Network Manager™ DMS
An integrated solution for distribution management, enabling utilities to meet their day-to-day challenges
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 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.
## 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.

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### Solution Functionality

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<th>Solution</th>
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| Load Flow Analysis| Determination of line currents and node voltages per phase for the entire distribution system, either on-line or off-line in simulation mode | − Improved system awareness  
|                   |                                                                               | − Higher asset utilization  
|                   |                                                                               | − Improved contingency planning                       |
| Fault Location    | Identification of possible fault locations on system                          | − Improved crew efficiencies during outages  
|                   |                                                                               | − Reduced CAIDI and SAIDI                             |
| Restoration       | Evaluation of isolation and restoration switching schemes                     | − Improved operator efficiencies during outages  
| Switching Analysis| Automated capacitor and regulator control to reduce losses and peak demand    | − Increased reliability                               |
|                   | Computation and analysis of load transfer options, including overload reduction | − Reduced demand can off-set generation requirements  |
| Line Unloading     |                                                                                | − Reduced thermal-mode failures  
|                   |                                                                                | − Longer equipment life due to reduced overloads      |
| Outage Management | − Trouble call management and outage analysis  
|                   | − Crew and referral management                                                 | − Quickly locate customer outages, identify root cause, dispatch crews to repair and verify restoration with customers  
|                   | − Outage and reliability reporting                                             | − Improved reliability  
|                   | − Major events/Damage assessment                                               | − Reduced downtime                                    |
| Business Intelligence (BI) | − Business Intelligence library for the utility market (KPI, web, graphs, reports, etc.) | − Improved situational awareness and operations management  
|                   | − Enhanced reporting, dashboards, and operational intelligence available to the company | − Improved decision making with increased access to real time data  |
| Distribution SCADA | Real-time monitoring and control                                               | − Increased situational awareness                     |
Network Manager DMS offers you access to wide knowledge and experience

The ABB Advantage
The ABB 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 ABB solutions:

− Service 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.

Distribution Networks
Customers that choose ABB as a partner benefit from professional project management, continuous support and in-depth understanding of power systems. ABB’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

About ABB
ABB provides industry leading software and deep domain expertise to help the world’s most asset intensive industries such as energy, utilities and mining solve their biggest challenges, from plant level, to regional network scale, to global fleet-wide operations.

Our enterprise software portfolio offers an unparalleled range of solutions for asset performance management, operations and workforce management, network control and energy portfolio management to help customers reach new levels of efficiency, reliability, safety and sustainability. We are constantly researching and incorporating the latest technology innovations in areas such as mobility, analytics and cloud computing.

We provide unmatched capabilities to integrate information technologies (IT) and operational technologies (OT) to provide complete solutions to our customers’ business problems.
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