

WHITE PAPER

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Compaq Insight Manager for OpenView and TME-10 NetView

An overview of the features and benefits of Compaq Insight Manager for OpenView and TME-10 NetView as a Systems Management application.

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White Paper - Compaq Insight Manager for OpenView and TME-10 NetView
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EXECUTIVE OVERVIEW

Compaq Insight Manager for OpenView and TME-10 NetView offers a solution for managing Compaq systems from the OpenView or TME-10 network management frameworks.

Deployment of business-critical Compaq systems is increasing throughout the enterprise. With this application, OpenView and NetView users are able to easily identify, organize and manage Compaq systems on their network.

Compaq Insight Manager for OpenView and TME-10 NetView automatically detects all Compaq systems that have Compaq Insight Management agents installed. It creates a graphical representation of Compaq systems on the OpenView or TME-10 NetView network segment map and reports to the OpenView or NetView database information about these systems. Compaq systems and subsystems are easily distinguished through unique icons; changes in health status are quickly identified through icon color changes.

This white paper provides an overview of the Compaq systems management strategy and then details Compaq Insight Manager for OpenView and TME-10 NetView. Additional white papers are available from Compaq covering Compaq SmartStart, Compaq Insight Manager, Compaq Netelligent Management Software, Compaq Remote Insight and the Compaq Systems Management Partnerships.

THE COMPAQ SYSTEMS MANAGEMENT STRATEGY

As today's complex and dynamic networks require higher performance and reliability, the human resources to manage these distributed networks is constantly constrained. It has never been more challenging to keep networks and costs under control while maximizing resource utilization and availability.

Recognizing this need, Compaq Computer Corporation has developed a comprehensive management strategy to help customers efficiently deploy and effectively manage a large number of systems. The Compaq systems management strategy has three major components - first, engineering manageability into all Compaq products; second, delivering advanced automation for integration and management; and third, partnering with the leaders in systems management to enable broad management of Compaq products.

Compaq's management products include Compaq SmartStart, the intelligent integration tool for setting up and maintaining Compaq servers; Compaq Insight Manager, the Windows-based application for easily managing Compaq systems; Compaq Netelligent Management Software, the easy-to-use network management application; the Compaq Remote Insight server option board for remote management of mission-critical servers; and Compaq Insight Manager for OpenView and TME-10 NetView. No other systems management products provide the breadth of functionality and depth of control required to successfully manage the critical hardware components of the distributed enterprise.

Engineered Manageability

Compaq designs extensive manageability into its products, enabling fault prediction and alerting, detailed asset and configuration inventory, and performance monitoring. More than 1,000 parameters are instrumented, all monitored by Compaq Insight Management Agents. These agents provide predictive failure alerts and access to management parameter values from a broad range of operating environments including NetWare, Windows NT, Windows 95, OS/2, and SCO UNIX and UnixWare.

Compaq Insight Management Agents are standards-based, delivering their alerts and configuration and performance data via the Simple Network Management Protocol (SNMP). Compaq servers, Deskpro desktops, LTE portables, and Professional Workstations come standard with Compaq Insight Management Agents. Deskpro desktops, LTE portables and Professional Workstations are also DMI compliant, ensuring broad manageability.

Products for Advanced Automation

Compaq has led the industry in the effective integration and management of networked systems through innovative automation. Compaq SmartStart integrates, optimizes and updates tested software solutions for networked Compaq systems. Compaq Insight Manager offers an in-depth view of event, configuration, and performance management of Compaq servers, desktops, workstations, and portables from a Windows NT console. Compaq Remote Insight is a server option board that provides complete remote management of Compaq servers. Compaq Netelligent Management Software is an easy-to-use and powerful network management application that supports all manageable Netelligent products. It can be easily installed along with Compaq Insight Manager to provide complete end-to-end network and systems management of Compaq devices from a single console. Compaq Insight Manager for OpenView and TME-10 NetView extends this in-depth fault management and status monitoring of Compaq systems to RISC-based UNIX consoles running HP OpenView for HP-UX or IBM TME-10 NetView for AIX.

Compaq Systems Management Partnerships

Compaq recognizes the challenges customers face in managing the distributed enterprise. That is why Compaq has joined forces with the leaders in systems management to provide end-to-end, enterprise-wide management solutions. Compaq partners and their products include: Microsoft Systems Management Server (SMS), Novell ManageWise, IBM/Tivoli TME-10, Hewlett-Packard OpenView, BMC Software Patrol, Boole and Babbage Ensign and Command/Post, Cabletron Spectrum, Seagate NerveCenter Pro, and Symantec Norton Administrator for Networks.

Why Central Management of Systems?

Organizations have attacked the challenge of centralized management of distributed systems by investing in more personnel to handle a growing population of networked devices spread over increasing distances. Manufacturers of computer products have recognized that one way to address rising personnel costs has been to design manageable products. Just as internetworking devices have long required manageability, critical servers and clients now increasingly require management as well. You can and should demand that critical systems provide the same level of manageability that you have come to expect from internetworking devices.

Two of today's most popular enterprise management tools are HP OpenView and IBM TME-10 NetView. Both of these products provide an environment for the integration of network and systems management tools. Many snap-in tools exist to provide real-time management, change management, production control, security management, and help desk operations.

Responding to the growing use of OpenView and TME10 NetView and customer interest in managing Compaq systems from those platforms, Compaq has developed Compaq Insight Manager for OpenView and TME10 NetView.

WHAT IS COMPAQ INSIGHT MANAGER FOR OPENVIEW AND TME-10 NETVIEW?

Compaq Insight Manager for OpenView and TME-10 NetView is a hardware fault management and status monitoring application for Compaq servers, desktops, workstations and LTE portables that runs on the enterprise management platforms HP OpenView for HP-UX and TME-10 NetView for AIX. This product monitors the hardware status of Compaq systems running Compaq Insight Management Agents 2.60 or greater and alerts the enterprise management platform of any significant status changes. Compaq Insight Manager for OpenView and TME-10 NetView provides easy visual monitoring of Compaq systems for efficient problem resolution.

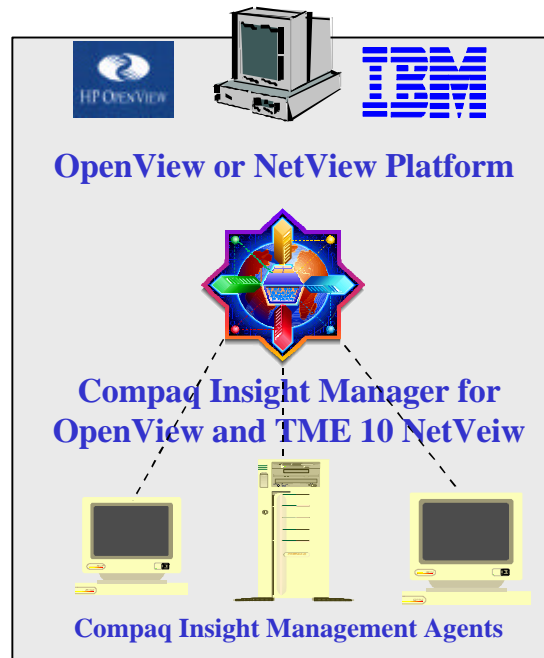


Figure 1 - Agent Program Relationship

An installation using Compaq Insight Manager for OpenView and TME-10 NetView consists of three components: a RISC-based UNIX management console (OpenView for HP-UX Network Node Manager or TME-10 NetView for AIX), a snap-in software module for Compaq fault management (Compaq Insight Manager for OpenView and TME-10 NetView), and server- or client-based management data collection agents (Compaq Insight Management Agents).

The Insight Management Agents gather information describing the state of the system. The agents then act upon that data, either by initiating an alarm in the event of a fault, or by providing updated management information, such as network interface or storage sub-system performance statistics.

The Insight Management Agents provide management information to Compaq Insight Manager for OpenView or TME-10 NetView. It displays system and subsystem status via color coded icons on the network maps. Alerts, sent in the form of SNMP traps by the Insight Management Agents, are shown in the OpenView and NetView Events Browser.

Compaq Insight Manager for OpenView and TME-10 NetView Lowers Costs

The most costly component of network management is personnel. As servers and clients are deployed into more business-critical environments and are used in more remote areas, the human resources required to manage this network also continue to grow.

By centralizing the management of Compaq systems, efficiency is improved and time is saved. At the central management console, Compaq Insight Manager for OpenView and TME-10 NetView helps reduce costs by providing at-a-glance information for quick identification and problem resolution. Information is obtained faster, more cost-efficiently, and more confidently from the integration of Insight Manager for OpenView and TME-10 NetView with the management console.

The overall result will be reduced cost by significantly contributing to server and client availability. By warning of impending failures, Compaq Insight Manager for OpenView and

TME-10 NetView complements Compaq's full array of hardware fault tolerance features with predictive alerting, enabling proactive management of Compaq systems.

KEY PRODUCT FEATURES



Figure 2 - Compaq Insight Manager for OpenView integration at the Segment Sub Map of OpenView

Compaq Insight Manager for OpenView and TME-10 NetView provides the following key features:

- Centralized solution for control of Compaq mission-critical hardware systems
- Enhanced fault management of Compaq systems from HP OpenView for HP-UX and TME-10 NetView for AIX
- Integrated with Compaq Insight Management Agents 2.60 or greater to receive alerts and management data
- Identifies Compaq systems and status on enterprise map with unique icons
- Detailed alert descriptions and action recommendations

Standards Based

Compaq Insight Manager for OpenView and TME-10 uses the Simple Network Management Protocol (SNMP) V1 protocol to communicate with Compaq Insight Management Agents installed on the managed devices.

Insight Management Agents embrace standards defined by the network management industry, delivering standard MIB support for RFC 1213, RFC 1398, RFC 1231, RFC 1398 for Ethernet network interfaces, and RFC 1231 for Token Ring interfaces as well as extended Compaq features.

Compaq System Discovery and Status Display



Figure 3 - Segment Level Sub-Map of Compaq Insight Manage for OpenView

Once Compaq Insight Manager for OpenView is installed, the program reveals recognizable changes to the OpenView maps. In the Segment Level Sub-Map of OpenView, illustrated in Figure 3, the results of the autodiscovery of Compaq systems are shown. Each Compaq system is uniquely identified and displayed, including the device's operating system. The autodiscovery feature of Compaq Insight Manager for OpenView and TME-10 NetView provides at-a-glance visual identification of Compaq systems.

Status display with Compaq Insight Manager for OpenView and TME-10 provides color status changes on the OpenView or NetView map from changes that occur in the subsystems of a Compaq device. This example of a segment level sub-map (Figure 3) shows a number of Compaq systems including Windows NT workstations, and NetWare, OS/2, SCO Unix and UnixWare

servers with a variety of color status displays. The color propagation provides at-a-glance status information making it simple and quick to identify problems. Further details about the condition status of a Compaq device are found by drilling down to the next level of the OpenView program, the Node Sub-Map.

Compaq Subsystem and Information Display



Figure 4 - Compaq Insight Manager for OpenView Subsystem display

By double clicking on a Compaq node, the Node Sub-Map window (Figure 4) is displayed. This map provides subsystem status information with Compaq specific sub-system icons.

The following information is displayed in the node sub-map based on the installed options of the device being monitored:

- SCSI Storage
- Drive Array Storage
- System Information (Characteristics of the system, such as asset details and processor type)
- UPS
- System Health (including ECC memory, thermal, critical error log, and server ASR)
- IntelliSafe hard drive
- Fibre Channel Array Storage
- Windows NT Clusters

When the subsystem has a status change, the color of the background on the Compaq subsystem icon will change. The color change of the Compaq subsystem will also be propagated to the OpenView Node Segment Map as seen in Figure 3. The Compaq subsystem status display reveals a variety of condition status levels of the monitored Compaq device. The color of the Compaq subsystem icon indicates a status condition of the subsystem.

- GREEN indicates Normal Condition Status
- YELLOW indicates Degraded Condition Status
- RED indicates Critical/Failed Condition status
- BLUE indicates Unknown Condition Status

Sub-System Information

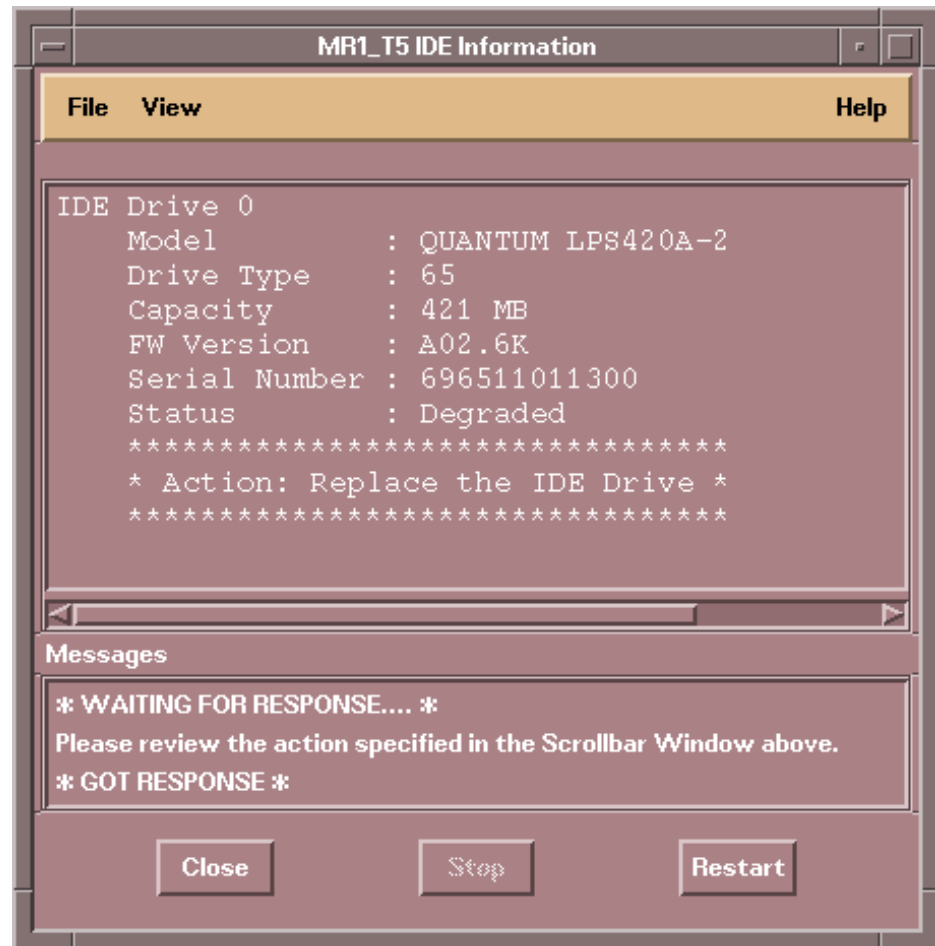


Figure 5 - Sub-system Summary Information for an IDE hard drive from Compaq Insight Manager for OpenView

By double-clicking on a sub-system icon, the Sub-System Information screen is displayed with detailed information specific to each subsystem. The Compaq Sub-System information display shows details for problem identification for efficient monitoring (Figure 5.) Serial number, system name, system ID and system contact information is available. Pre-failure warranty checks are also monitored from this screen.

The following devices have pre-failure warranty available, in which Compaq will replace the components, free of charge:

- SCSI Hard Drives attached to Drive Array controllers
- ECC Memory Modules
- Pentium Pro Processors
- Intellisafe Hard Drives

Subsystem Information Export

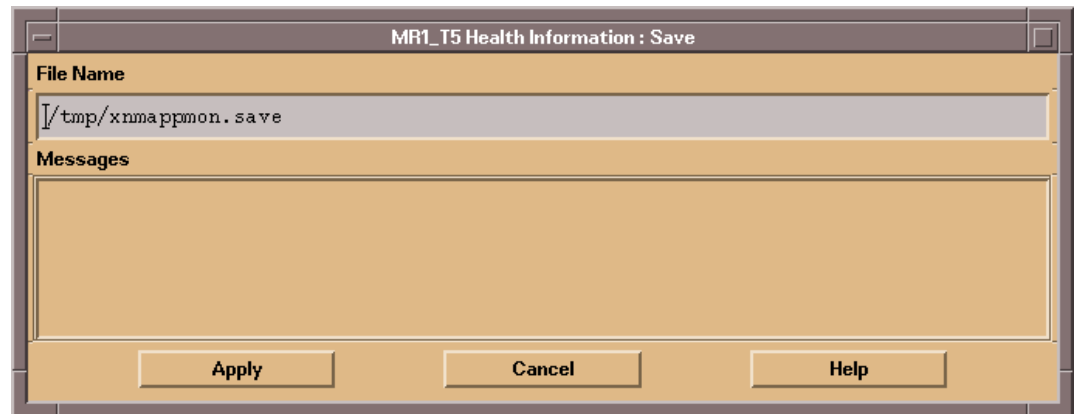


Figure 6 - Text Export Screen from Compaq Insight Manager for OpenView

From the sub-system information screen (Figure 6) you can export the information by simply choosing “File” menu and performing a “save as” function. The text can then be utilized by other applications such as trouble ticketing and help desk products.

OpenView Events Browser

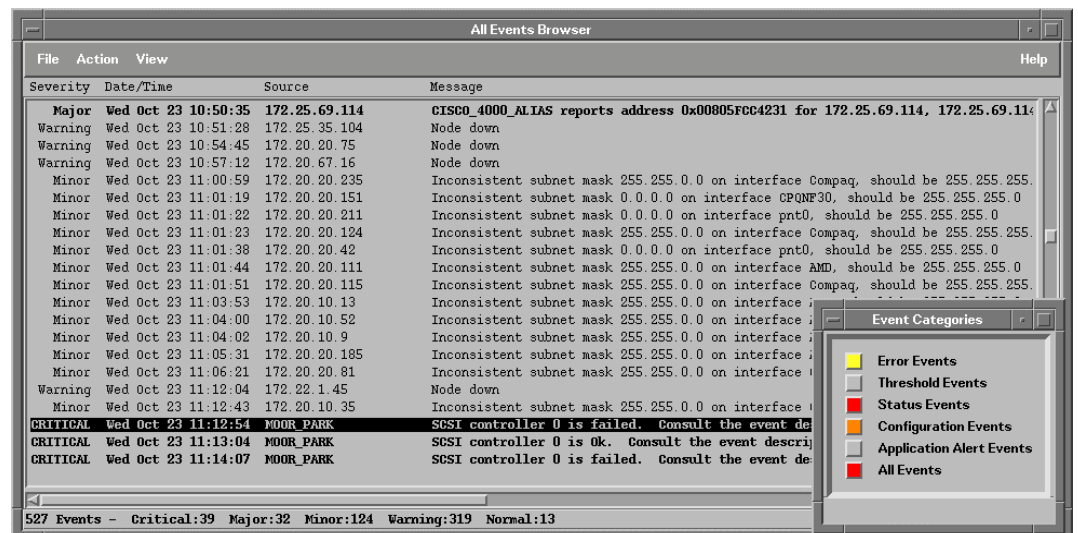


Figure 7 - OpenView Events Browser with Compaq Insight Manager for OpenView integration

You can also monitor Compaq systems through the OpenView Events Browser (Figure 7.) Click on “Status Events” or “All Events” to get to the Events Browser screen for OpenView.

From there, the Events Browser Information is displayed in a scrolling list format. The OpenView Event Browser will list specific Compaq alerts in a simple and easy-to-understand format due to the integration of Compaq Insight Manager for OpenView.

Event Description Window



Figure 8 - Event Description Window from Compaq Insight Manager for OpenView

The event description window (Figure 8) provides information about a selected alert entry. The detailed description of the condition is provided with recommended actions.

APPENDIX A - OBTAINING COMPAQ INSIGHT MANAGER FOR OPENVIEW AND TME-10 NETVIEW

Compaq Insight Manager for OpenView and TME-10 NetView are available in the same CD package.

An evaluation copy of Compaq Insight Manager for OpenView can be obtained from the Compaq World Wide Web site (www.compaq.com) or by calling Request Pack at **1-800-635-8269** in North America. In Europe, Middle East, and Africa, call the local Compaq Reseller and ask for the Product Request Form for Compaq Insight Manager for OpenView and TME-10 NetView which will be faxed to the fulfillment house.

The evaluation copy provides full Compaq Insight Manager for OpenView functionality. However, only five Compaq devices are enabled for monitoring.

If an evaluation copy was obtained from the Web site and a decision is made to purchase the product, a copy of the CD package from the Request Pack Center is needed. The Activation Key Fax Order Form can be printed from the CD enclosed in the Compaq Insight Manager for OpenView and TME-10 NetView packet. The CD is necessary for order processing and key activation.

Once the Activation Key Fax Order form is completed, fax it to an authorized Compaq reseller for purchase. Resellers will obtain the activation key to enable Compaq Insight Manager for OpenView and TME-10 NetView products for unlimited device monitoring.

Unlike Compaq Insight Manager, Compaq Insight Manager for OpenView and TME-10 NetView is not bundled with Compaq servers. Compaq Insight Manager for OpenView and TME-10 NetView is available for sale as a stand alone product.

To locate the nearest Compaq Authorized Reseller in North America, call 1-800-345-1518. For all other locations, check the Compaq Worldwide Web site.

APPENDIX B - HOW TO ORDER COMPAQ INSIGHT MANAGER FOR OPENVIEW AND TME-10 NETVIEW ACTIVATION KEYS

Activation keys are ordered using the Compaq Insight Manager for OpenView and TME-10 NetView Key Order Forms which are printed from the CD. The CD is located in the right hand side of the packet as well as the instructions and serial number sticker.

Activation Keys must be ordered through a Compaq Authorized Reseller or Dealer. To Order the Compaq Insight Manager for OpenView and TME-10 NetView Key, complete the following steps.

1. Print out and complete the Compaq Insight Manager for OpenView and TME-10 NetView Order Form
 - Place an X, or indicate quantity, in the box next to the product(s) to be purchased.
 - Complete the appropriate sections in the Customer Information Order Form.
 - Section A identifies the person to whom the activation key(s) will be issued. This person could be the installer or the owner of the software license: an End User, a Reseller/Dealer or a Distributor/Channel
 - Section B identifies the Reseller/Dealer and applicable purchase order
 - Section C identifies the Distributor/channel (if applicable) and purchase order
 - Section D identifies the End User and MUST be completed to:
 - Register the program purchase for support
 - Obtain product updates
 - Section E requests an End User Signature for compliance with the Compaq Insight Manager for OpenView and TME-10 NetView program license agreement
2. Remove the Serial Number labels from the “How to Purchase..” card and attach it to the Order Form
3. Fax the Order Forms (with a purchase order if applicable) to a Compaq Authorized Supplier.

APPENDIX C - HARDWARE AND SOFTWARE REQUIREMENTS

Hardware and software requirements for the Management console

HP 9000 Series 700/900 Operating Systems and OpenView Versions Support		
	HP-UX 9.x	HP-UX 10.20
OpenView 3.31		
OpenView 4.1		
OpenView 5.0		

IBM RS/6000 Operating Systems and NetView Versions Support	
	AIX 4.1
TME-10 NetView 4.1	

Appendix C - continued

Software Requirements for Managed Compaq Systems

Compaq Insight Management Agents	Feature	Requirement
Managed Server Requirements	CPU	Compaq ProSignia and ProLiant servers
	CPU utilization	Less than five percent
	Management Protocol	Simple Network Management Protocol (SNMP)
	Free disk space	At least 2 MB
	Memory	At least 512 Kbytes to load agents
For NetWare	NetWare versions	NetWare 3.1x and 4.x
	Network Protocols	IP, IPX, PPP
For Microsoft Windows NT	Windows NT versions	Windows NT 3.51, 4.0
	Network Protocols	IP, IPX, PPP
For SCO OpenServer	SCO versions	SCO OpenServer Release 5.0, 5.02, SCO UNIX 3.2.4, Open Desktop 3.0
	Network Protocols	IP
For IBM OS/2	IBM OS/2 versions	IBM OS/2 Warp Server 4 family, Warp 3.0 and OS/2 2.x
	Network Protocols	IP, PPP
For SCO UnixWare	UnixWare versions	UnixWare 2.X
	Network Protocols	IP, PPP
Managed Workstation Requirements	CPU	Compaq Professional Workstation
Supported workstation operating systems		Windows NT 3.51, 4.0
	Network Protocols	IP, IPX, PPP
Managed Client Requirements	CPU	Compaq Deskpro, Compaq Armada
Supported client operating systems		Windows 95, Windows NT 3.51
	Network Protocols	IP, IPX
Supported Standards	REQUEST FOR COMMENT	DESCRIPTION
	RFC 1212	Concise MIB definitions
	RFC 1215	A convention for defining traps for use with SNMP
	RFC 1213	Management Information Base (MIB II)
	RFC 1398	Ether-Like Interface Type MIB
RFC 1231	IEEE 802.5 Token Ring Interface Type MIB	
Management MIBS	Server Management Parameters	Over 1,000
	Server Management Traps	Over 60
	Desktop Client Management Parameters	Over 160
	Desktop Client Management Traps	4