User Interfaces
PSS®NETOMAC

PSS®NETOMAC, one of the world’s leading programs for simulating all kinds of dynamic phenomena in electrical power systems with decades of experience and with a wide variety of applications, is a modularly structured tool. This high-end simulation engine can be employed by different graphic user interfaces (GUI), by efficient automation scripts in a Microsoft Windows environment and even within co-simulation with other simulation software and hardware.

Figure 1: Modular structure of PSS®NETOMAC

Any text-editor can be utilized to enter the network and model data as well as to configure the simulation parameters. The complete data set is described by means of well-structured ASCII-files, which are interpreted by the PSS®NETOMAC calculation engine.

In general, PSS®NETOMAC contains an easy to use interface with many valuable features for the definition of input data and the analysis of results. It facilitates the user a very high degree of freedom in model definition. Furthermore, in order to provide the user with diverse input possibilities, the network can be graphically defined and analyzed in PSS®SINCAL, accessing the high-performance PSS®NETOMAC engine.

Figure 2: GUI of PSS®SINCAL

The results of PSS®NETOMAC calculations are displayed in the PSS®SINCAL graphical user interface – they can even be displayed directly in the network diagram. PSS®SINCAL provides these results as diagrams for further processing and evaluation.

Figure 3: GUI of PSS®NETOMAC

PSS®SINCAL GUI
This GUI provides a comprehensive and seamless integration of PSS®NETOMAC. All network data is entered and processed graphically in PSS®SINCAL and is stored in a database.

PSS®NETOMAC’s comprehensive simulation methods are part of the PSS®SINCAL user interface.

Figure 4: Graphical Model Builder (GMB)

Besides the definition of network models, it enables the user to model any type of controllers in Block-Oriented Simulation Language (BOSL). This contains various pre-defined transfer and mathematical functions as well as the possibility of user-defined FORTRAN statements. Moreover, the integrated Graphical Model Builder (GMB) enables a user-friendly graphical input for any type of controllers existing in PSS®NETOMAC. The modern GMB contains all standard editing possibilities and various analysis functions, which efficiently support the user within the modelling and control design process.

Figure 4: Graphical Model Builder (GMB)