Distribution Automation
Yukon™ Feeder Automation software

COOPER POWER SERIES

Integrating feeder reconfiguration and improving system performance

Without the incorporation of dynamic solutions, distribution automation systems in operation today simply cannot keep pace with changing needs and equipment configurations. Today's solutions have limited functionality or require complex third-party engineering, and after installation, systems are difficult to modify as a result of limited configurability or the need to re-contract with the original engineering vendor. As a result, both vendors and utilities tend to approach feeder reconfiguration as a "project" rather than an "integrated process."

Improve system performance in less time

Eaton's Cooper Power series Yukon™ Feeder Automation software includes a graphical user interface, object-oriented configuration, a simulator, communications dashboard, and post-event traceability allowing users to turn distribution automation into an integrated process.

The robust, standardized tools empower utility engineers to easily change automation settings in hours rather than months by eliminating costly custom programming and "trial and error" debugging. Utility engineers can now own the feeder automation process with Yukon's many advanced tools.

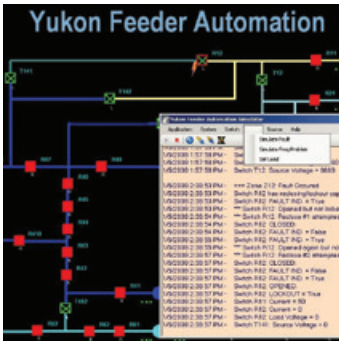
Maximize system service

Standard functionality includes:

- Fault isolation and reconfiguration
- Loss of source voltage reconfiguration and automatic return
- Setting profile management for multiple system configurations
- System miscoordination correction
- Movable open points so the system can be activated in any configuration
- Loss of voltage reconfiguration for open conductors
- Manual/SCADA initiated return-to-normal

Scalability

Yukon Feeder Automation software allows users to easily add and remove devices using a standardized interface without reprogramming of reconfiguration algorithms. The number of sources and switching devices that can be automated is only limited by the physical load flows of the power system and communication structure.



EATON
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CONFIDENCE BEFORE DEPLOYMENT

With Yukon Feeder Automation software, utilities can take charge with configurable software. Standardization of a configurable solution reduces installation and training costs with each deployment, and enables utilities to move feeder reconfiguration from a project to an integrated process.

Integration

Virtually any existing control and standard communication protocol can be integrated into automation systems, eliminating the need for additional hardware or protocol converters. The Yukon Feeder Automation software solution ensures compatibility with existing legacy controls and the next generation of controls.

Yukon Feeder Automation software will also seamlessly integrate into existing SCADA and DMS systems, allowing operators to control intelligent electronic devices (IEDs), enable and disable automation, and provide a view of what is happening on the system from the control center.

Flexible communication media

Yukon Feeder Automation software will work with multiple communications media including serial and Ethernet radios, fiber, cellular modems, and others. The software will also work with any combination of communication technologies allowing utilities to leverage their existing communications infrastructure and upgrade to new communication technologies in the future as needed.

How the integrated process works

Distributed or centralized control

The Yukon Feeder Automation software can be distributed geographically across a utility's system, or installed on a central server in the control center.

Easy operation with HMI

The Yukon Visual T&D allows automation to be visualized for system monitoring and control. Control of the system can be performed at the substation level with an HMI, or at the control center level using SCADA commands. Control includes the ability to individually operate any switch for manual restoration, or to use the built in Return-to-Normal functionality. The HMI provides virtual push-button control for enabling or disabling automation functionality, resetting targets, printing feeder health reports, and more.

Yukon Feeder Automation Simulator

The Yukon Feeder Automation Simulator provides users the ability to test the configuration programming and response under normal and abnormal power system conditions. The automation engine interfaces with the Simulator identically as it would with real-life devices.

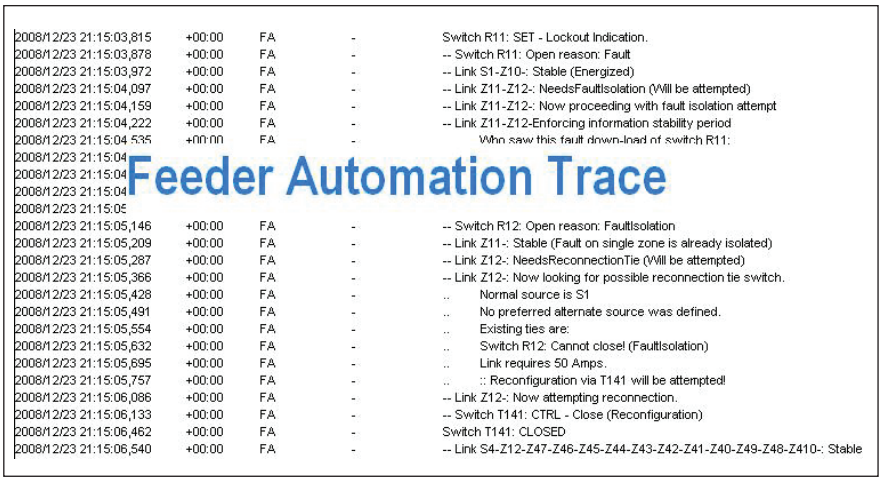
The Yukon Simulator can facilitate laboratory testing – reducing concept to installation time and minimizing automation costs. It resides on a PC and is a powerful tool for training, commissioning, and ensuring reliability.

Post event traceability

Yukon Feeder Automation software maintains a complete log of each device in operation and changes in status. During any event, the steps are traced through each automation logic decision with supporting preprogrammed logic comments for actions based on available data. All entries are time and date stamped and can be synchronized with device sequence of event (SOE) records. This allows the automation engineer to easily audit events on the distribution system.

Reduce system costs and improve reliability

Automation restores service to the most customers in seconds. This reduces commercial and industrial customer penalties for extended outages, improves reliability indices, and maximizes customer satisfaction.



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