Edisan™ & Swift™

Overview

Edisan™ presents an innovative, integrated and simplified GIS-based approach to electrical network planning, whilst Swift™ performs GIS-based statistical analysis on utility billing data.

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.

MODELS LIVE IN GIS

The Edisan™ and Swift™ models are 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.

Edisan™ presents a completely new, simplified approach to integrated network planning software where the electrical model is embedded inside a geographical information system.

Swift™ is the engineering interface between utility billing systems and GIS-based engineering models. It allows spatial analysis of utility treasury data including electricity consumptions, customer information, land use and zoning data, tariff analysis as well as the payment history per customer or per suburb.

Swift™ allows the user to obtain accurate demands for modelling purposes and also reports non-revenue electricity, for the prioritisation of revenue enhancement interventions.

Edisan™ and Swift™ both ensure productivity by providing the modeller with access to powerful modelling-, analysis- and planning tools, as well as customisable GIS-based themes and an extensive model reporting system. Interfacing Swift™ with Edisan™ allows the modeller to develop accurate demand models for electrical network modelling and planning purposes.

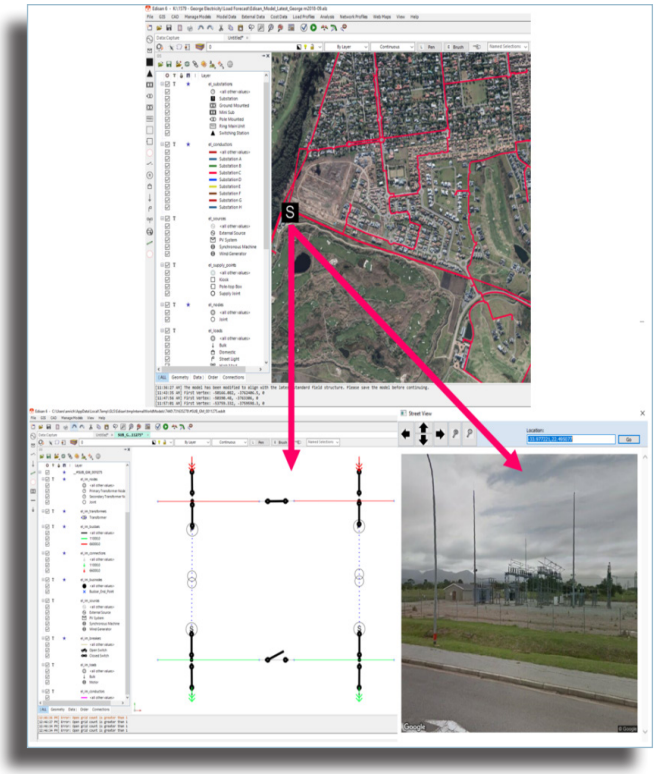
GLS
Infrastructure planning

Key features of Edisan™

- Integrated electrical network modelling and planning tool
- Simultaneously captures spatial and electrical network topology in a single model
- Advanced spatial and electrical network based selection methods
- Capable of creating very large systems
- Consolidates several datasets into one master dataset
- Master planning of electrical networks
- Asset replacement prioritisation algorithms
- Geospatial load modelling and forecasting using a customisable library of load profiles and ADMDs along with spatial correlation tools
- Customisable load-growth curves for planning purposes
- Vast library of electrical components
- Detailed modelling of substations via *Internal World*
- Ability to design and size LV network components
- Distributed generation modelling
- Steady state-, quasi-dynamic- and fault- simulations via onboard OpenDSS simulation engine
- Herman-Beta method to cater for diversity in LV feeder voltage drop calculations
- Export interface to DIgSILENT PowerFactory

Key features of Swift™

- Interfaces with Edisan™
- Electricity demand management initiatives
- Energy consumption audits
- Non-technical loss calculations
- Input to electricity master plans
- Identification of faulty meter readings
- Energy balance calculations
- Designing of electricity tariffs
- Performing revenue enhancement



Edisan™ model view with satellite background, Internal World and Street View

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. Adding model elements with the minimum number of clicks has been at the forefront of the design to minimise repetitive tasks for the modeller. Customisable model element presets also simplify data capturing.

Interaction with web services

Accessing Internet-based resources through web services, allows Edisan™ and Swift™ to display background maps from sources like Google™, Mapbox™ or OpenStreetMap™. In addition Street View is integrated in the software.

Data-handling

Model database tables are dynamic, synchronised, fast and practically unlimited in size. This facilitates easy handling of large datasets, which is a key element in the data-centric focus of Edisan™ and Swift™.

GIS-themed views of data model

A wide selection of predefined and customisable themes are available to render the model in GIS.

Extensive model reporting system

The SQL-based reporting system provides access to predefined and customisable reports. Reports can be generated for the complete dataset or for user selections.

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