EnerVista

VIEWPOINT maintenance

TROUBLESHOOTING AND REPORTING TOOLS

Viewpoint Maintenance is a must-have tool for any integrators or electrical staff involved in Power System protection and maintenance. This software increases the security of your relays, reports your device's operating status and simplifies the steps to troubleshoot your device.

Benefits:

- Reduce the time required to perform maintenance on your device
- Increase the security of your relays by identifying relay settings that have been changed or tampered with
- Reduce time required to collect data for Troubleshooting a fault and avoid costly downtime
- Improve Maintenance scheduling by prioritizing service needed for your power system equipment
- Anticipate system problems before they arise

Features:

- Security Audit Trail tracks settings and configuration changes, who changed them, and the time and method of the change
- Take a snapshot of a device state and corresponding settings in a time period of your choice
- Single button click to package all fault diagnostics into a single .zip file for easy sharing with engineers who can help assess system problems
- View critical information that may cause equipment to trip
- On-line and Hard copy reports for easy viewing
- Easily identify the file name of the settings file loaded on the relays*

* Available for the UR Platform 4.60 and above

Instant traceability of all changes to settings, firmware and hardware of your protection device.

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The Security Audit Trail feature in Viewpoint Maintenance is the first of it's kind that can automatically track the details of settings changes to your relays along with the MAC address of the user who changed them. This traceability helps map out where a problem may have occurred and will help improve maintenance procedures to prevent them from happening again. This is also a valuable tool to take snapshots of device status and settings to ensure the system tested is in the same state as the system that was transitioned into the field.

Security Audit Trail Features:

- Date and Time of hardware, firmware or setting changes made to your relays
- Logging of the MAC address of computers and users making settings changes
- Track method of how settings changes were made (i.e. Keypad, Serial Port, Ethernet)*

- Printer-friendly option to view hard copy reports
- Filter by date to identify changes to settings over time
- Ability to identify the name of settings files for accurate identification*

* Available for the UR Platform 4.60 and above

EAST LANE 2 SECURITY/CHANGE HISTORY REPORT

Generated at: Sep 09 2005 14:30:40

Device Summary

Device Name:	East Lane 2
Device Type:	UR L90
Order Code:	L90-H03HDH-H6A-WYC
Firmware Version:	4.60
Serial Number:	MAGC0400000127
IP Address:	3. 94.247.167

Settings Summary

Setting File Name:	FAST_LINE-2.urs
Last Changed:	Sep 09 2005 14:18:03.070200 via Ethernet
Changed by Whom (MAC Address):	0008742D6FD0

Setting Changes History

Event	Date of Change	# of Changes	Password Entered	Method of Change	Changed by Whom (MAC address)	Filename Uploaded	Status	Firm. Version
144	09/09/05 02:18 PM	15	No	Ethernet	0008742D6FD0	FAST_LINE-2.urs	In Service	4.60
143	08/26/05 09:15 AM	1	No	Keypad			In Service	4.60
142	08/25/05 08:29 AM	1	No	Keypad			In Service	4.60
141	08/25/05 06:02 AM	1	No	Keypad			In Service	4.60
140	08/24/05 09:45 AM	18	No	Ethernet	00B0D0D2EA63	FAST_LINE-2.urs	In Service	4.60
139	08/09/05 05:12 AM	3	No	Ethernet	00B0D0D2EA63		Out of Service	4.60
138	08/09/05 03:12 AM	16	No	Ethernet	00B0D0D2EA63		Out of Service	4.60
137	09/09/05 02:30 PM	22	No	Ethernet	0008749784BF		Out of Service	4.60
136	09/09/05 02:30 PM	12	No	Ethernet	0008749784BF		Out of Service	4.60
135	09/09/05 02:30 PM	3	No	Ethernet	00B0D0D2EA63		Out of Service	4.60

Setting Changes Detail History

Event	Date of Change	Old Value	New Value	Item	Modbus Address
144	09/09/05 02:18 PM	Disabled	Enabled	Thermal Model Events	0x6620
144	09/09/05 01:10 PM	Disabled	Enabled	Thermal Model Function	0x6620
144	09/09/05 12:45 PM	Disabled	Enabled	Acceleration Events	0x6900
144	09/09/05 12:10 PM	10.00s	9.00s	Acceleration Time	0x6900
144	09/09/05 11:05 AM	Disabled	Enabled	Acceleration Function	0x6900
144	09/09/05 03:05 AM	Not Programmed	Programmed	Relay Programmed State	0x43E0
144	08/24/05 09:49 AM	None	F5	Source x Auxiliary VT	0x458A
144	08/24/05 03:05 AM	None	F5	Source x Phase VT	0x458A
144	08/24/05 01:12 AM	None	F1	Source x Ground CT	0x458A
144	08/23/05 11:20 PM	None	F1	Source x Phase CT	0x458A
144	08/23/05 09:10 PM	None	F5	Source x Auxiliary VT	0x4583
144	08/23/05 06:33 PM	None	F5	Source x Phase VT	0x4583
144	08/23/05 04:15 PM	None	F1	Source x Ground CT	0x4583
144	08/23/05 02:21 PM	None	F1	Source x Phase CT	0x4583
144	08/23/05 02:02 PM	1.00:1	24000.00:1	Phase VT x Ratio	0x4502
143	08/23/05 01:10 PM	1A	65000A	Phase CT x Primary	0x4480
142	08/23/05 12:30 PM	Off	SRC 2 Pc	Data Logger Channels	0x418C
141	08/23/05 11:21 AM	Off	SRC 2 Vcg RMS	Data Logger Channels	0x418A
140	08/23/05 11:01 AM	Off	SRC 1 Vbg RMS	Data Logger Channels	0x4188
140	08/23/05 10:10 AM	Off	SRC 2 V_1 Angle	Data Logger Channels	0x4186
140	08/23/05 06:19 AM	Off	SRC 1 Vca RMS	Data Logger Channels	0x4184

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Date and Time that the Security Report was generated

Description of the GE Multilin Relay
- Equipment Name
- Relay Model Number and Firmware version
- Relay Serial Number

Summary of the last time the configuration was changed
- Name of settings file
- Who loaded the file
- When the file was loaded

History of last 10 occurrences the configuration was changed
- Date and time of configuration change
- Number of settings changed at this time
- Method used to change the relay settings
- MAC address of computer sending settings
- Name of the setting file sent to the Relay
- The relay status after the settings changes

Detailed description of all changes made to the relay's configuration
- Date and time of configuration change
- Description of the setting that was changed
- Setting value before change was made
- Setting value after change was made

Convenient File Format
- On-line and off-line copies
- Easily zip these reports with other pertinent files such as settings files and fault reports to share with engineers

Reduce the time required to perform maintenance on your device by receiving a report that shows health and operating status of your relays, meters and the power system being monitored.

Status Reports Include:

- Current operating condition of the GE Multilin device
- Operating status of the equipment being protected
- Critical device settings that have not been programmed

- Operating history of the monitored devices
- Maintenance issues that need to be addressed
- LED simulated view of equipment targets and alarms detected
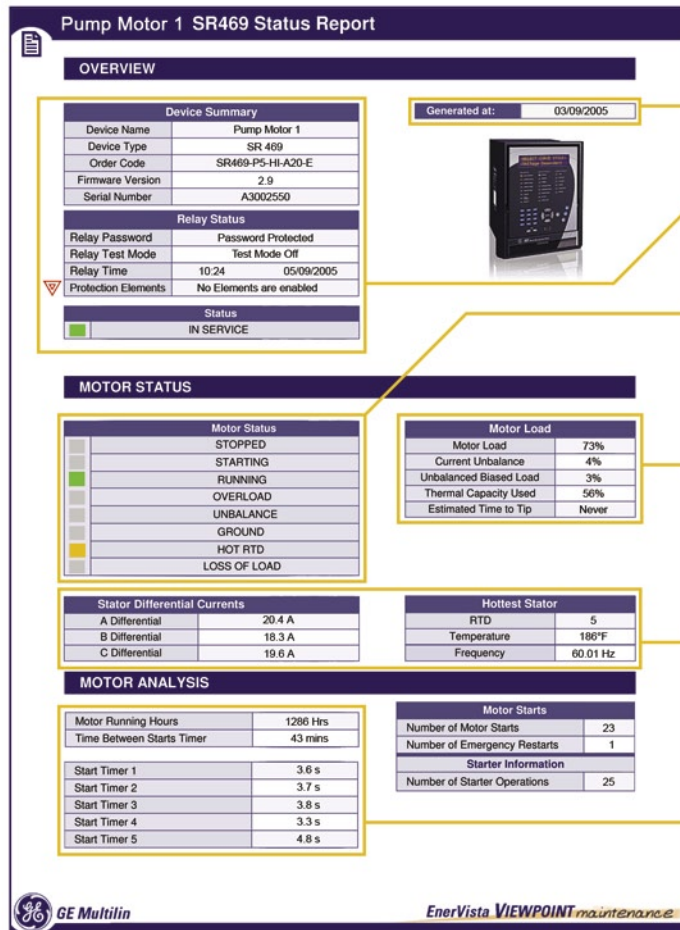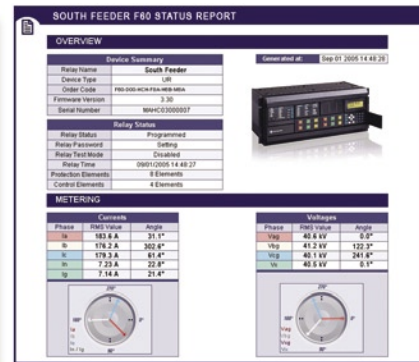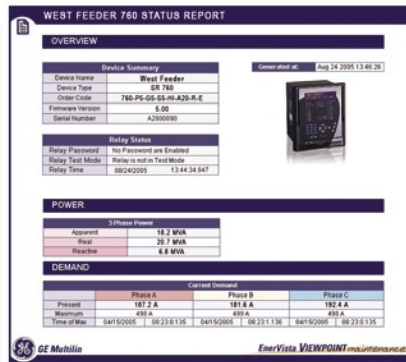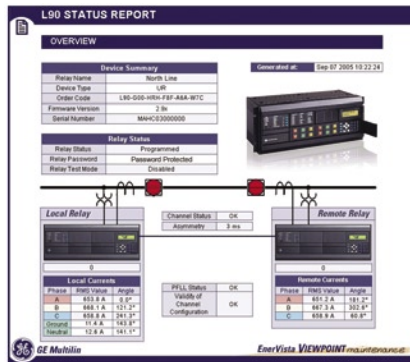
Date and Time that the Status Report was generated

Description of the GE Multilin Relay and equipment being protected

- Equipment Name
- Relay Model Number and Firmware version
- Relay serial Number
- Intelligent Reporting raises red flags to draw attention to disabled protection or control elements

Equipment Targets and Alarms detected by the relay

- Motor Overload
- Hot RTD Alarm
- Loss of Load

Current Operating Condition of the equipment

- Motor Speed
- Transformer Load
- Tap Changer Position
- Estimated Time to Trip

Critical information that can aid in anticipating faults

- Differential Currents
- Temperature
- Frequency

Historical Information about the asset that aids in predicting maintenance requirements

- Motor Running hours
- Accumulated Loss of Life
- Number of Breaker Operations

Reduce time required to collect data for Troubleshooting a fault with Viewpoint Maintenance. No need to access the setup program for the device or sift through settings to figure out what data is needed. With the click of a button, Viewpoint Maintenance will gather all required information including pertinent Settings Files, Oscillography, Events, Fault Reports, Data Logger and Health Reports and package it into a single .zip file to allow for easy sharing with engineers to assist with your fault analysis.

Fault Diagnostics Features:

- Effortlessly collect all the data required to diagnose a fault

- Automatically package all pertinent information into a .zip for easy file sharing

- Eliminate costly hours of Troubleshooting by filtering data at the click of a button

- Assess why and how the fault occurred to improve preemptive maintenance procedures

- Avoid costly downtime and customer interruptions

- Reduce the amount of time required to troubleshoot a fault to get your system back up and running
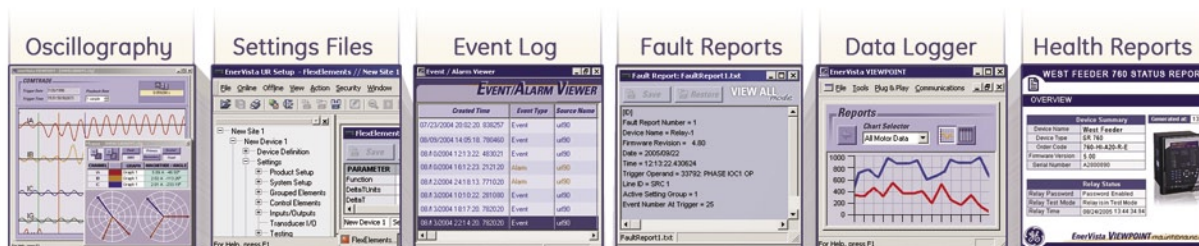
① At the click of a button Viewpoint Maintenance will gather all required information including pertinent Settings Files, Oscillography, Events, Fault, Data Logger and Health Reports...

② ...Viewpoint Maintenance then automatically packages and compresses these files into a single .zip file...

③ ...and stores the zipped file on your hard drive for easy emailing to your engineers or instantly emails to GE Tech support

EnerVista™ Viewpoint Maintenance Software Selection Guide

VPM			EnerVista™ Viewpoint Maintenance
	1		Single Pack
	5		5 Pack
	10		10 Pack
	50		50 Pack
			No Upgrades
		G1	1 Year Upgrades
		G2	2 Year Upgrades
		G3	3 Year Upgrades

The following GE Multilin devices are supported in the Viewpoint Maintenance 2.00 release:

Devices	Firmware Versions
UR Family*	2.6x, 2.8x, 2.9x, 3.0x, 3.1x, 3.2x, 3.3x, 3.4x, 4.0x, 4.2x, 4.4x, 4.6x, 4.8x
SR469	2.5x, 2.6x, 2.8x, 2.9x, 4.0x
SR489	1.3x, 1.4x, 1.5x
SR745	2.4x, 2.5x, 2.6x, 2.8x
SR750/760	3.6x, 3.7x, 4.0x, 5.0x, 6.0x

*Excludes B90

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