CABLETRON systems

Software
Product
Information

PRODUCT NAME: clearVISN Fault Policy Manager
Version 1.3 - Windows Suite

9033106
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Description

clearVISN Fault Policy Manager is a network management application for aiding in monitoring the health and proper operation of a network of Digital network devices. It accomplishes this by setting up devices to monitor their own parameters against specific values called thresholds. When a device samples those parameters and detects that one of them has exceeded the threshold value, then it sends a message which will cause an alarm to be generated on a network management station. This may be the station where Fault Policy Manager is running, or any other machine that is capable of receiving and logging Simple Network Management Protocol (SNMP) Traps.

Fault Policy Manager uses the Remote Monitoring (RMON) Management Information Base (MIB) structure to set up a device to monitor a particular parameter against a preset value. This device generates an SNMP Trap when a threshold crossing occurs.

The Fault Policy Manager application allows you to set RMON Alarms and Events for network devices, such as repeaters, switches, and chassis. Alarms define the thresholds for the network devices. If a condition exists that crosses a threshold, the device generates an event. An event is the action that takes place when an alarm condition occurs. Examples of events include traps that are sent to network management stations and activities that turn channels on or off.

You can set up groups of devices and assign alarms to the entire group, to a single device, to a port on that device, or to a repeater port group on a device. This saves you time and gives you flexibility in defining your alarm rules. Fault Policy Manager also lets you select where to send traps, should an alarm condition occur. You can specify that the trap go to one or more network management stations.

Note: Fault Policy Manager does not include an alarm handler function. It is expected that you will use an NMS for alarm handling and reporting. Any NMS that supports SNMP traps will work.

An alarm defines the type of variable to be sampled. The variable, taken from the RMON MIB, must be INTEGER, counter, gauge, or time-ticks. These are the only variable types that conform to the ASN.1 type INTEGER.

The alarm is assigned other parameters, which are defined in the alarm table. The alarm table defines:

- The Alarm Interval, which is how often the variable is to be sampled

- The Threshold, or the upper and lower limits for the variable

- The Alarm Sample Type (delta or absolute).

You can set these values for the alarm.

For example, you can set an alarm to monitor the total number of errors for a repeater. If the repeater generates more than 30 errors (the threshold) in 60 seconds (the alarm interval), the repeater generates an event. The alarm has both rising and falling thresholds. To limit the generation of an excessive number of events, the device generates only one event when a threshold is crossed. The device does not generate another event until the opposite threshold is crossed.

An event is an action that is triggered when an alarm condition exists. An Event table describes the event, such as the type of event, the owner of the event, the last time the event was generated, and a description of the event. The type of event can be a log entry, an SNMP trap, neither, or both. The Event table lists the community that receives the traps.

Supported Devices

The Fault Policy Manager application supports the following devices:

Chassis	DIGITAL MultiSwitch 900
	DIGITAL MultiSwitch 600
Repeaters	DECrepeater 900TM, 900GM
	PORTswitch 900FP, 900CP, 900TP, 900TP/12
	DIGITAL MultiSwitch Hub 624T*, 612TX*
	DIGITAL MultiSwitch Hub 924TX
Switches	VNswitch 900 CC, CG, EA, EE, EF, EX, FA, GV, XA, XX, LL, FF, FX
	PEswitch 900TX
	DECswitch 900FO, 900EE, 900EF
	DECbridge 900MX
	DIGITAL MultiSwitch 612EX*

*The DIGITAL MultiSwitch 600 modules are used with the DIGITAL MultiSwitch 600 Stack Director or in a DIGITAL MultiSwitch 900.

When you open the Fault Policy Manager application, it extracts the network devices that it supports from the clearVISN database.These devices are displayed in the User Configurations window, under the Device Snapshot folder. Next you can create groups of devices for applying the same settings to a number of similar devices simultaneously. If you have many devices in the database, then you can filter the view to specify which groups or classes of devices to display.

Fault Policy Manager includes a Status Log, which displays messages in real time. To invoke the Status Log, open the View menu and click Status Log. The Status Log window messages can be saved to a file; other features that let you filter messages or clear the display and start logging again. You can add alarms to devices at the following levels:

- Group level adds alarms to all devices in the group.

- Device level adds alarms to individual devices.

- Port level adds alarms to the ports of devices.

- Repeater group level adds alarms to repeater groups.

When you add an alarm to a device, Fault Policy Manager displays the alarm on the device. When you load the alarm to the network device, Fault Policy Manager sets the alarm on the real network device. The device monitors the alarm and sends an event.

You can customize the alarms by modifying the values of the alarms that already exist. When you change the value of an alarm, the alarm with the new values is created in the User Defined Group in the Alarm Templates window. The original alarm remains intact.

Once you have set up your devices with alarms and events, you can enable them to start monitoring conditions. You enable the alarms and events by loading them to the network device.

You can obtain a snapshot of the alarms that are currently enabled on the network device by selecting a device or group of devices in the Device Snapshot User Configuration in the User Configurations window and clicking on Load Alarms from Network.

You can specify the IP address of a network management station (NMS) that is to receive events in the form of a Trap. If you want the events sent to more than one NMS, you can specify more than one trap address. You can also assign the trap address to a single device or to a group of devices.

Hardware Requirements

- Intel® Pentium 200MHz or higher performance IBM®-compatible PC

- Color monitor with 800 x 600 resolution

- Minimum 64 MB RAM

- CD-ROM drive

- Minimum 100 MB of disk space

- Mouse or other pointing device supported by Windows

- 32-bit Ethernet Network Interface Card (NIC)

The following Alpha processors running Windows NT 4.0 are supported using FX!32:

AlphaStation	200, 250
AlphaServer	400, 1000, 2000, 2100
DECpc AXP 150	
DEC 2000 Server	

This list comprises the requirements for running the Windows Suite family of applications standalone. The requirements may be greater if you are running the Windows Suite with other network applications. Refer to your documentation for the hardware requirements of those applications.

Software Requirements

One of the following operating systems:

- Microsoft Windows 95, Windows 98, or Windows NT 4.0- Intel
- Microsoft Windows NT V4.0 - Alpha (with FX!32 translator)

Consolidated Firmware

Firmware in supported devices must be at the latest revision levels. Although the Consolidated Firmware Kit for the DIGITAL devices is included on the clearVISN CD-ROM, it can also be obtained through the Cabletron Web Page at the following address:

http://www.cabletron.com/dnpg/dr/hubs/firmware/

Optional Software

Other Cabletron applications include:

- Stack Manager
- MultiChassis Manager
- VLAN Manager
- Recovery Manager
- Traffic Policy Manager
- RMON Manager

Growth Considerations

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

Distribution Media

CD-ROM

Ordering Information

Note: The clearVISN CD-ROM contains all the applications and documentation. You need to order only one copy of QA-5FVAB-X8. You must purchase additional QM licenses for each user of the application.

Fault Policy Manager license only:	QM-5M2AA-BA
Fault Policy Manager upgrade license:	QM-5M2AA-BB
CD-ROM and documentation:	QA-5FVAB-X8

Software Product Services

Provided by the Compaq Computer Corporation, and available through Compaq:

New Version License Service:	QT-5M2AA-TA
Media and Documentation Delivery Service:	QT-5FVAB-E8
Installation:	QT-5M2AA-I9
Telephone Support:	QT-5MZAA-ZA

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Year 2000 Information

For Year 2000 information, refer to the Cabletron web page:

http://www.cabletron.com/year-2000

Software Warranty

Warranty for this software product is provided by Compaq with the purchase of a license for the product as defined in the license agreement.

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