



Products, Services and Programs of HP OpenView

- Dave Pitney

Network and System Management Division
Hewlett-Packard Company



The IT Management Challenge

End user results suffer when IT
doesn't deliver the service they need...

'Application performance is
impacting ability to do my job'
'My application is not available
when I need it'
'How do I know I am protected from
unauthorized access'
'My IT costs seem out of control'



Bottom line impact...

- ✓ Higher operating costs
- ✓ Missed opportunities/lost rev
- ✓ Dissatisfied customers
- ✓ Loss of control
- ✓ Productivity drain

IT management is not prepared to
respond to end user dissatisfaction

- ✓ Point solutions don't work
well for maintaining
availability in a distrib. world
- ✓ Managing infrastructure is
not enough
- ✓ End user expectations are
unrealistic
- ✓ My current people are
frustrated & I can't hire any
more people
- ✓ Whose problem is this
anyway!

Operations
Management
Team

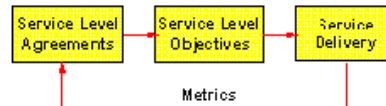




The Answer for IT



IT Service Management - Delivering IT Services to the business user (LOBs) under contracted, defined conditions.



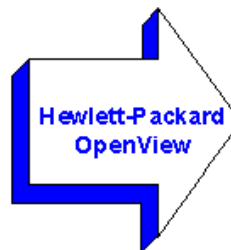
Key objectives for IT Organization

- ➔ Understand the needs of the business user
- ➔ Focuses on required levels of service and customer service function
- ➔ Become efficient, competitive and results oriented
- ➔ Assume role of large systems integrator, act as "broker" of IT Services



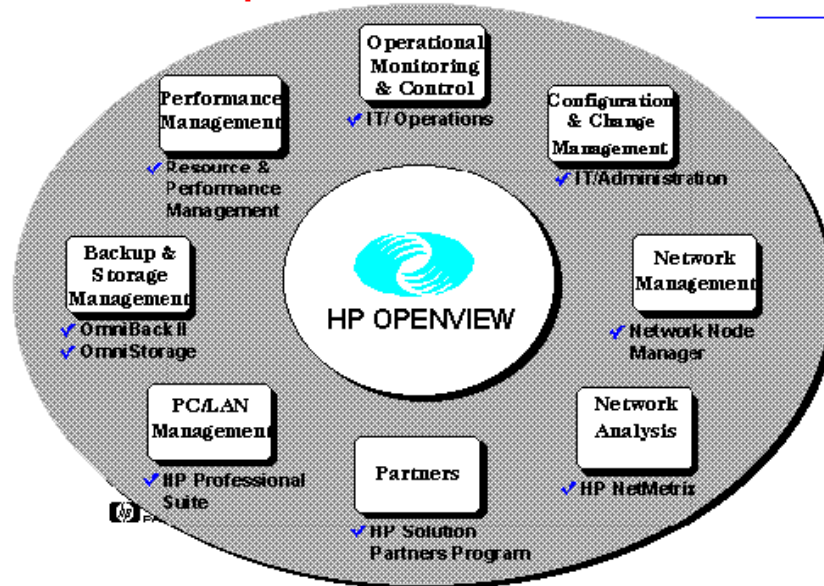
HP OpenView

HP OpenView increases the productivity of network and system managers, thereby decreasing costs, increasing service levels, and making your business more competitive.





HP OpenView Enterprise Solution Portfolio



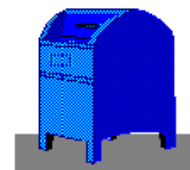
Network Availability?

E-mail isn't working - it says "no postoffice connection"

- Suspicion:** Failure of a network device, but which one?
- Process:**
- View network topology between user and application server
 - Determine status and connectivity of network devices
 - Check event log for pertinent events
 - Compare real-time and historical data
 - Determine router interface has failed
- Action:** Launch router management application to re-set interface
- OV Solution:** Network Node Manager



HEWLETT
PACKARD



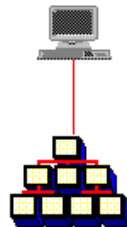


Network Node Manager

Fault, Configuration and Performance Management of IP and IPX Networks

Challenges to IT

- Increase network availability
- Monitor critical network resources
- Quickly determine network status and connectivity
- Manage a wide variety of network devices
- Limit network utilization from management application



Monitor and control your network from a single view

Features

- Scalable, distributed architecture on UNIX and NT platforms
- Automatically discover and generate topology maps of IP and IPX networks and devices
- Collect real-time or historical data and graphically display
- Color-coded threshold and event notification indicates availability
- Hundreds of partner applications and tools available



NNM Operators Screen

Standard Menues and CDE Buttons

Graph Key Information

Discover and Map Your IP Network

Panner/Viewport lets you See the Big Picture and the Detail

Common Event Log with Color Coding

User Definable Maps with Background Graphics

Missing Image

SCREEN.BMP



Traffic Problems?



Our SLA states that network response time will be less than 1 second - current metrics are 10 seconds

Suspicion: A LAN segment is the bottleneck - but which one?

Process:

- Determine transaction load and response times of segments
- Compare actual to forecasts in network planning documents
- Analysis indicates danger signs were present
- Choose "trial and error" or "modeling" method
- Re-balance application and re-measure response times

Requirements: Monitor network response times, determine effects of moving applications and perform capacity planning

OV Solution: HP NetMetrix

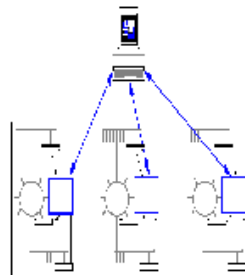


NetMetrix

Distributed Internetwork Monitoring and Analysis System

Challenges

- Meet or exceed customer IT service expectations
- Provide complete picture of network performance and optimize response times
- Proactively monitor client/server traffic across distributed enterprise networks
- Track metrics for capacity planning



Features

- Performance tuning capabilities help meet customer service expectations
- Automatically gather, integrate and correlate data on internetwork segments into a single view
- Intelligent agents monitor network traffic on Ethernet, Token-ring and FDDI segments
- Visualize network growth and optimization

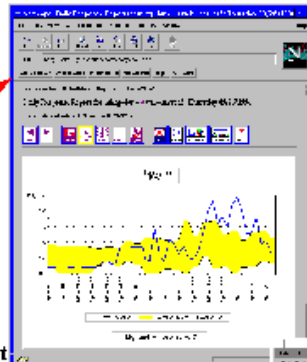
Control and Deliver Consistent Network Performance Service Levels

NetMetrix Screen Shots

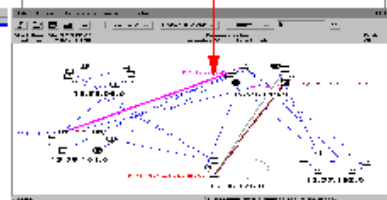


Concurrent graphs make it easy to compare and identify where performance degradation is occurring

Choose time slice of interest to reveal relation between latency and work cycles



Response times for selected critical servers



Management Directives?



"Our SLA requires increased application uptime - but we cannot add staff"

Suspicion: Problems can be resolved before they become critical

Analysis:

- Problem warning signs are present
- Large, heterogeneous environment leads to data overload
- Operators are overwhelmed with alarms
- Operators constantly performing same, repetitive fixes
- Experts can solve problems quickly

Requirements: Proactive monitoring of networks, systems, databases and applications with guided problem resolution

OV Solution: IT/Operations with Partner applications



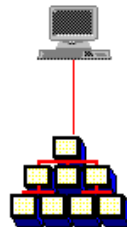


IT/Operations

Centralized Operations and Problem Management of Distributed Client/Server Systems

Challenges

- Maintain availability and quality of IT services while controlling costs
- Monitor systems, networks, databases and applications in heterogeneous environments
- Improve operator efficiency by reducing "data overload" and providing information only on their area of responsibility



Gain Sophisticated Control Over Distributed Systems

Features

- Easy-to-use GUI for managing complex distributed systems environments
- Operator functionality includes
 - guidance on problem resolution
 - problem escalation to experts
 - automated problem resolution
- Event Correlation, Filtering and "Centers of Expertise"
- Customized operator environments
- Distributed Agent-based Intelligence



IT/Operations User Screen

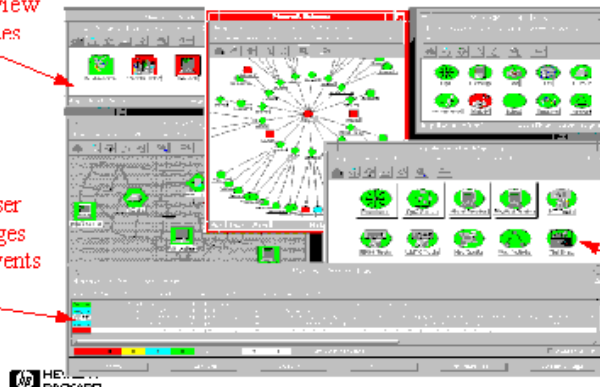
Managed Nodes depicts logical view of managed nodes

Message Browser displays messages generated by events

Network Submap depicts topological view of the network

Message Groups represents logical grouping of all incoming messages

Application Desktop contains operator tasks



Proactive Management?



HP OPENVIEW

More complaints that the order entry system is slow again

Suspicion: System parameters need tuning - but which ones this time?

Process:

- Review system history graph for utilization - CPU at 100%
- Drill into system to determine where problem is generated
- Application file cache has filled
- Last time it was a hung daemon

Requirements: Proactive system monitoring with threshold levels and alarms

OV Solution: PerfView, MeasureWare and GlancePlus



HP OPENVIEW

PerfView, MeasureWare, GlancePlus

Collect, Monitor & Analyze Performance Metrics

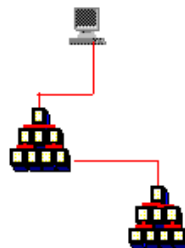
Challenges

- Alerted before performance becomes a user's problem
- Resource information on all equipment in our environment, all in one place to zero-in on problems
- Data must be useable by a variety of multi-vendor management tools
- Low resource consumption on managed devices



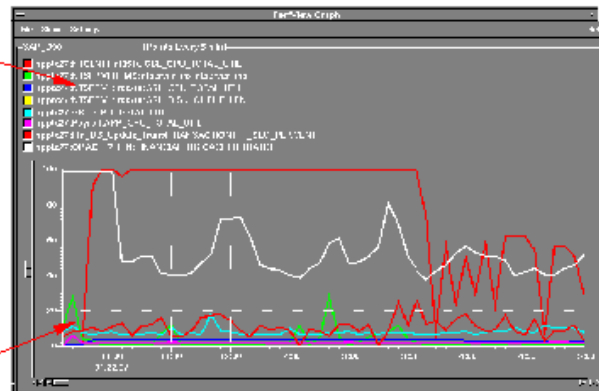
Features

- Collects and stores data on systems, networks, OS's, applications, databases, legacy systems and more
- All metrics automatically displayed on a "single pane of glass"
- Data is used by HP and 3rd party management products
- Uses 3% CPU and 1MB data storage per device





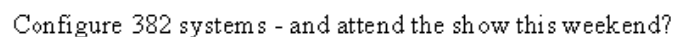
A "single pane of glass" showing CPU, network, database, application, OS -- everything in one place!



Trending and planning based on real historical data



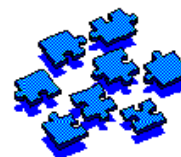
Easily Configurable?



Process:

- Determine current system configurations
- Understand configuration changes required (for each set)
- Update configuration parameters
- Test result of update process
- Try again

OV Solution: IT/Administration



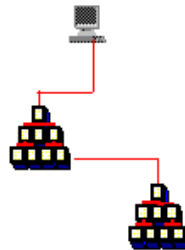


IT/Administration

Consolidated System Administration Increases Control and Reduces Expenses

Challenges

- Control heterogeneous environments from a single administrative system
- Easily add new users or software to multiple systems
- Automatically collect/control hardware and software inventory
- Automatically track configuration changes
- Centrally define and enforce administrative policies



Features

- Supports changes to user accounts, inventory and software management on enterprise UNIX/PC desktops
- Drag & Drop technology for mass updates and adds to multiple systems
- Automated discovery of systems components/resources are synchronized with central database repository for accurate updates

Centralized Configuration and Change Management of Distributed Client/Server Systems



IT/Administration User Screen

Charges can be performed immediately or scheduled for a later time

Administrator domains can be tuned to specific areas of responsibilities

Query Manager allows complex queries to be set up for mass updates on selected objects

Sophisticated templates and models ensure consistency and policy enforcement

Objects are automatically discovered and database will be synchronized regularly with real world

Intuitive working environment, based on object oriented technology

On the Leading Edge?



HP OPENVIEW

"Our users cannot share certain files anymore"

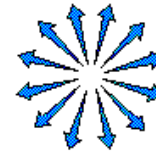
Suspicion: Incompatible product versions - but which ones, all 1,000?

Findings:

- "Power users" have upgraded to latest version on their own
- Heterogenous environment (WIN, UNIX, DOS, NT...)
- Each machine appears to have a unique configuration
- 3,000 man years to manually update machines
- On-going problem, need reusable solution

Requirement: Automatic software distribution for heterogeneous environments

OV Solution: Software Distributor



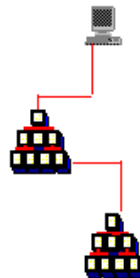
HP OPENVIEW

Software Distributor

Centralized Electronic Software Distribution for UNIX and PC Systems

Challenges

- Distribute, install and configure software and upgrades in heterogeneous environments
- Automatically install dependent or pre-requisite software and control versions
- Bundle product, libraries and manuals into one package



Features

- GUI efficiently schedules distribution jobs to multiple nodes simultaneously on UNIX and PC systems
- Distribution depot management includes dependency and version control
- Access Control Lists provide flexible rights for hosts, file systems, depots, and specific products



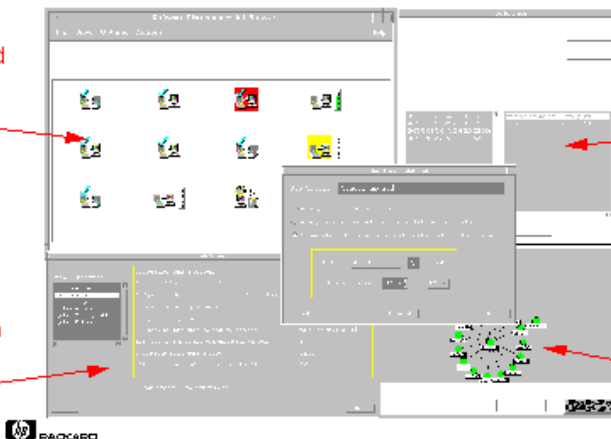
Software Distributor User Screen

Browser shows saved distribution jobs

Options window allows "on-the-fly" job changes

Description window shows details on each job

"Drag and Drop" functionality



Growing Pains?



"I can't restore my lost files and our application goes off-line"

Suspicion: Workgroups not performing backups - but why?

Findings:

- Part time administrators have less time for routine tasks
- Applications go off-line for backup - stop database
- Applications are growing in size
- Heterogeneous environment with multiple storage products
- Multiple storage policies and strategies in place

Requirement: Enterprise storage solution with API's for on-line database backup

OV Solution: OmniBack II



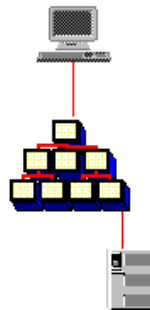


OmniBack II

Enterprise-wide Backup and Restore of Distributed Client/Server Systems

Challenges

- Protect data in heterogeneous distributed computing environments
- Backup policies and strategies that match organizational and IT needs
- High performance and on-line backups to support 7x24 operations



Features

- Supports backup and restores in UNIX/NT/PC environments on broad range of devices
- Centralized and flexible domain configuration, administration and monitoring
- Concurrent writes to multiple backup devices and raw disk backup with single file restore
- APIs for on-line backups of databases and applications
- WWW interface

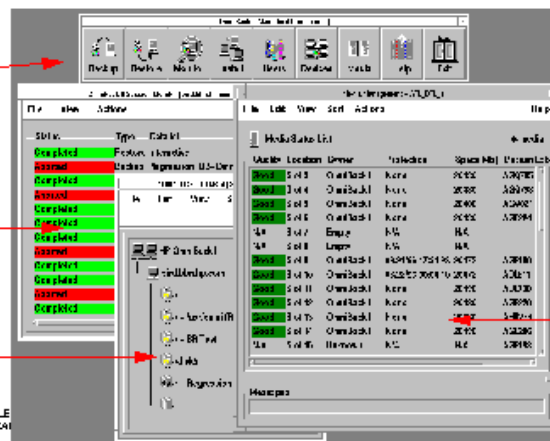


OmniBack II User Screen

Main GUI Window

Session Monitor

File selection



Media Manager



We're Growing



"I can't save my file, it says Network drive full"

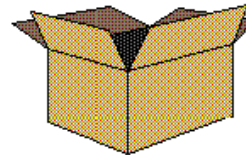
Suspicion: Storage needs are outgrowing our resources

Findings:

- The drives we installed last month are full
- 90% of the files were not accessed within the last month
- SLA states that files must be available within 10 seconds
- Budget will not allow us keep buying new drives

Requirement: HSM solution providing near-line storage with integrated backup

OV Solution: OmniStorage and OmniBack II

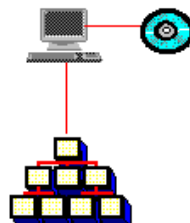


OmniStorage

Automatic and Transparent Hierarchical Storage Management

Challenges

- Cost effectively manage ever-increasing volumes of data
- Manage terabytes of data without adding administrators
- Make data access transparent, automatic and seamless to users



Features

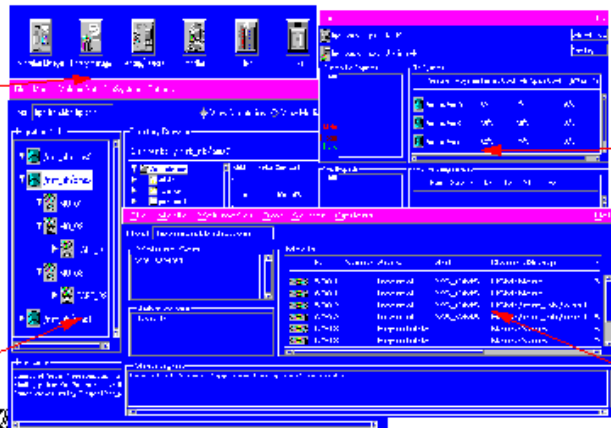
- Customizable data migration criteria provides flexibility
- Provides sophisticated storage management infrastructure for databases, data warehouses and applications like SAP R/3
- Automating data management tasks increases productivity and reduces costs
- MFS (Migrating File System) file system appears as extension of HP-UX while media type is transparent to users



OmniStorage User Screen

GUI for
manager
functions

Migration
Mgr -
configuration
and
hierarchies

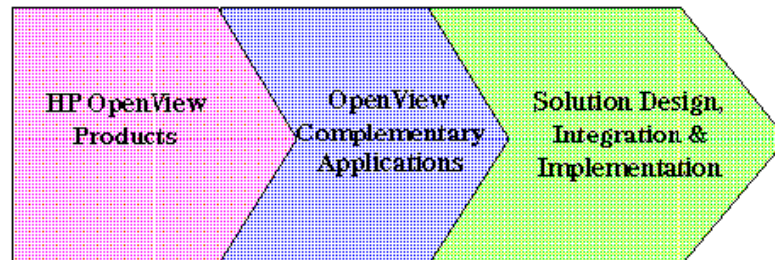


Monitor
displays
status
information

Library
Manager for
volume mgmt.



Complete Solution Delivery



◆ HP

◆ HP
◆ Partners

◆ HP PSO
◆ System Integrators
◆ OV Authorized
Resellers





Solution Partners Program

- Multiple Vendor Solutions => Flexibility & Functionality
- Designed to Provide Complementary and Well-Integrated Applications
- HP OpenView Certification Test Lab
- Two Levels of Partnership
 - Premier Partner
 - Solution Partner



HP OpenView Partners Program

Partners for the Total Customer Solution

There are currently over 280 applications from over 170 different companies that provide HP OpenView solutions



Complete Solution Delivery

- Professional Services Organization
 - 4,500 worldwide technical experts focused on implementation
- NSMD Solution Engineering
 - Designs, builds and delivers integrated OV management solutions
- Authorized Channel Partners
 - Selected for specialized INSM expertise
- Resellers
 - Provide solutions from local offices
- Original Equipment Manufacturers
 - Integrated solutions targeted at specific needs
- Local Products Organization
 - Selected IT management solutions in Europe



For More Information on HP OpenView

- If you are a customer please call HP's Customer Information Center at the numbers below or the Authorized Channel Partner nearest you.

- United States: 800-752-0900
- Canada: 800-387-3867 or 416-206-4725
- Latin America: +525-202-0155

- Europe, South Africa, Middle East: +41-22-780-8111
- Asia Pacific: +852-599-7777
- Australia/New Zealand: +61-3-272-2805
- Japan: +81-423-30-7800

- If you are a developer in the U.S., please call the HP OpenView Solution Partner Program hotline at 800-288-0211. Outside the U.S. call 970-229-4975.
- If you are an HP sales rep, please call the HP Sales Response Center.
- Visit the HP OpenView Web site at <http://www.hp.com/go/openview>

