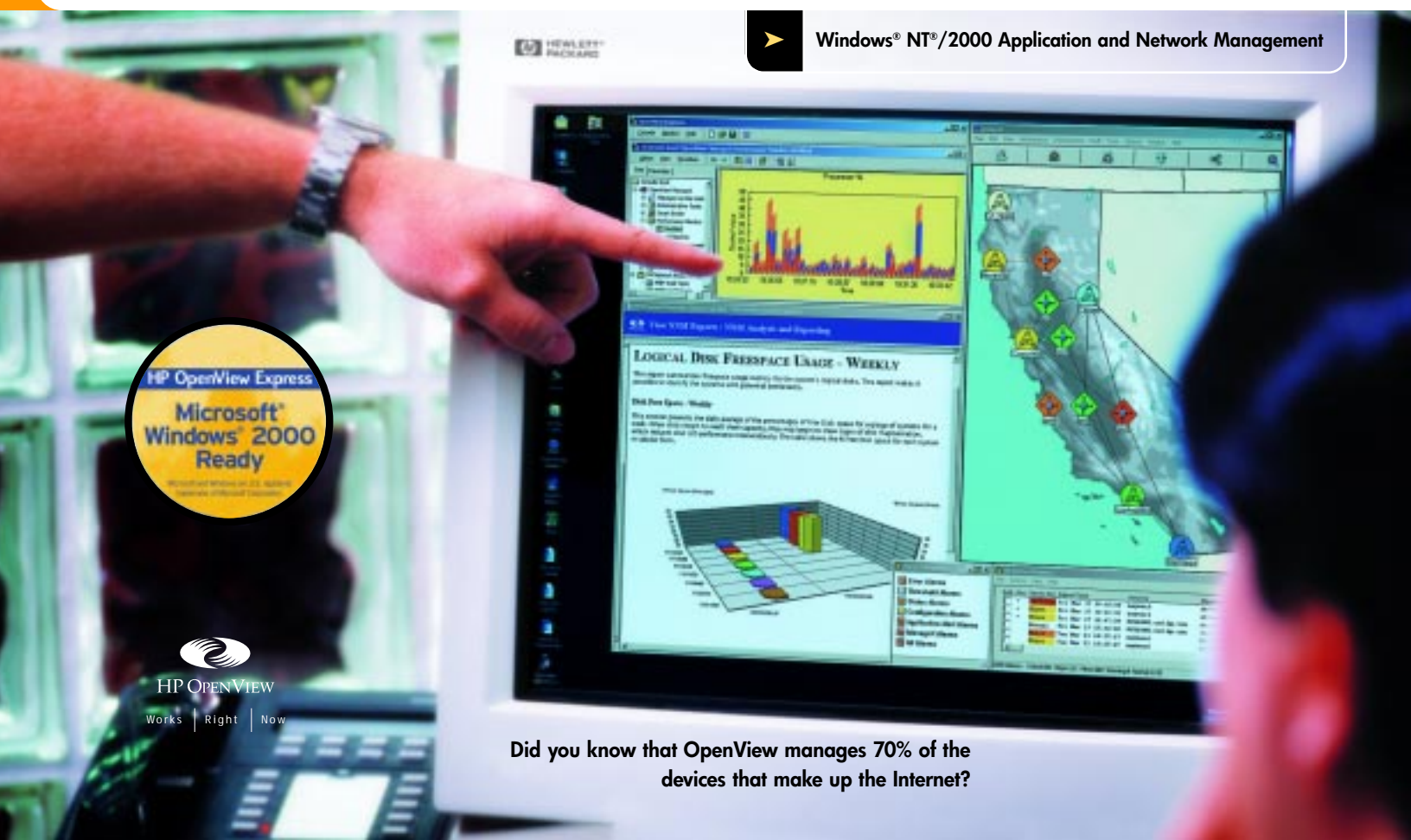




# HP OpenView Solutions

## HP OpenView Express Technical Solution Guide

➤ Windows® NT®/2000 Application and Network Management



Did you know that OpenView manages 70% of the devices that make up the Internet?

Over **70%**  
of all Internet devices are managed by  
**HP OpenView Solutions**

It's true. More than 70% of today's Internet devices are managed by HP OpenView solutions. And many of these key solutions have been combined in HP OpenView Express.

Simply put, OpenView Express was designed to help administrators manage Windows NT/2000 network, server, application and data environments.

We understand that it's next to impossible to evaluate new management solutions when your beeper is stuck in on-mode and you're buried in sticky notes. We know you are busy. That's why you won't find marketing hype in this brochure (just the facts).

What you will find is whether or not HP OpenView Express can make life easier in your shop.

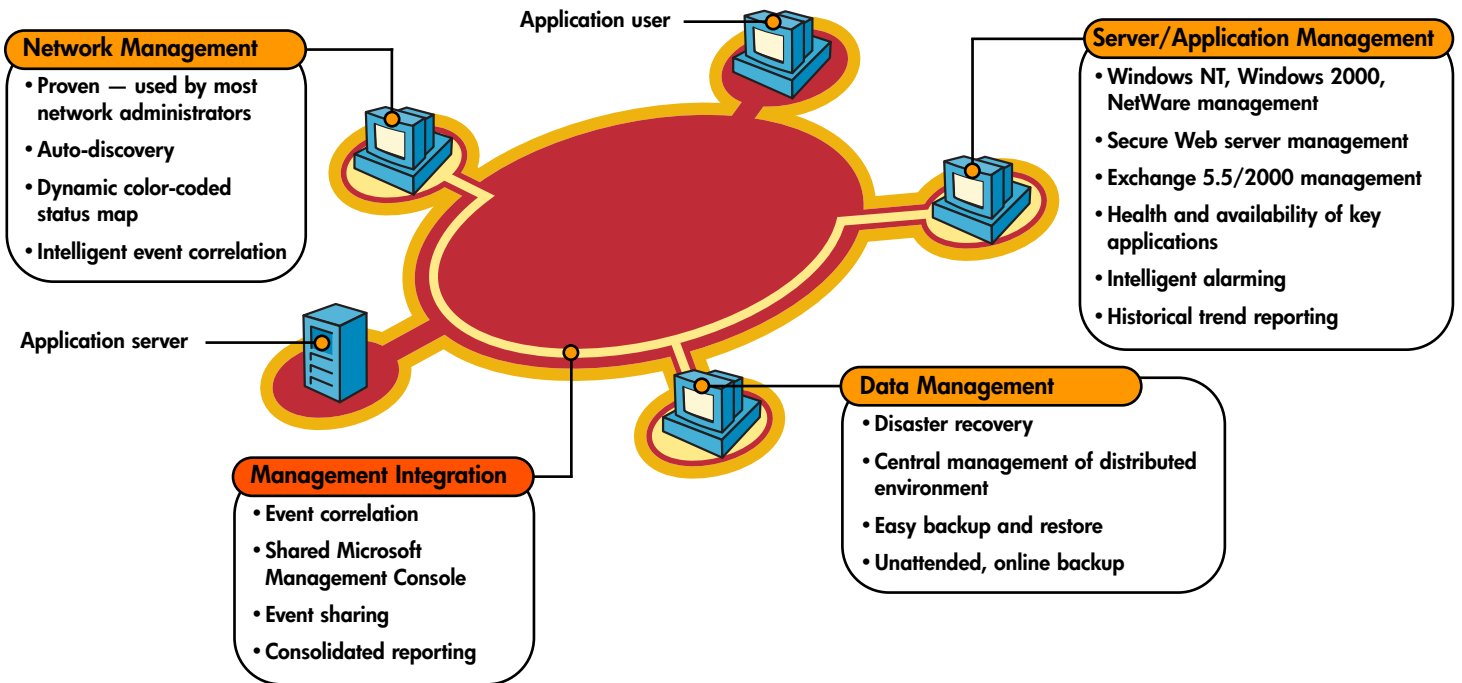
**Four facts right up front:**

1. We've created the fastest and least-painful way in the industry to check out a management solution in your shop.
2. We'll come to you and show you how to get maximum visibility of your networked systems environment.
3. When you're ready, we'll help you install it—in days, not weeks or months.
4. It's affordable.

## **Who needs OpenView Express?**

Windows NT/2000 network, server, application and data administrators.

# What does OpenView Express do?



## What does OpenView Express manage?

### Operating Systems & Services

Windows NT  
 Windows 2000  
 MS Windows 2000 Active Directory  
 MS Windows 2000 Active Directory Connector  
 MS Terminal Services (Windows 2000)  
 MS Terminal Server (NT 4.0)  
 Novell NetWare

### Messaging Servers & Services

Lotus Domino/Notes  
 MS Exchange Server 5.5  
 MS Exchange 2000  
 MS Message Queue Server/Service

### Web Servers & Services/Internet Infrastructure

MS Internet Information Server/Service  
 MS Proxy Server  
 MS Certificate Server  
 MS Index Server

### Database Servers & Services

MS SQL Server  
 MS Transaction Server/Service  
 Oracle RDBMS Server  
 Sybase Server

### Server Hardware

Compaq Insight Manager  
 Dell OpenManage  
 HP TopTools for Servers  
 DMI 2.0 systems

### Network Devices

TCP/IP devices  
 IPX devices  
 Cisco devices  
 Networked printers

### Backup & Restore

VERITAS Backup Exec  
 HP SAN components  
 HP One Button Disaster Recovery

### Tools & Utilities

MS SNA Server  
 MS SMS Server  
 MS WMI support  
 McAfee Virus Scan  
 Norton AntiVirus

# Pain-points

Okay, let's talk pain-points. On the following pages, you'll find a few scenarios that show how OpenView Express can help you manage your networked environment. Each scenario provides you with an idea of what OpenView Express can do for you.



## Web servers

My IIS Web server is outside our firewall and is virtually unmanageable. I need to get control of it .....page 5



## Exchange 5.5/2000

I need to get our 5.5 environment under control today. When I start planning for Exchange 2000 I need to be able to manage a mixed Exchange 5.5/2000 environment .....page 6



## Windows NT/2000

I'm adding Windows 2000 and Active Directory Service to my NT 4.0 network. I need to manage this mixed environment .....page 7



## Finger pointing—network or server

The network guys blame the server. The server guys blame the network. I need to quickly find out what the real problem is .....page 8



## Get control of your servers

I have a variety of network and server hardware running every application under the sun. I need to get control of this mess .....page 9



## Disaster recovery

A disaster just occurred and the restore requests are pouring in. I need to quickly restore several key files at a remote location .....page 10

# 1

## Web servers

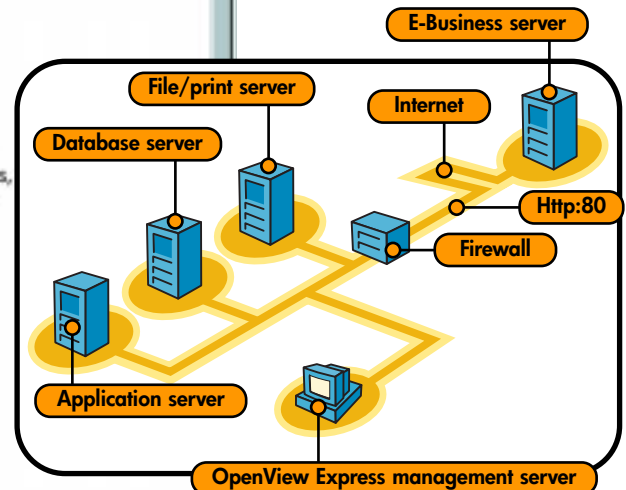
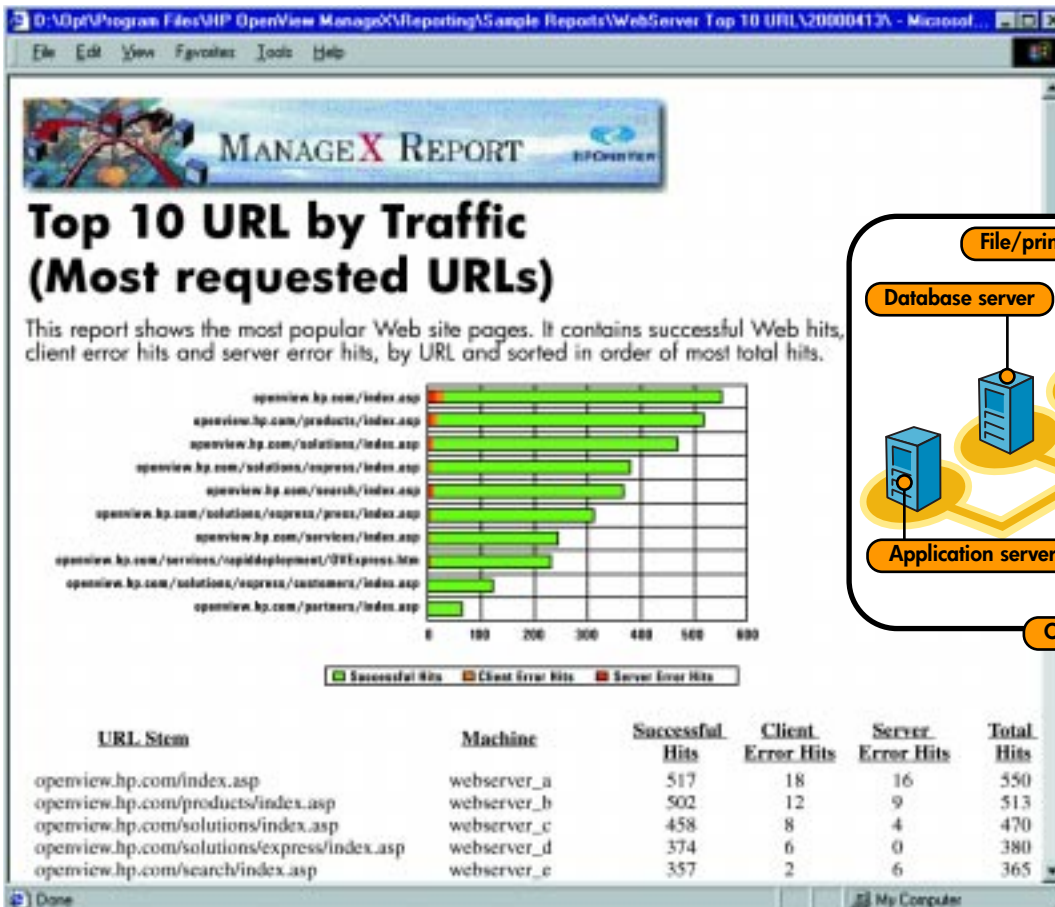
My IIS Web server is outside our firewall and is virtually unmanageable. I need to get control of it.

“More and more companies of all sizes are quickly implementing e-business projects utilizing Windows technologies. Web servers are vital to business operations and the corporate image. Effective management of Web servers, which generally sit outside of a firewall, can be difficult and presents security problems. It’s extremely important to keep security in mind when evaluating management solutions.”

Corey Ferengul  
Program Director  
META Group’s Service Management Strategies

### HP OpenView Express Web Server Capabilities:

- Manage outside the firewall with no increased security risk. Use existing http Internet port.
- Real-time alerts for Web server problems including Internet Information Service (IIS), OS and hardware.
- Monitor (IIS) for:
  - Cache hits.
  - Thread counts.
  - Queued requests.
  - Network traffic.
- Data collection and monitoring of IIS 4.0/5.0 Logfile for:
  - Volume by hour/day/week.
  - Traffic characteristics (GET versus POST).
  - Top/bottom URL access.
- Monitor underlying OS and hardware.
- Reports that correlate server OS performance with IIS performance.
- Manage backup of Web server data from inside the firewall.



# 2

## Exchange 5.5/2000

I need to get our 5.5 environment under control today. When I start planning for Exchange 2000 I need to be able to manage a mixed Exchange 5.5/2000 environment.

"In the past, we frequently got the classic complaint, 'The mail seems slow today.' That was about the extent of the information we had. Since we've installed HP OpenView Express Exchange management, we can see our entire environment on a single console. We're able to deploy better, manage quicker, and be proactive with our users. We've cut our call load for problems by 40%, and we continue to meet or exceed our SLA's with our units. We're planning to add Exchange 2000. The unique visualization technology included in the OpenView Express Exchange solution will give us even deeper insights into our mixed 5.5/2000 environment."

Rick Bauer  
Chief Information Officer  
The Hill School

### HP OpenView Express Exchange 5.5/2000 Capabilities:

- Auto-discovery of Exchange distributed architecture.
- Graphical map showing organizational view with message flow and status of Exchange 5.5/2000.
- Health and availability of Active Directory Connector. Ensures Exchange 5.5 directory service is in sync with ADS.
- Intelligent alarms and thresholds. Provides detailed advice for troubleshooting.
- Historical trend reports provide insights into the health and performance of Exchange environment.
- Intelligent event correlation shows network device problems that affect the Exchange environment.
- Online backup of Exchange data provides recoverability and integrity verification without service interruption.
- Backup company-wide Exchange environment from a single management console.

The image displays two screenshots of the HP OpenView Express Exchange 5.5/2000 management console. The left screenshot, titled "Organizational View", shows a hierarchical tree structure of the Exchange environment. It includes a left-hand navigation pane with various management tools. The main area shows a tree starting from an "Organization level" at the top, branching down to "Site level", and then to "Exchange servers". A "Visual server status" icon is shown next to a server node. Below the tree is a "Real-time event notification" table with columns for Name, Type, Source, Category, Location, and Acknowledged. The right screenshot, titled "Message View", shows a network diagram of "Message flow" between servers. A "Visual Connector status" icon is shown next to a connector node. Below this diagram is another "Message flow" table with columns for Name, Type, Source, Category, Location, and Acknowledged.

# 3

## Windows NT/2000

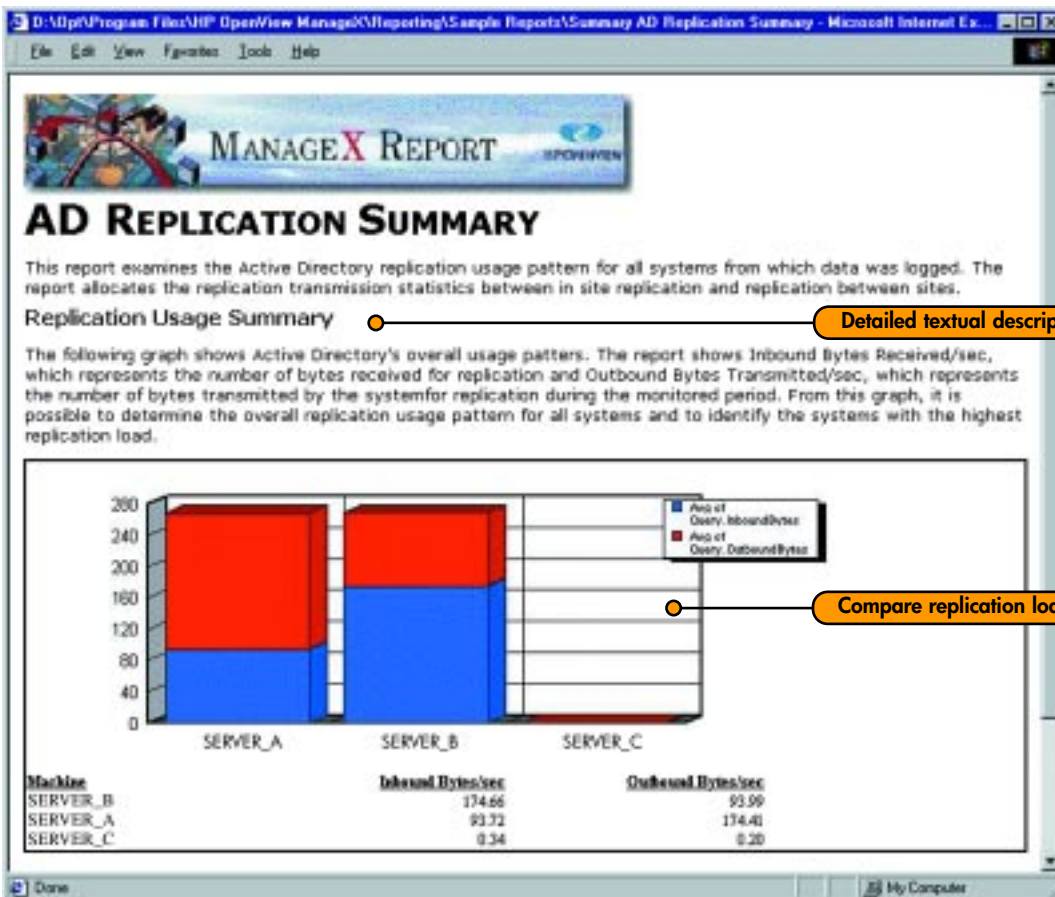
I'm adding Windows 2000 and Active Directory Service to my NT 4.0 network. I need to manage this mixed environment.

"As a Microsoft Windows 2000 RDP site, HP OpenView Express enabled us to monitor both Windows NT and Windows 2000 servers, allowing us to manage the difficult transition to a full-blown Windows 2000 solution. It's rare to have a management tool that can help you manage your environment before, during and after such a major migration. We've been extremely impressed with OpenView Express' ability to handle this migration."

Gay Sherman  
Senior Network Administrator  
Orange County Public Schools

### HP OpenView Express Windows NT/2000 Capabilities:

- Health, performance and event monitoring of Windows NT/2000 and its applications.
- Detailed performance and historical trending reports.
- ADS process monitoring:
  - Net logon.
  - NT LM security.
  - Kerberos key distribution.
  - Security account manager.
  - ISEC policy agent.
  - File replication service.
  - Active Directory Connector.
- Active Directory Connector monitoring to ensure Exchange 5.5 Directory Store is in sync with ADS Directory Store.
- Schema health monitoring to prevent schema corruption.
- Monitoring of the number of ADS authentications/second.
- Online backup of Active Directory Services database.
- Full support of NTFS 5.0 enhancements (mount points, reparse points, etc.).



Detailed textual descriptions complement graphical information

Compare replication loads on Windows 2000 servers

# 4

## Finger pointing—network or server

The network guys blame the server. The server guys blame the network. I need to quickly find out what the real problem is.

“Before we implemented HP OpenView Express, most of my time was spent trying to discern where the problem actually originated. I usually spent at least an hour a day listening to my system and network administrators trying to sort out who owned the problem. Now I can visually see where my network and system issues are and I’m regularly notified before the majority of our end-users even realize there’s a problem.”

Gary Zeiger  
 Technical Services Manager  
 Mortgage Flex Systems, Inc.

### HP OpenView Express Network/Server Capabilities:

- Continuous auto-discovery of all TCP/IP, IPX and Level 2 (MAC layer) devices.
- Dynamic, color-coded map that shows real-time status of devices.
- Auto-discovery of relationships between network elements and servers.
- Intelligent event correlation to pinpoint the root cause of a problem.
- Relevant events shared between network administrator’s console and server administrator’s console.
- Real-time alarms and performance graphs that alert network and server administrators to problems.
- Over 400 add-on tools from HP OpenView partners.
- Automated backup processes are automatically monitored. Failure conditions are reported to other administrators via their event browsers.

The screenshot displays the HP OpenView Express interface with several key components and callouts:

- Dynamic, color-coded map displays device status:** A map of the United States showing various network devices represented by colored icons (green for healthy, red for failed).
- Detailed alarm filtering:** A panel on the left showing a list of alarm types such as Error Alarms, Threshold Alarms, Status Alarms, Configuration Alarms, Application Alarm Alarms, Management Alarms, and All Alarms.
- Network device traffic before and after failure:** A line graph showing network traffic over time, with a sharp spike indicating a failure event.
- Network failure alarm and impact on servers:** A table in the 'Management Alarm Browser' showing a list of alarms with columns for Alarm ID, Severity, Date/Time, Source, and Message.
- Root cause: network device failure:** A callout pointing to a red icon on the network map, indicating the source of the problem.
- Highlighted servers unavailable due to network failure:** A callout pointing to several red server icons in a network topology diagram, showing their status as unavailable.

# 5

## Get control of your servers

I have a variety of network and server hardware running every application under the sun. I need to get control of this mess.

“OpenView meets our needs for managing our mission-critical infrastructure. We now have one place to see events, instead of checking each server individually... HP OpenView Express has enabled Heidelberg USA to quickly move from reactive management to proactive management. In many cases, we have identified and corrected a problem without our end users knowing it.”

Jesse Vardaman  
 Manager, Network Services  
 Heidelberg USA

### HP OpenView Express Server Capabilities:

- Auto-discovery of Windows NT/2000 systems and automatic grouping by OS, application and function.
- Over 250 policies available out-of-the-box to provide health, performance and event monitoring of Windows NT/2000 applications and server hardware.
- Real-time event notification.
- Intelligent event correlation to pinpoint the root cause of a problem.
- Detailed Web-based reports available for inventory, performance, backup/restore and historical trending.
- Automated backup of key applications and databases.
- Central management of remote backup and recovery needs.
- Restore single files, databases or complete systems with a few mouse clicks.

The screenshot displays the HP OpenView Express interface. On the left, a tree view shows various policies under 'Available' and 'Installed'. The main window shows a performance graph titled 'NTCPUHealth' with a bar chart showing CPU usage over time. Below the graph is a table of expressions and their values. On the right, a 'Device Selection' pane shows a list of discovered servers. At the bottom, a 'Message Results' window shows a list of events with columns for Type, Time, Source, Category, Event ID, and Acknowledged. Callout boxes highlight specific features: 'Over 250 application and server management policies' points to the policy list; 'Auto-discovery and grouping of servers' points to the device selection pane; 'Real-time health and performance monitoring' points to the performance graph; and 'Real-time event notification' points to the message results window.

Expression	Value	Scale Factor
Processor % Processor Time.0.0'	6.01	1.000
Processor % Privileged Time.0.0'	4.10	1.000
Processor % User Time.0.0'	1.90	1.000
Processor % DPC Time.0.0'	0.00	1.000
Processor % Interrupt Time.0.0'	0.00	1.000
System Processor Queue Length'	5.00	10.000
System Control Switches\acc	304.70	0.010

Type	Time	Source	Category	Event ID	Acknowledged
Error	8/30/98 2:14:01 PM	MS Exchange Server	End-to-End Delivery	82632	No
Warn...	8/30/98 2:13:51 PM	MS Exchange Server	Core Services(HTA)	82321	No
Warn...	8/30/98 2:13:48 PM	MS Exchange Server	End-to-End Delivery	82332	No
Warn...	8/30/98 2:13:38 PM	MS Exchange Server	Core Services(HTA)	83321	No
Warn...	8/30/98 2:13:18 PM	MS Exchange Server	Core Services(HTA)	83321	No

# 6

## Disaster recovery

A disaster just occurred and the restore requests are pouring in. I need to quickly restore several key files at a remote location.

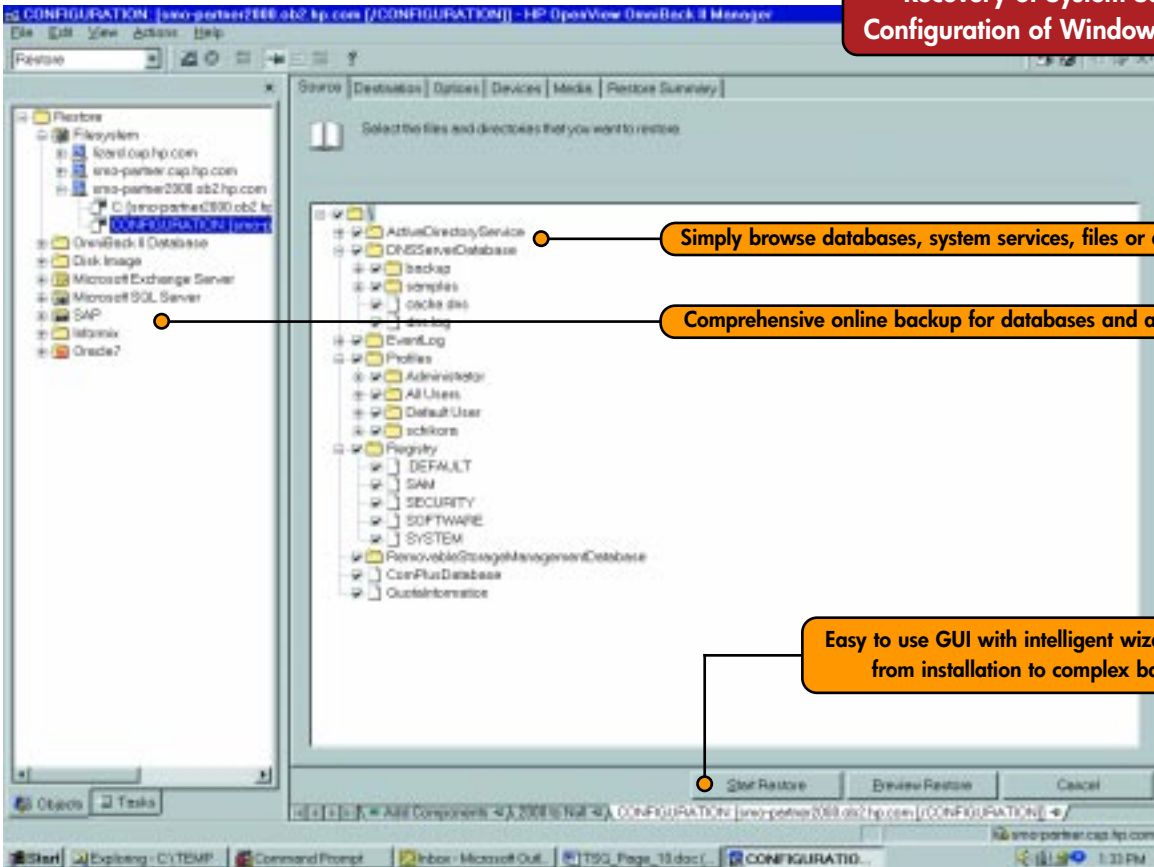
“Being a dot-com company, it is critical to us and to our customers that we have full protection and availability of our data 24x7. We store highly secure and mission critical data for major corporations. HP OpenView [backup capabilities] provides us with a comprehensive, reliable solution for protecting our data. Recently, we had a problem. [OpenView’s] tape backup services saved our lives and had us up and running shortly — fully restored. We didn’t lose anything.”

James Barrese  
Vice President of Engineering  
Charitableway.com

### HP OpenView Express Disaster Recovery Capabilities:

- Centrally restore critical files at a remote location. No local operator required.
- Full backup/restore of Windows 2000 including NTFS 5.0 and Active Directory.
- Quickly restore critical files. You select the files and OpenView Express takes care of all the other details (media location, incremental backup details, etc.).
- Online backup so you’re always prepared for disaster.
- Automated restore from library determines what is on which tape without operator intervention.
- One button disaster recovery. Combine OpenView Express with an HP OBDR device and you can recover with the push of a button.
- MS Cluster integration. Provides consistent full or incremental backup/restore of the logical cluster server.

### Recovery of System Services and Configuration of Windows 2000 Server



Simply browse databases, system services, files or directories you want to restore

Comprehensive online backup for databases and applications

Easy to use GUI with intelligent wizards guide you through tasks, from installation to complex backup/restore operations

# HP OpenView Express & Microsoft

One reason HP OpenView Express is capable of managing hundreds of Windows NT and 2000 OS metrics and all the key Windows applications—right out of the box—is that HP OpenView Express was built using Microsoft technology. HP OpenView Express extensively utilizes Microsoft technologies such as MMC, WMI and ActiveX, which are quickly becoming industry standards, especially with the release of Windows 2000.

Additionally, HP OpenView Express provides comprehensive management and backup of Microsoft's Active Directory Services. All ADS services and OS resources are monitored, along with directory store replication, security, event logs, schema health, and load and volume statistics—all of which can ensure the health of your Windows 2000 or mixed NT/2000 environments.

No wonder HP OpenView Express was selected to manage the Windows NT/2000 network infrastructure at key Microsoft trade shows such as Microsoft TechED, Microsoft Exchange Conference, and the Microsoft Windows 2000 Launch Show.

"Thanks to the network and system management capabilities of HP OpenView Express, the 'hands-on' pavilion at the Windows 2000 Conference & Expo delivered superior performance and 100% uptime."

Rodney Miller  
Technical Coordinator,  
Microsoft Windows 2000  
Launch Pavilion

Visit our website today at  
[www.openview.hp.com/express](http://www.openview.hp.com/express)



Sign-up for a one-day onsite assessment and watch HP OpenView Express show you your Windows network like you've never seen it before.

Online Demos

Success Stories

Onsite Assessment

# The rest of the story

Getting OpenView Express up-and-running smoothly in your shop takes more than a CD full of bits. Here's the rest of the story.

## Do the evaluation in a day with our onsite assessment.

- Reduce evaluation period from weeks to one day.
- OpenView Express expert comes to your site.
- OpenView Express installed.
- Network and server environments auto-discovered.
- Color-coded network map produced.
- Reports on your environment printed.

## Implement OpenView Express in just a few days.

- Installation by an OpenView Express expert.
- Summary of service provided:
  - Perform environmental assessment.
  - Prepare existing environment for OpenView Express.
  - Install OpenView Express.
  - Discover and map network environment.
  - Discover server environment.
  - Discover applications.
  - Configure inter-product communication mechanisms.
  - Install management policies on servers.
  - Install backup agents.
  - Backup the management server.
  - Demonstrate the restore function.
  - Configure Web-based reporting.
  - Demonstrate and discuss operational tasks.
- Knowledge transferred to your staff.

## Expand the solution as needed.

- Add in-depth Microsoft Exchange Server management functions.
- Add in-depth Lotus Domino/Notes management functions.
- Add service desk functionality (help desk plus change control).
- Get new functionality in OpenView Express through ongoing product revisions.
- Make use of other members of the OpenView family including over 400 partner solutions.

## Ongoing help.

- Support with experts as problems come up. One year of phone-in support included.
- Use OpenView Express experts to customize the solution as your business dictates.



HP OpenView Express is built with the following three HP OpenView products:

- HP OpenView ManageX
- HP OpenView Network Node Manager for Windows NT
- HP OpenView OmniBack II for Windows NT & Windows 2000

Each product contributes full functionality to the integrated solution. HP OpenView Express offers sophisticated information flows among the products to produce meaningful shared views of the managed environment. The powerful collaboration of these products helps administrators work more efficiently to satisfy end-user needs.

While many customers want to immediately gain the complete benefits of HP OpenView Express, some want to solve a single, pressing problem first and then get the other areas under better control. No problem. HP OpenView Express provides implementation flexibility. Each of the three products that make up HP OpenView Express can also be obtained individually.

The following optional HP OpenView Express companion products can extend the management reach of HP OpenView Express:

- HP OpenView Service Desk
- HP OpenView SMART Plug-In for Microsoft Exchange Server
- nworks SMART Plug-In for Lotus Domino/Notes for HP OpenView

For more information on HP OpenView Express, please contact your local HP OpenView Express reseller or HP sales office.

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Or, visit the HP OpenView Web site:  
<http://www.openview.hp.com/express>

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