

New Single-line Diagram Graphical Interface for Electrical Network Software

Network components are simply created and added to the diagram by a "drag & drop" process ... (they) automatically connect to other components at their end points ... (and) can be easily re positioned by just "dragging" them around the screen with connections "stretching" to accommodate their new positions.

S ydney-based *DataShare Power Engineering Software* has released a new graphical interface for use as an important extension to its suite of power engineering software or, alternatively, as an interface to other 3rd-party software applications, including GIS/Spatial systems.

Engineering analysis software users want the convenience of working with graphical interfaces and managers of electrical networks are increasingly requiring their network analysis tools to work with data maintained in centralised databases that ensure that users have access to up-to-date, accurate and consistent sets of data. It is in response to these needs that DataShare has introduced its database-linked, user interface and data integration tool, known as "*ViewNET*".

ViewNET features an extremely easy-to-use graphical interface - based on a schematic representation of the network - and provides data management facilities relevant to network studies and management.

Modular Design

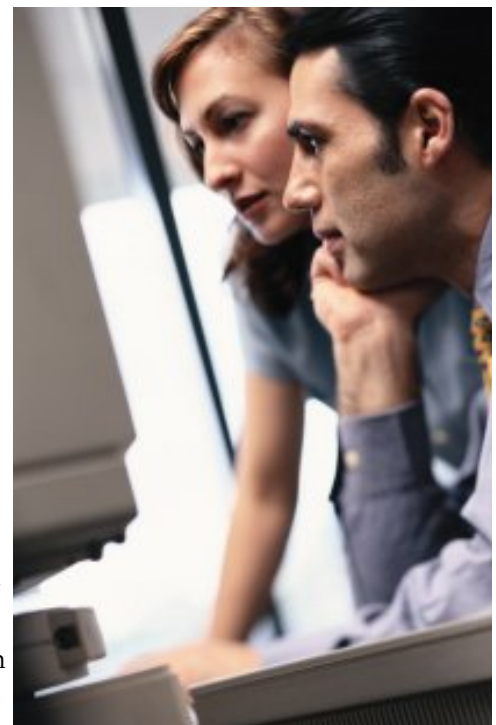
Employing a flexible, modular design, *ViewNET* is able to work with remote database tables and is designed to be user-configurable. Its flexible design even supports working with database tables structured entirely to meet the needs of other systems!

The main modules of *ViewNET* are the network diagram module, the data import/export module and the reporting module.

Data entry is performed through the single-line diagram interface and it is also used as the backdrop for the presentation of results.

"Drag & Drop" Drawing

The drawing process is especially easy. Network components are simply created and added to the diagram by a "drag & drop" process. Components snap to a grid to align vertically and horizontally and automatically connect to other components at their end-points. They can also be easily re positioned by just "dragging" them around the screen with connections



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NetworkDiagram

"stretching" to accommodate their new positions. As well, connections can be simply disconnected from one point on the network and "stretched" to connect to an alternate point.

The import/export module supports reading and writing of IEEE standard load flow file formats as well as DataShare's own analysis software files, and can also import files from some other analysis software systems. A substantial part of the diagram for an imported text-only data file can be automatically generated from the file information..

Engineering Analysis Software Interfacing

When used as an interface to DataShare's Load Flow, Fault Cal-

ulation and Protection Coordination software each of these programs work with a common set of data that is created and maintained through the schematic interface and the data is stored in an industry standard database.

Ultimately DataShare's analysis software packages will simply become engines operating transparently behind the interface, with users working exclusively through it. But for now, users can still use the existing software- as they are accustomed to doing - but utilising the data prepared through the single-line diagram interface.

The *ViewNET* interface is now supplied as standard component of DataShare's analysis software at no extra cost to new purchasers and with software upgrades.

"Intelligent" Diagram Displays Network State

A special feature of the schematic diagram is the "intelligence" built into it that makes it able to respond to and display the electrical state of the network. It is capable of displaying which parts of the network are energized according to the state of network sources (generators, etc.) and switches modelled as part of the diagram. This can even include the direction of energisation and the highlighting of any loops or paralleled sections of the network.

Further information is available from DataShare's website at www.datashare.com.au or direct from DataShare (see contact details on first page).

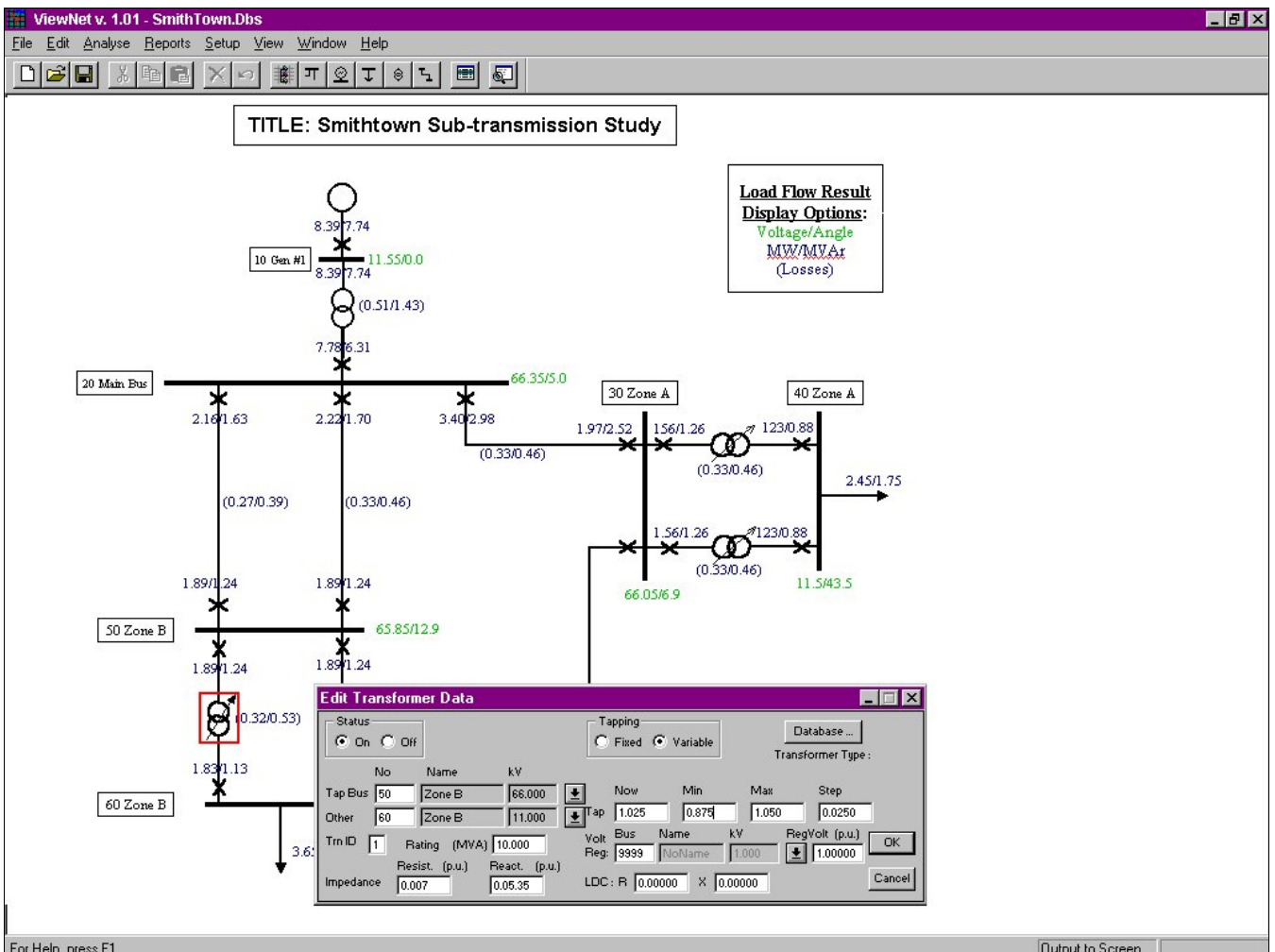


Figure 1. "ViewNET" single-line diagram graphical interface and transformer data entry dialog.