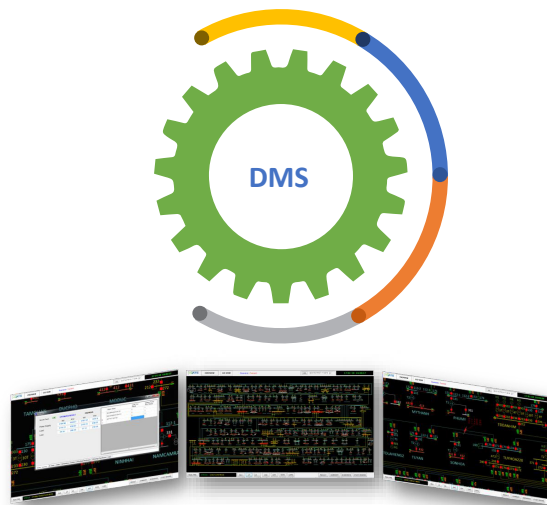


SmartDMS™ (Distribution Management System) is an advanced software platform used by electric utility companies to monitor, control, and optimize the performance of the distribution power grid. It integrates real-time data, automation, and analytics to enhance the reliability, efficiency, and resilience of the grid.

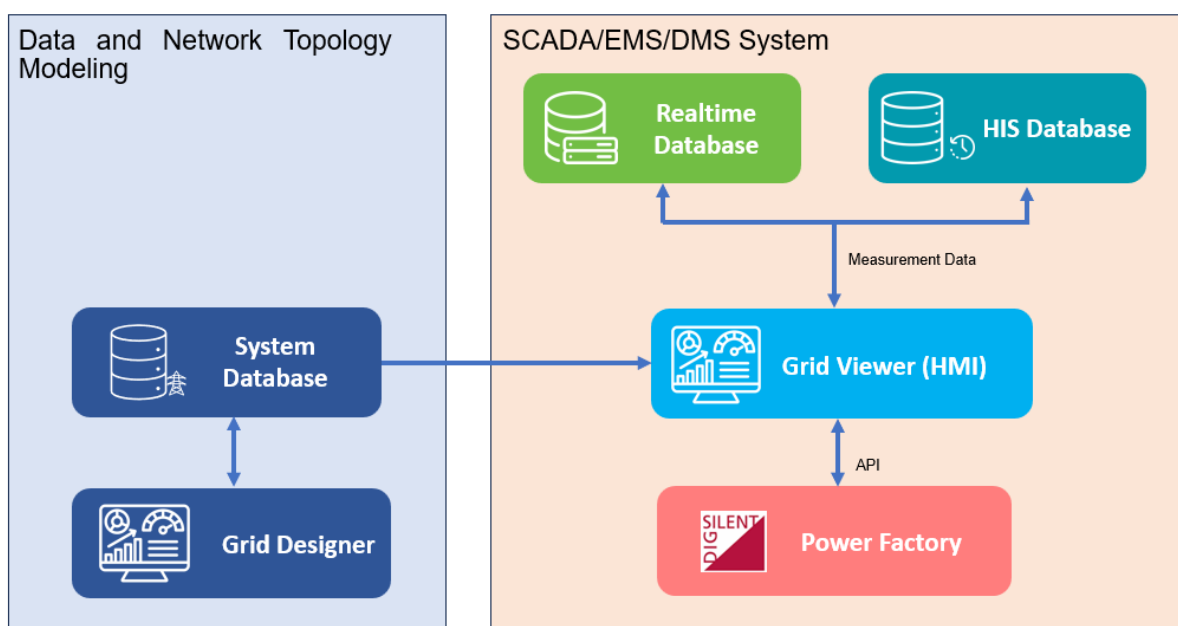
DMS applications uses modules that enable operators to evaluate the operating status of power system, and provide optimal operating practices to operate power grid more safely, reliably and economically.

DMS modules can be integrated comprehensively with @SCADA+® to provide an optimal engineering solution for power companies.

SmartDMS™ Applications



SE	State Estimation
LA	Bus Load Allocation
LF	Load Flow Analysis
SHC	Short-Circuit Analysis
CA	Contingency Analysis
OPF	Optimal Power Flow Analysis
TOPO	Tie Open Point Optimization
Other Applications: Volt/VAR Optimization, Optimal Capacitor Placement, Automatic Feeder Reconfiguration, Renewable Energy Forecasting, Load Forecasting	



Structure of SmartDMS™ in OneATS™

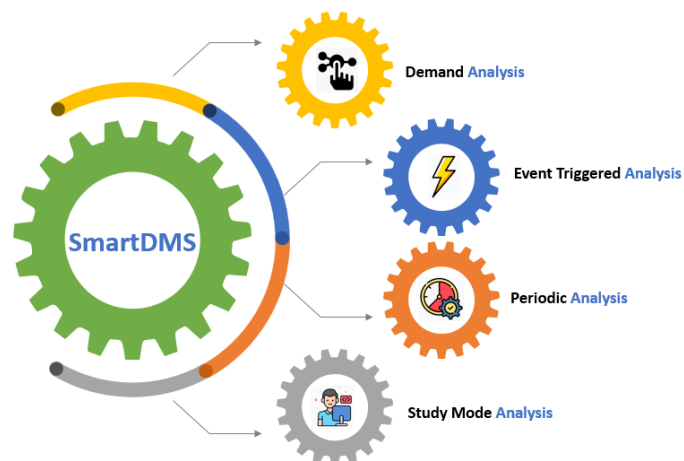
SmartDMS™ - Distribution Management System

DMS input data

- ◆ Supports flexible use of data as input to grid analysis functions: real-time data, historical data, estimated data, manual entered data and characteristics data.
- ◆ Support many system types: AC balance system, AC unbalance system, DC system
- ◆ Users can build power system data, analyze, and monitor result on the same interface with HMI. Analysis result will be show on HMI beside realtime data from SCADA help users easily monitor, operate, and analyze.

Automation analysis

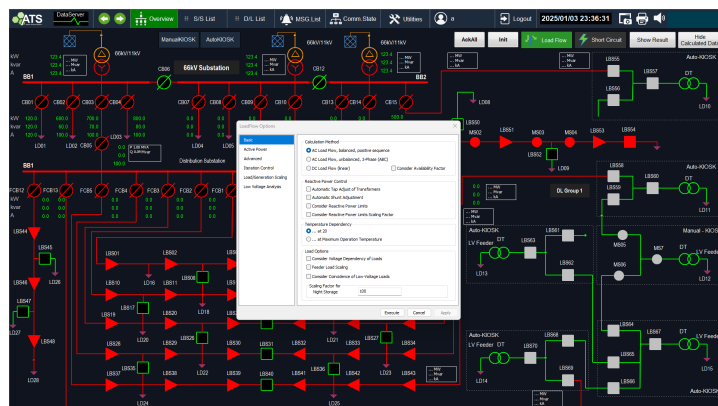
- ◆ Operators can perform grid analysis functions in many ways such as: On demand, On event triggered, On periodic and perform advantage analysis in Studymode.
- ◆ SmartDMS™ allows automate perform grid analysis function.



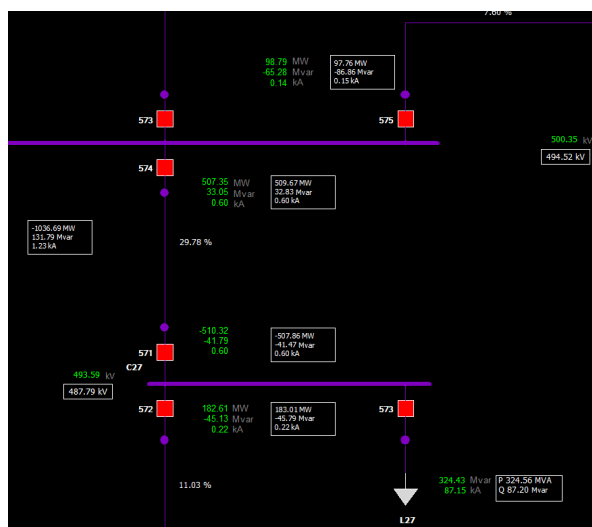
SmartDMS™ supports various calculation modes

High Performance:

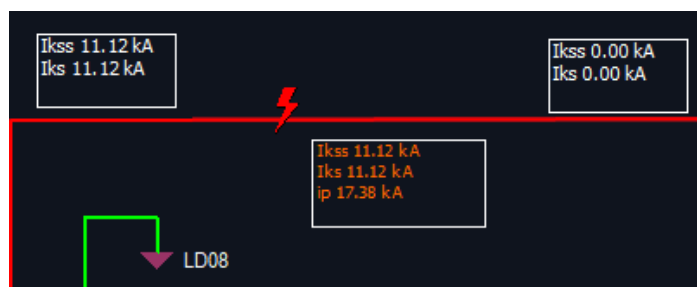
- ◆ Using Load Flow (LF) function with automate possible perform every 5 second with real-time data, continuously monitor overload, low-high voltage and provide early warning in HMI support for operator recognize small problems early before them develop into big problem and make appropriate decisions. It makes Improve Network Reliability and reduce the duration of power outages and the number of sustained outages
- ◆ Using Volt/VAR Optimization function, you can efficiently manage voltage and reactive power throughout the network, minimizing losses.
- ◆ Using Tie Open Point Optimize funtion, you can select the opening point in an optimal way, helping to minimizing losses.
- ◆ Unlimited number of nodes
- ◆ High performance, loadflow calculations with 10.000 nodes about 5 second.



SmartDMS™ Load Flow Calculation



SmartDMS™ Load Flow Calculation Results



SmartDMS™ Short-circuit Calculation Results

