

# Electrical Protection Database - Australian Designed and Developed

*Store information about  
any electrical protection  
device ... from a LV Fuse,  
to an EHV Distance  
Protection Relay ... from a  
simple timer, to the most  
complex LVCB!*

**S** ydney-based *DataShare Power Engineering Software* has developed a new customised protection database to meet the needs of electrical protection design and maintenance staff and network operating personnel employed in factories, heavy industries, power stations and electrical utilities.

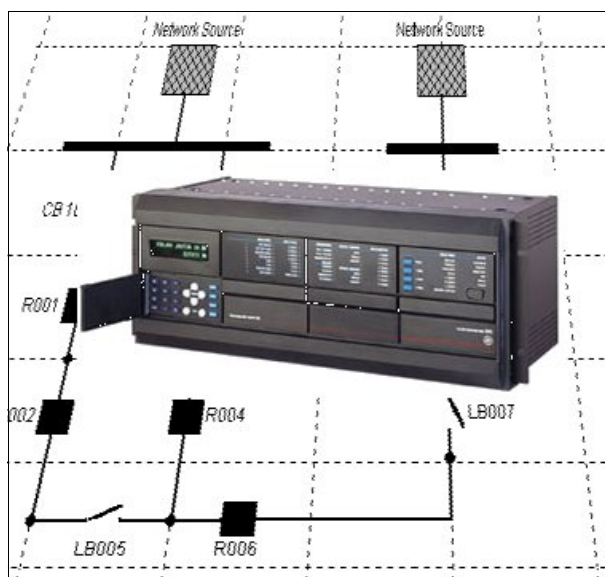
Created with ease-of-use and flexibility as primary design objectives, the resulting software, known as "*ProtectionDb*", utilises up-to-date Windows® software features to simplify accessing and searching the database. Also, rather than restrict users to a fixed data format, storing only the information the database designer anticipated would be needed ... and requiring all types of protection devices to be fitted into this format ... with "*ProtectionDb*" the user can decide most of what they store for themselves - and change their mind later, if they need to!

The user can choose any of the pre-defined protection device "data templates" provided with the database ... and extend, or modify, these templates as they wish... or they can even introduce entirely new templates to suit their own special needs!

This flexible, user-definable, data formatting capability allows the database to efficiently store information about any electrical protection device ... from a *LV Fuse*, to an *EHV Distance Protection Relay* ... from a *simple timer*, to the most *complex LVCB*!

Another important feature of "*ProtectionDb*" is the facility it provides for the user to associate protection devices with other network components or physical features - eg. the protected circuit/equipment (feeder, transformer, motor, etc.), the controlled switch, a substation, a control panel, C.T.s, V.T.s, or a geographical region (multiple relationships can be set) and then locating protection devices through a graphical presentation of any of these established associations.

The database provides an ideal means for clients and



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their consultants engaged on electrical protection projects to exchange protection device details and setting information.

A number of printed reports can be produced from "ProtectionDb", including relay setting/test instructions, settings history and other summary and management reports.

"ProtectionDb" is available as a stand-alone application for users simply wanting to manage their electrical protection data or, as an option, it can be integrated with DataShare's electrical network single-line diagram creation software, "ViewNET".

For advanced protection design and management, "ProtectionDb" can be further integrated with DataShare's Protection Coordination and Fault Calculation software - "RELCORD/32 for Windows" - with "ViewNET" acting a common user interface to

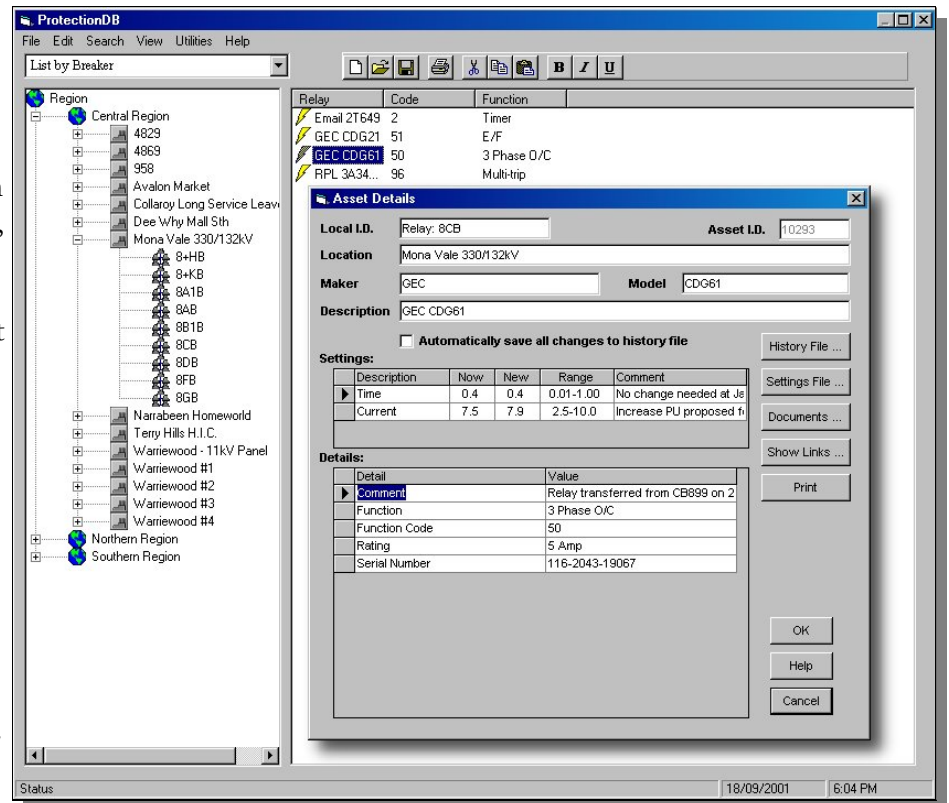


Figure 1. User interface to the "ProtectionDb" database.

both applications.

Further information is available

from DataShare's website at [www.datasshare.com.au](http://www.datasshare.com.au).

## New Features

A number of new features have been added to "ProtectionDb" in response to requests/suggestions from prospective users. These new features include:

- the capability to work in conjunction with protection device manufacturer's proprietary settings/communications software to:
  - store and manage setting files produced by this software - in most instance, even when the settings file is modified using the manufacturer's software
  - activate the proprietary software from the database
- Store electronic versions of manufacturer's literature for particular protection device models, including manuals, application

notes, bulletins, etc. This feature provides the user with immediate access to consult these documents directly from within the database.

- Improved handling of device settings details - including provision to store proposed new settings, automatic logging of protection settings changes to history files.

## Now Two Modules

A further change is the separation of the software into two modules:

- User module - for general users who simply need to view and, if authorised, to change data or add and delete protection devices to/from the database and define relationships between devices and other assets.

- Administration module - used to configure the system including the ability to:
  - define or modify device templates and attribute sets for specific protection device types
  - define or modify relationships able to be established between protection devices and other assets.
  - set up and maintain hierarchical relationships able to be used to organise the display and access to database data
  - manage archiving of data - especially archiving and purging of history files.

An optional browser-based user interface allowing intranet/internet access to the database is planned for release in early 2002.