

Product Overview

Network Manager™ DMS



An integrated solution for distribution management, enabling utilities to meet their day-to-day challenges.

Network Manager DMS is a key component of smart grid and provides the needed functionality to enhance the management of sub-transmission, medium and low voltage distribution networks.

Network Manager DMS provides powerful operation, planning and engineering features that facilitate safe and efficient day-to-day operation and improve long-term flexibility and profitability.

Problem

Electricity distribution companies are under pressure to improve reliability and system performance while dealing with the challenges of the aging infrastructure and increasing customer demands for higher reliability and power quality. Budget and investment constraints require electric utilities to manage their distribution systems more efficiently.

Solution

Network Manager DMS is an advanced real-time system for managing operations in a modern distribution control center. Network Manager DMS provides monitoring and control, network analysis, network optimization and outage management capabilities in an integrated software platform. Thus,

Network Manager DMS enables electrical utilities to efficiently manage their distribution assets on a platform developed to cope with the continual changing world of distribution.

Network Manager DMS Benefits:

- Increased operational efficiencies with a common working environment for Network Applications, Outage Management and Distribution SCADA
- Avoided cost to build, maintain and coordinate multiple network models
- Increased situational awareness with real-time data, an accurate network model and advanced network applications
- Reduced impact of outages with Automated Restoration Switching Analysis
- Reduced demand and system losses with Volt/Var Optimization (VVO)
- Integrated view of system efficiency allowing users to analyze weak spots in the network to improve reliability
- Combined workflow processes of OT/IT
- Provided business intelligence throughout the organization

Network Manager DMS Major Functions:

Advanced network applications

Advanced network applications provide operators with the analytical tools to make informed decision and manage the network effectively.

Outage management

Outage management is a mission-critical system. It can be utilized simultaneously by hundreds of users. It integrates information about customers, system status and resources, providing a platform for operational decision support.

Distribution SCADA

Distribution SCADA provides functionality for total network monitoring and control of electric power systems.

Business intelligence

Network Manager DMS and FocalPoint provide business intelligence for an integrated view of system efficiency, availability and economy.

Business Intelligence gives managers and executives real-time and ensures customers are restored as quickly as possible. It also allows users to analyze weak spots in the network that can improve reliability, before reliability targets are missed.

Crew and resource management

Management system which makes optimum use of all resources to promote safety and enhance operations.

Solution	Functionality	Benefits
Load Flow Analysis	<ul style="list-style-type: none"> Determination of line currents and node voltages per phase for the entire distribution system, either on-line or off-line in simulation mode 	<ul style="list-style-type: none"> Improved system awareness Higher asset utilization Improved contingency planning
Fault Location	<ul style="list-style-type: none"> Identification of possible fault locations on system 	<ul style="list-style-type: none"> Improved crew efficiencies during outages Reduced CAIDI and SAIDI
Restoration Switching Analysis	<ul style="list-style-type: none"> Evaluation of isolation and restoration switching schemes 	<ul style="list-style-type: none"> Improved operator efficiencies during outages Increased reliability
Line Unloading	<ul style="list-style-type: none"> Automated capacitor and regulator control to reduce losses and peak demand Computation and analysis of load transfer options, including overload reduction 	<ul style="list-style-type: none"> Reduced demand can off-set generation requirements Reduced thermal-mode failures Longer equipment life due to reduced overloads Higher asset utilization
Outage Management	<ul style="list-style-type: none"> Trouble call management and outage analysis Crew and referral management Outage and reliability reporting Major events/Damage assessment 	<ul style="list-style-type: none"> Quickly locate customer outages, identify root cause, dispatch crews to repair, and verify restoration with customers. Improved reliability Reduced down time
Business Intelligence (BI):	<ul style="list-style-type: none"> Business Intelligence library for the utility market (KPI, web, graphs, reports, etc.) Enhanced reporting, dashboards, and operational intelligence available to the company 	<ul style="list-style-type: none"> Improved situational awareness and operations management Improved decision making with increased access to real time data
Distribution SCADA	<ul style="list-style-type: none"> Real-time monitoring and control 	<ul style="list-style-type: none"> Increased situational awareness

The Ventyx Advantage

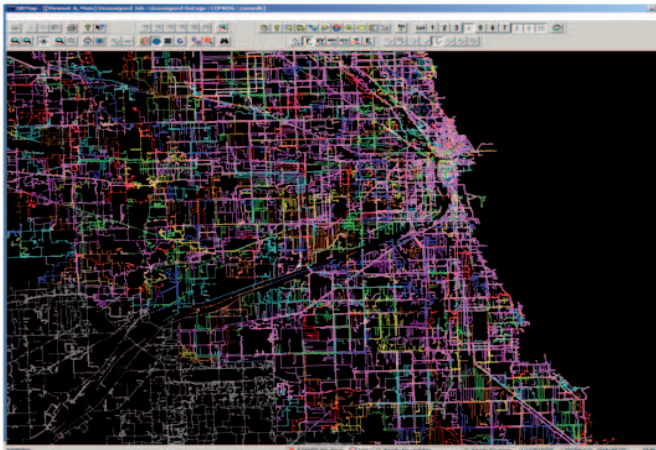
The Ventyx portfolio provides interoperability and increased functionality across a full range of smart grid solutions.

Through Service Oriented Architecture (SOA), Network Manager DMS can interact with the following Ventyx solutions:

- Service Suite
- Customer Suite
- Asset Suite
- Demand Response Management Systems

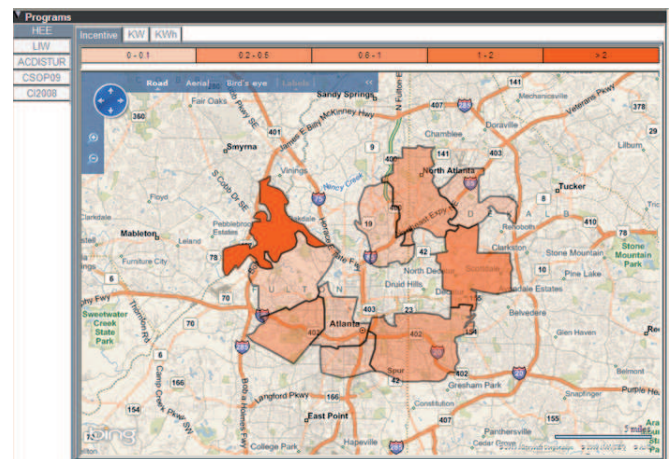
Service Suite

Network Manager DMS provides full integration to Service Suite for improved operation efficiency, putting Advanced DMS features in the hands of the field worker while providing baseline, standard outage management business processes that span our products.

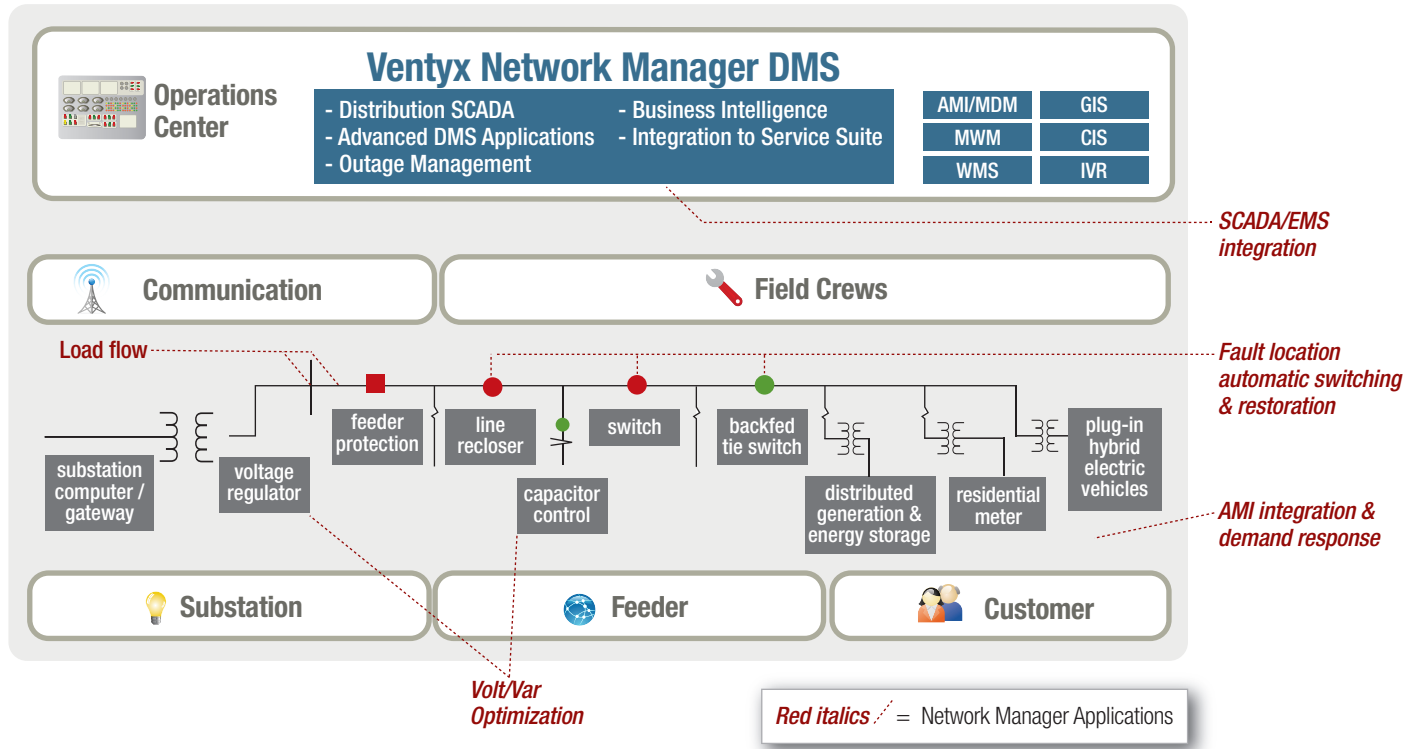


Access to Wide Knowledge and Experience of Distribution Networks

Customers that choose Ventyx as a partner benefit from professional project management, continuous support and in-depth understanding of power systems. Ventyx's long-term commitment to control center IT solutions and energy know-how enhances our Customers' competitive strength and profitability, allowing the Network Manager DMS investment to pay dividends well into the future. analyze weak spots in the network that can improve reliability, before reliability targets are missed.



Network Manager DMS is Your Tool for Comprehensive and Efficient Day-to-Day Operations



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Ventyx, an ABB company, is the world's leading supplier of enterprise software and services for essential industries such as energy, mining, public infrastructure and transportation. Ventyx solutions bridge the gap between information technologies (IT) and operational technologies (OT), enabling clients to make faster, better-informed decisions in both daily operations and long-term planning strategies.

Some of the world's largest private and public enterprises rely on Ventyx solutions to minimize risk, enhance operational and financial performance, and execute the right strategies for the future.

To learn more about Ventyx solutions visit www.ventyx.com or contact a Ventyx sales representative today.