distribution Ltd
PTI
Sir William Siemens House, Princess Road
Manchester, M20 2UR
United Kingdom

For more information, please contact
our Customer Support Center.
Phone: +49 180 524 70 00
Fax: +49 180 524 24 71
(Charges depending on provider)
E-mail: support.energy@siemens.com

Power Distribution Division
Printed in Germany
Printed on elementary chlorine-free
bleached paper.

All rights reserved.
Trademarks mentioned in this document
are the property of Siemens AG, its affiliates,
or their respective owners.
Subject to change without prior notice.
The information in this document contains general
descriptions of the technical options available,
which may not apply in all cases.
The required technical options should therefore be
specified in the contract.

SWSC83-EN-200905