Edisan

Overview

The Edisan™ software presents an innovative, integrated, and simplified approach to electrical network planning software where the engineering model lives inside a geographical information system (GIS).

Our software is designed by engineers for engineers. We aim to simplify the modelling process during every step and make the power of GIS available to the modeller.
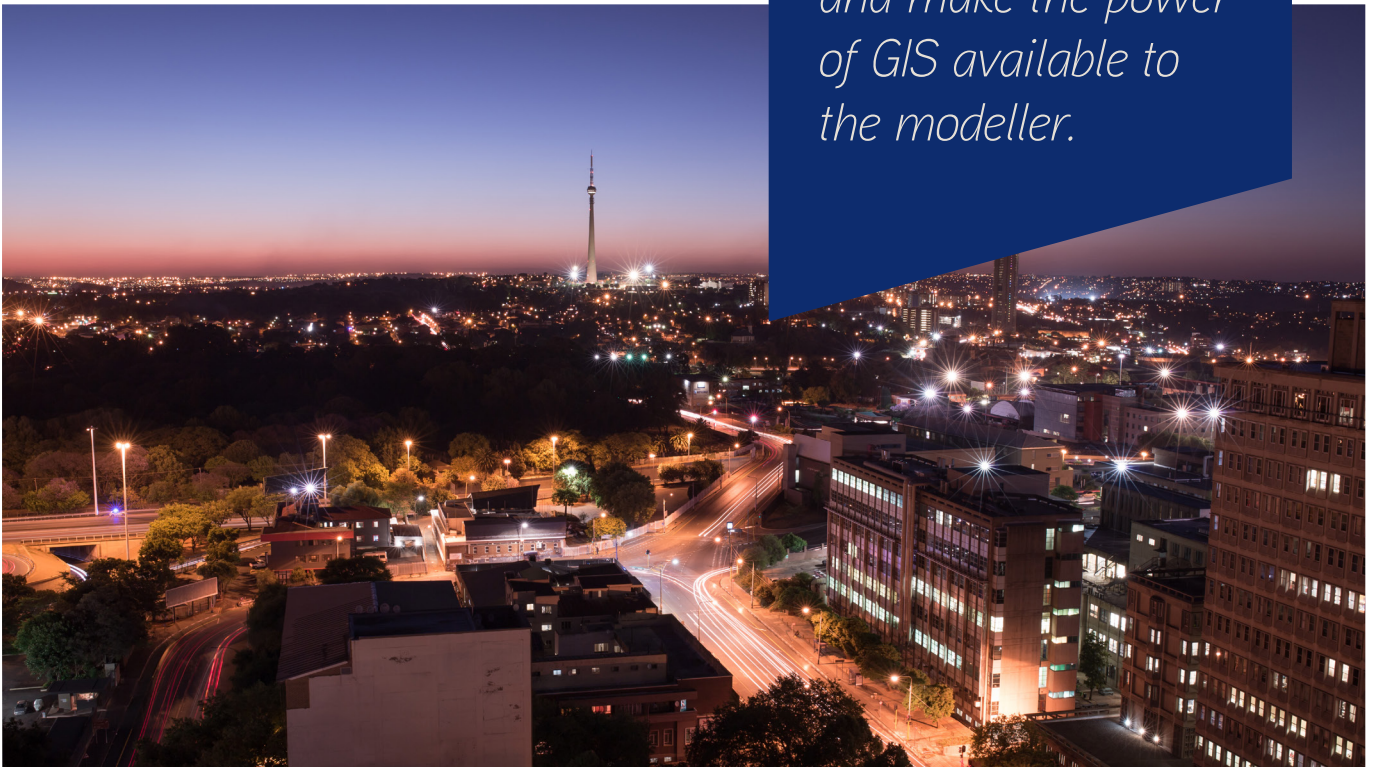
MODEL LIVES IN GIS

The electrical network model is embedded in our own powerful Albion™ GIS platform.

The power of GIS can now be applied to the engineering model, allowing the modeller to directly harness GIS tools when creating and editing datasets.

From a network modelling perspective, spatial correlation can be used to extract text, such as cable parameters from CAD or other GIS sources and apply it directly to elements of an

electrical network model such as transformers and cables.

Another example would be to select part of the model using a spatial query, then refine the selection using a SQL text query. Finally the resulting filtered dataset can be populated interactively with data. This works directly on the engineering model.

The more advanced modeller can create extensive selection or update queries using SQL, and see the effect immediately rendered in the GIS based model.

Model tables are dynamic, fast and practically unlimited in size.

The modeller can have multiple user customizable layouts with field groupings in colour, customisable themes.

All model operations are now also fully undo-able.

GLS
Infrastructure planning

Edisan Overview

Our software is designed by engineers for engineers. We aim to simplify the network modelling and planning process during every step, by supporting demand forecasting, network modelling and analysis, as well as planning.

The Edisan software presents a completely new simplified approach to integrated network planning software where the engineering model is embedded inside a geographical information system (GIS).

Key features of Edisan

- Integrated electrical network modelling and planning tool

- Capable of creating very large systems

- Ability to design and size network elements

- Master planning of electrical networks

- Simultaneously captures spatial and electrical circuit topology in a single model

- Variety of electrical components supported

- Support for cables, transformers, capacitors, generators, sources, etc.

- Advanced spatial and electrical network based selection methods

- Support for steady state simulation, including fault current and harmonics using OpenDSS simulation engine

- Ability to interface with other leading packages like DigSILENT PowerFactory and Reticmaster

- Geospatial load forecasting using a library of load shapes and ADMDs tied to land use of load class

- Different growth curves for planning purposes, for example linear and S-curves

- Herman-Beta method to cater for diversity in voltage drop calculations

- Time simulations to simulate each hour of the day to ensure the correct peak load is used for equipment sizing everywhere.
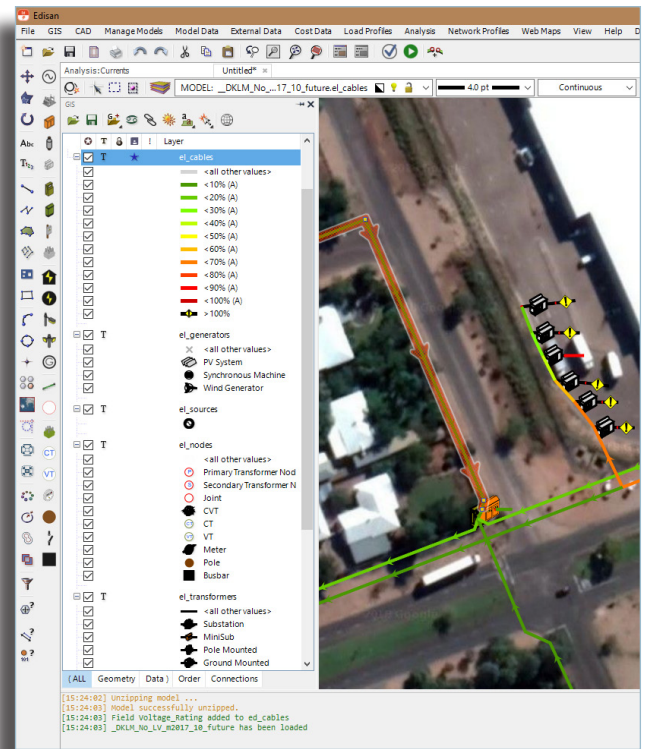
Model view with satellite background

Simplified model building

Edisan simplifies the process of model building from a wide range of sources including as built drawings, CAD plans, GIS data sources, scanned images, schematic layouts, tabular spreadsheets or even hand drawings. The process of adding model elements such as transformers, cables, or busbars with the minimum number of clicks has been at the forefront of the new design to minimize repetitive tasks for the modeller.

Interaction with web services

Vast amounts of information are available on the Internet. Accessing Internet based resources through web services, allows Edisan to display background maps from sources like Google™, Mapbox™, Bing™ or OpenStreetMap™. In addition Street View is now integrated in the software.

Providing the modeller with access to powerful user customizable GIS based themes and an extensive model reporting system, ensures productivity.

Summary of features of Edisan

- Models live in GIS
- Interaction with web services
- Simplified model building
- Customizable GIS based themes
- Extensive model reporting system

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