Openview Product Management of Linux Systems

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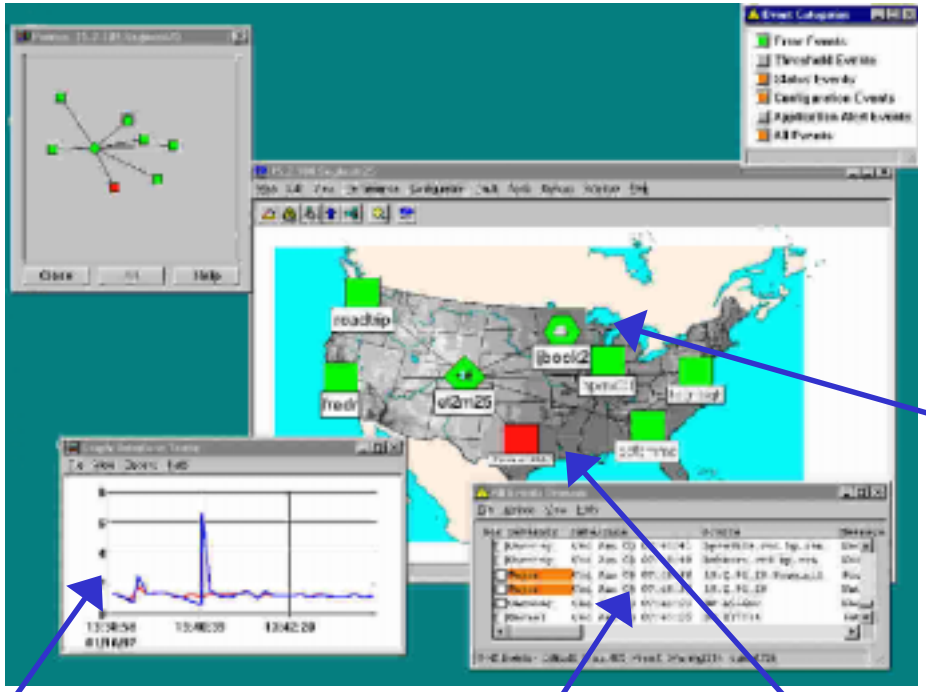
HP Customer Education

Outline

- - How Network Node Manager Discovers Linux Systems
- - How IT Operations can manage events of Linux Systems
- - How OmniBack can manage the backups of Linux Systems

Network Node Manager

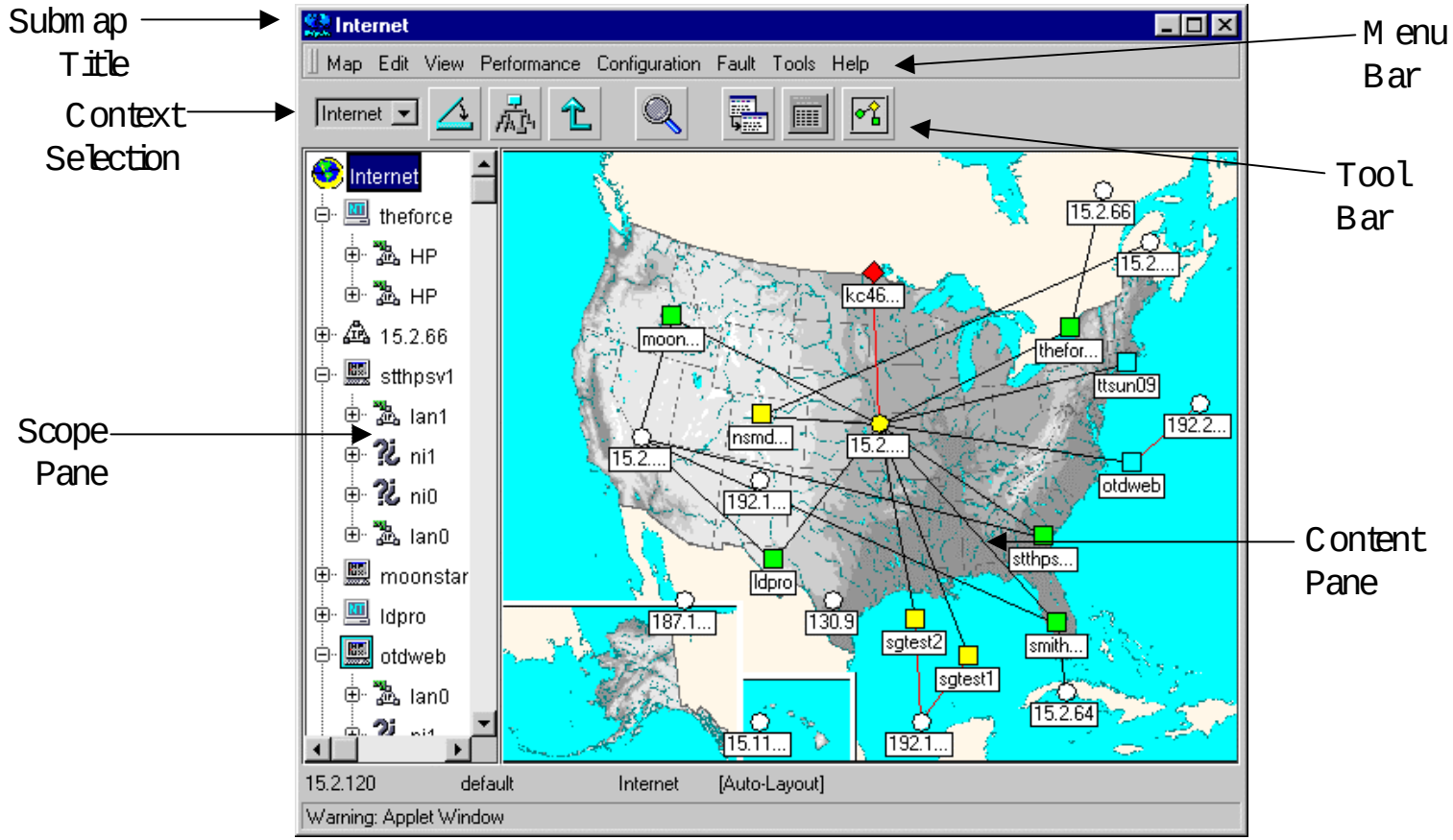


- Proactive problem resolution
- Out of the box Event Correlation
- Out of the box Excel reporting
- Access from anywhere with new Java GUI
- Out of the Box discovery, polling and identification of network elements
- Integration with many 3rd party products

Basic Features of NNM

- What is NNM
- How does it discover the network
  - Non SNMP Nodes

The Network Presenter Window



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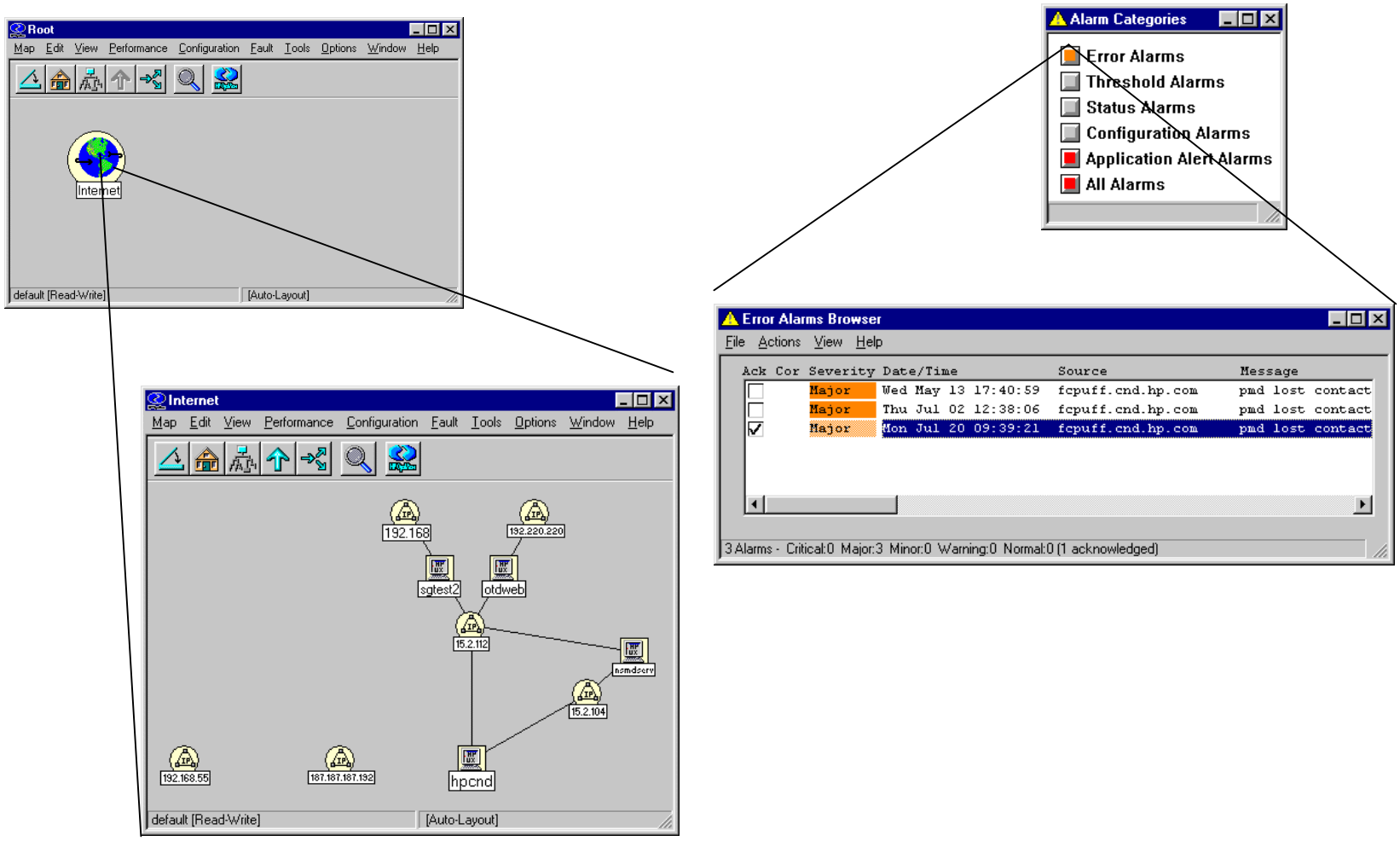
Basic NNM Windows



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SNMP agent on Linux Systems

- How is Linux installed by Default
- Starting up SNMP Agent
- Creating RC script
  - Loading additional MiBs

Network Node Manager Discovery of Linux Systems

- How NNM Discovers Linux Systems
  - SysobjID
    - RedHat Linux with UCD SNMP Agent .1.3.6.1.4.1.2021.250.10
  - SysDescription
    - Configure in /etc/snmp.

Mibs Supported by SNMP Agent

- MIB 2 Mibs - SNMP2, SNMP
- Operating System Mibs
  - Memory Utilization
  - Process Management
- Private Enterprise Mibs
- UCD Extensible Mibs
  - Execute Commands by SNMP Agent

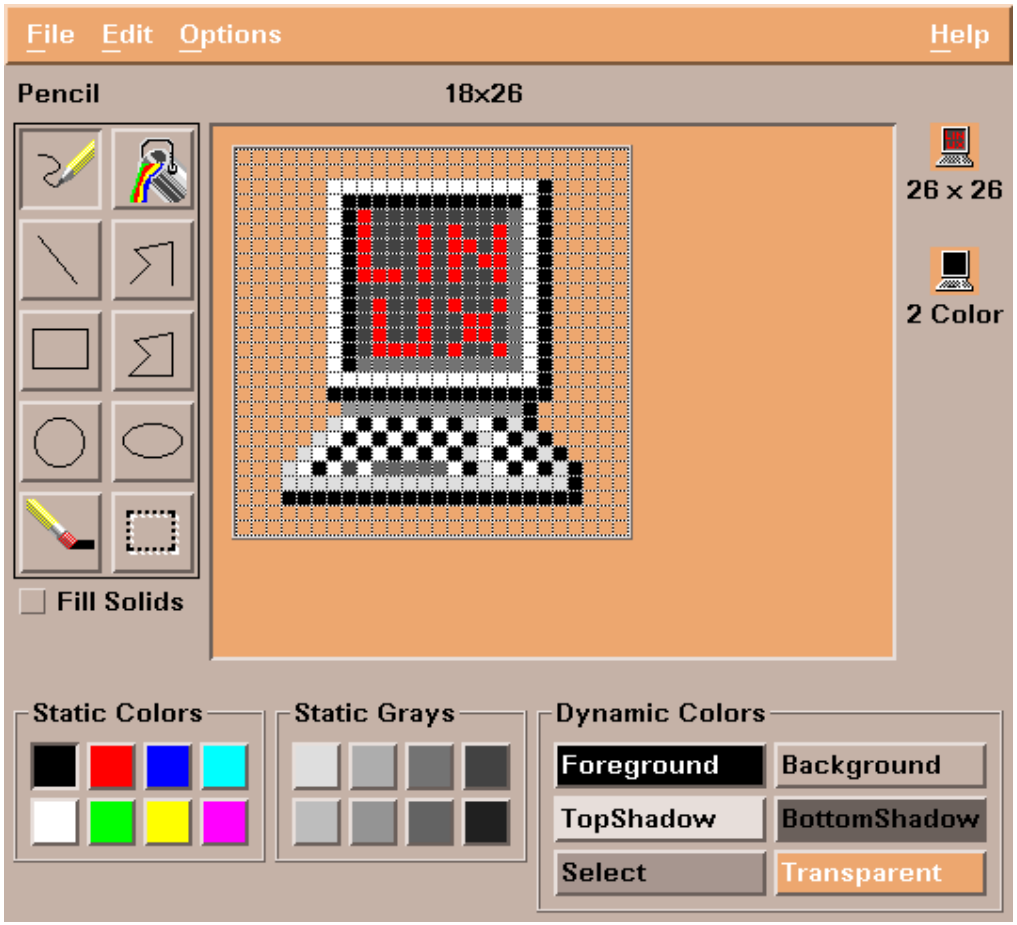
Customizing a symbol a for Linux System

- Can be done for NNM on UX or NT
- Create a Symbol Registration File
- Example (using NNM on HP-UX)
  - Copy computer symbols and customize them
- Fixing Linux Systems already discovered
  - ovtopofix -l

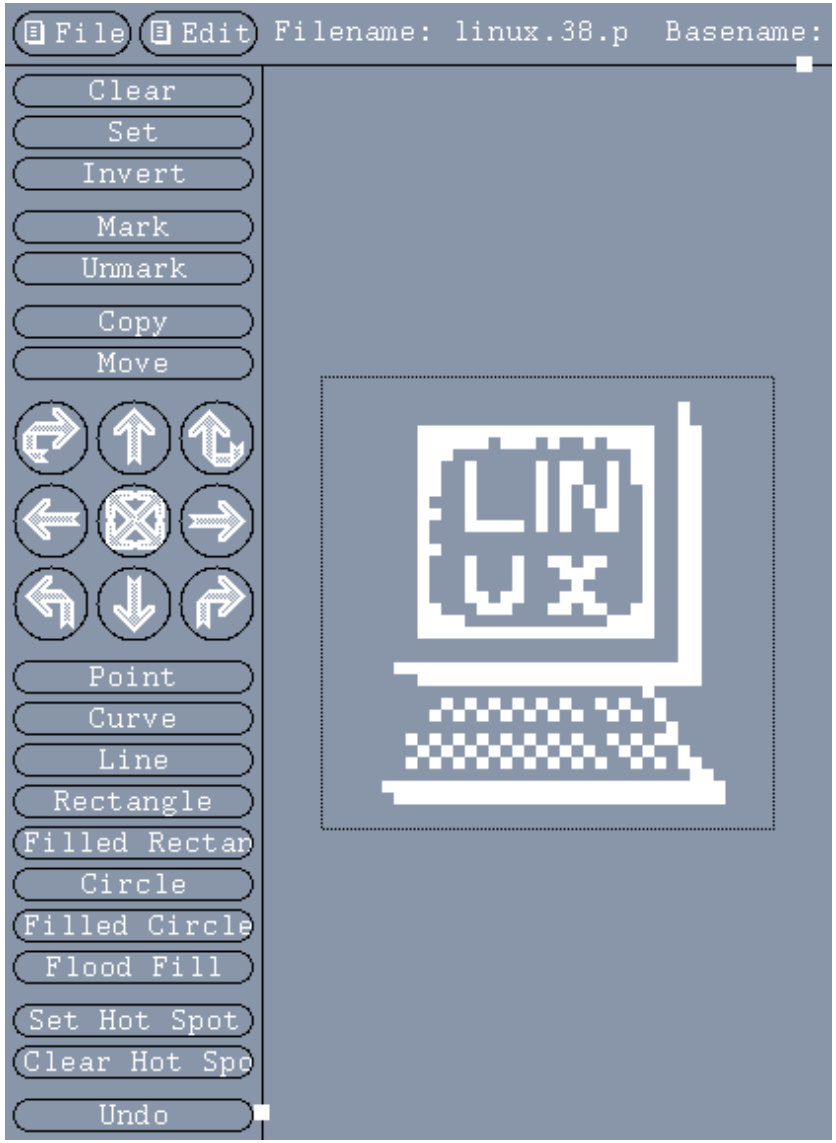
Customizing a symbol for a Linux System

- Create ICON file
- Create Bitmap file
- Register Symbol
- Configure NNM to use symbol for Linux Systems

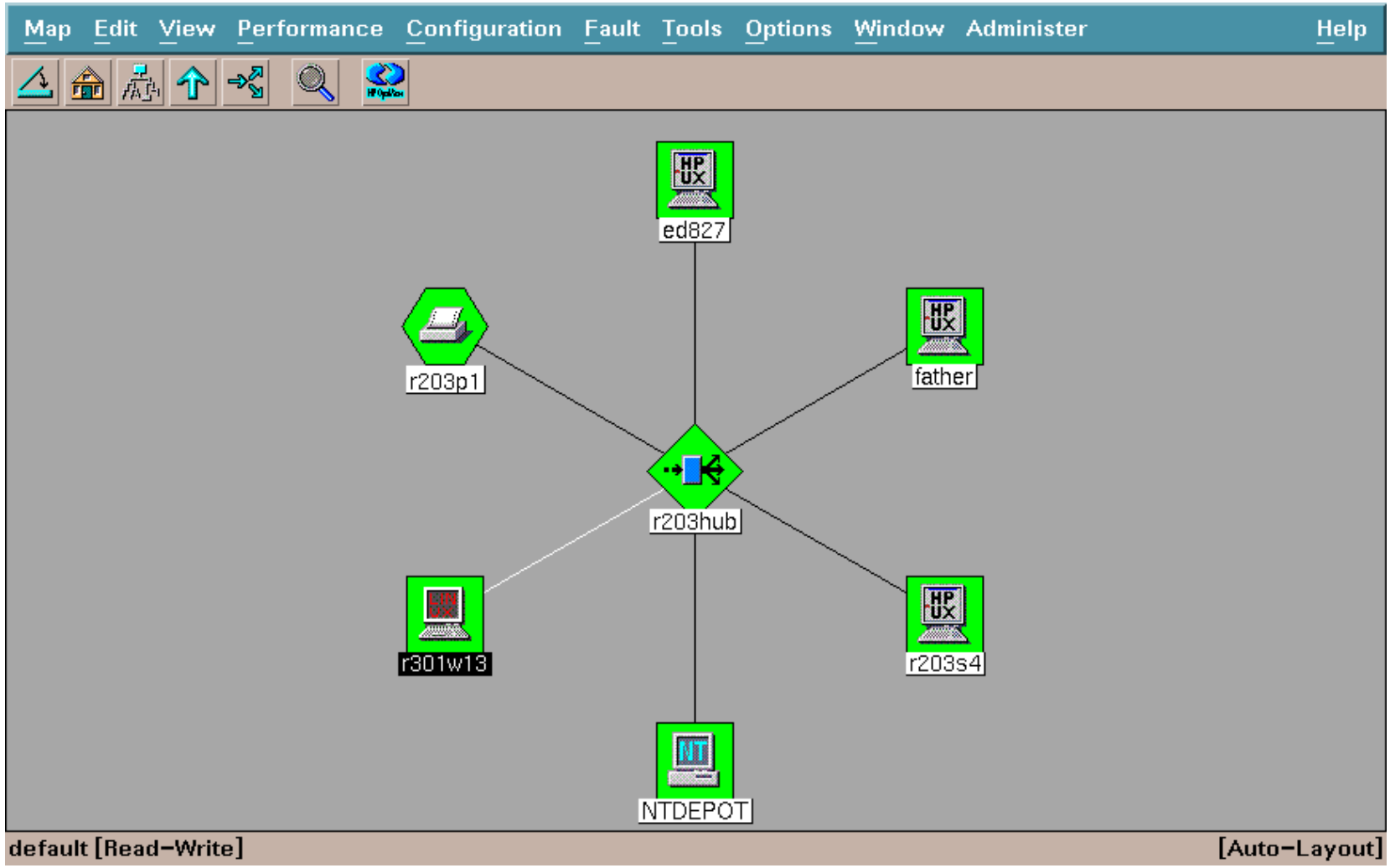
Icon File Example



Bitmap file Example



Final Submap with Linux System



NNM Summary

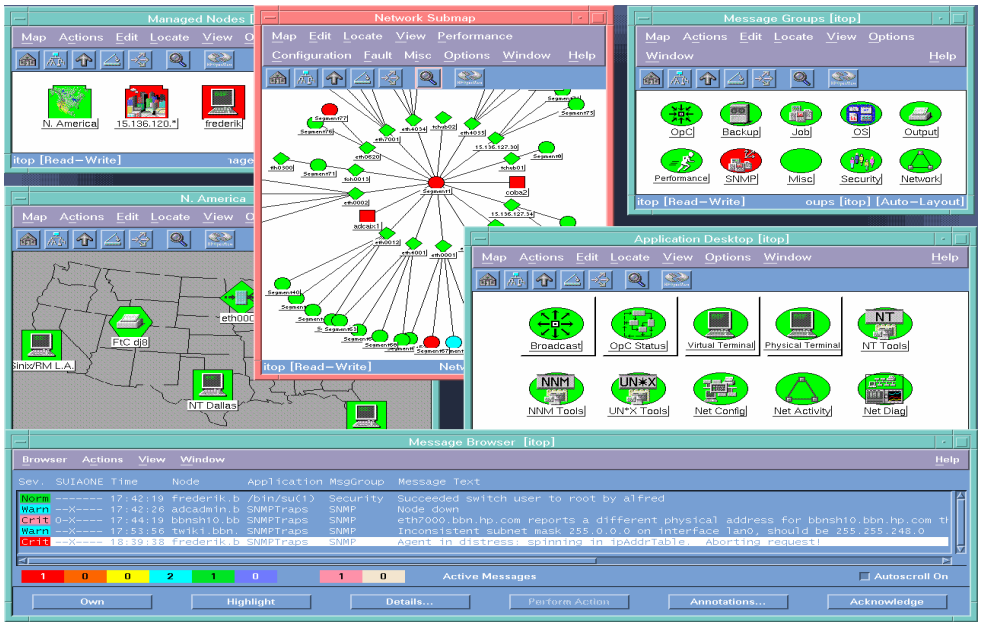
- For Discovery
  - Turn on SNMP Agent
- For Management
  - Copy Mibs from Linux system to SNMP-MIBs directory on NNM System
  - Load Mibs
  - Create customized symbol

IT Operations

- What it is
- User Interface
- Action Concepts and Execution
  - Automatic and Operator initiated
- Operator Instructions
  - Pre-defined instructions
  - Instruction text interface
- Notification Services and Trouble Ticket Interfaces

IT Operations

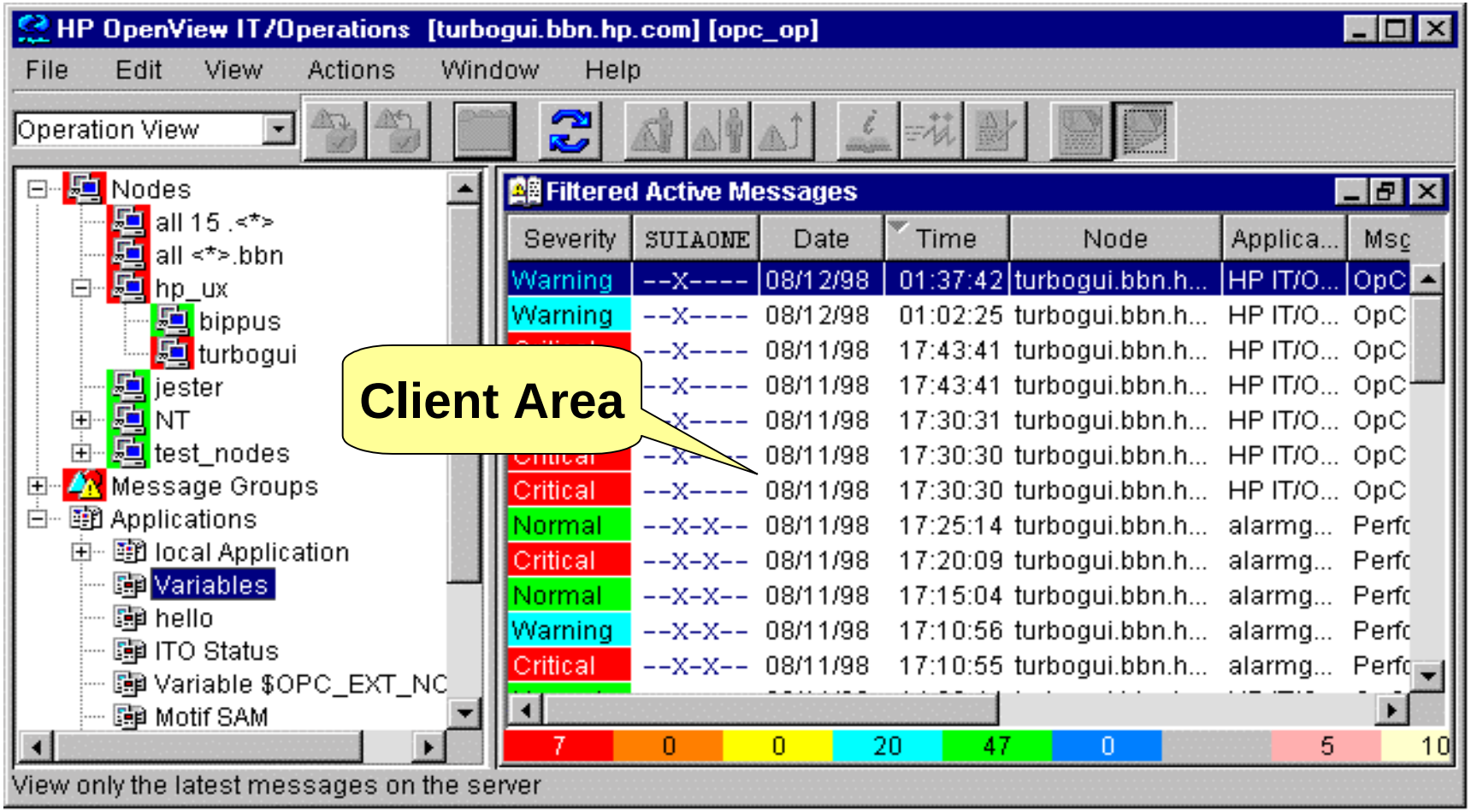
- **Message Group Window**
- Organize messages by application, function, or any other combination to solve problems faster



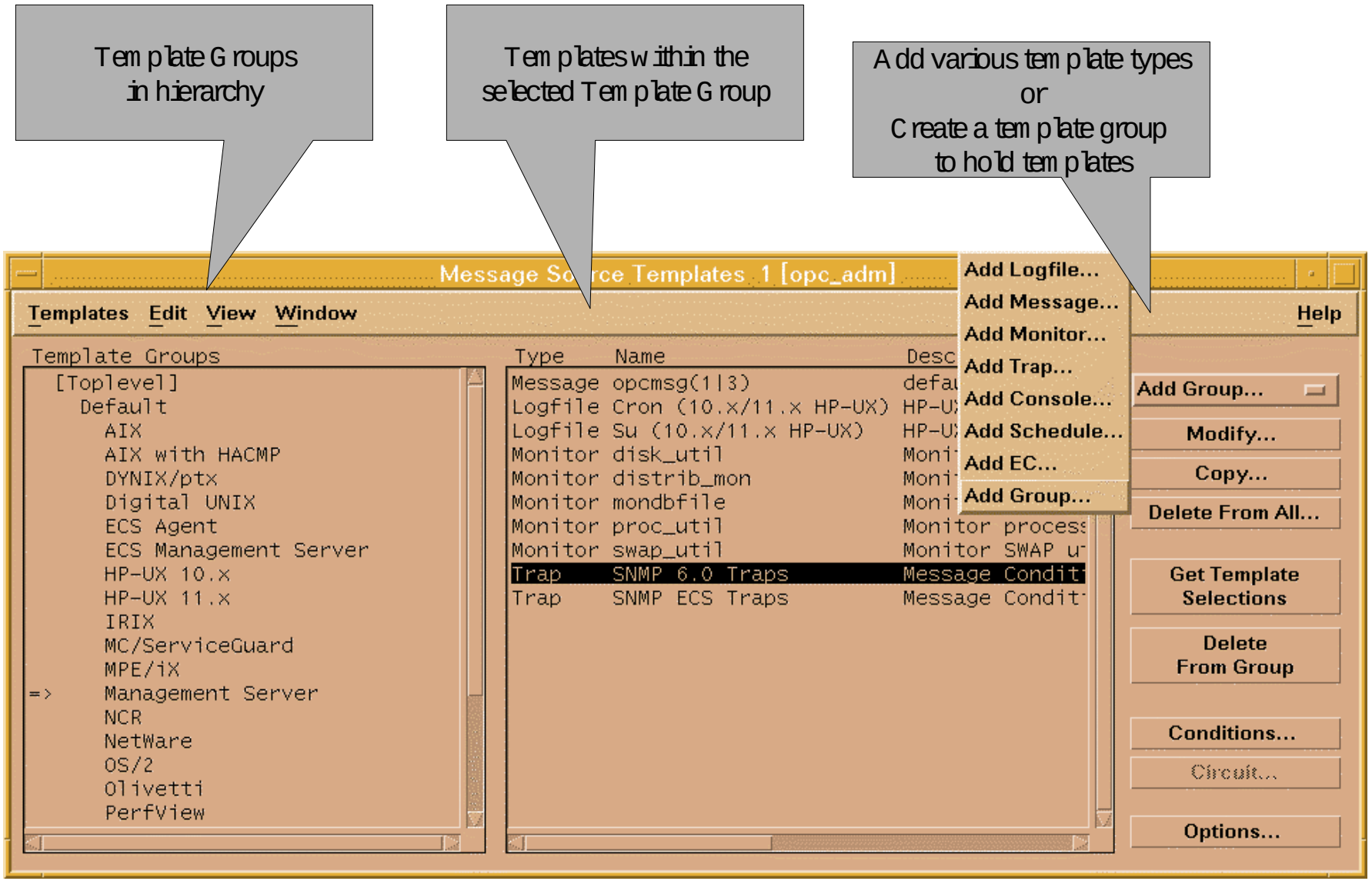
Application Desktop
•Integrated management "toolbox" for solving problems
•Launch other OpenView or HP tools, as well as third-party and custom tools

Message Browser
•Provides in-depth message details and user guidance to help solve problems
•Describes actions initiated automatically, as well as those available to be initiated by operators

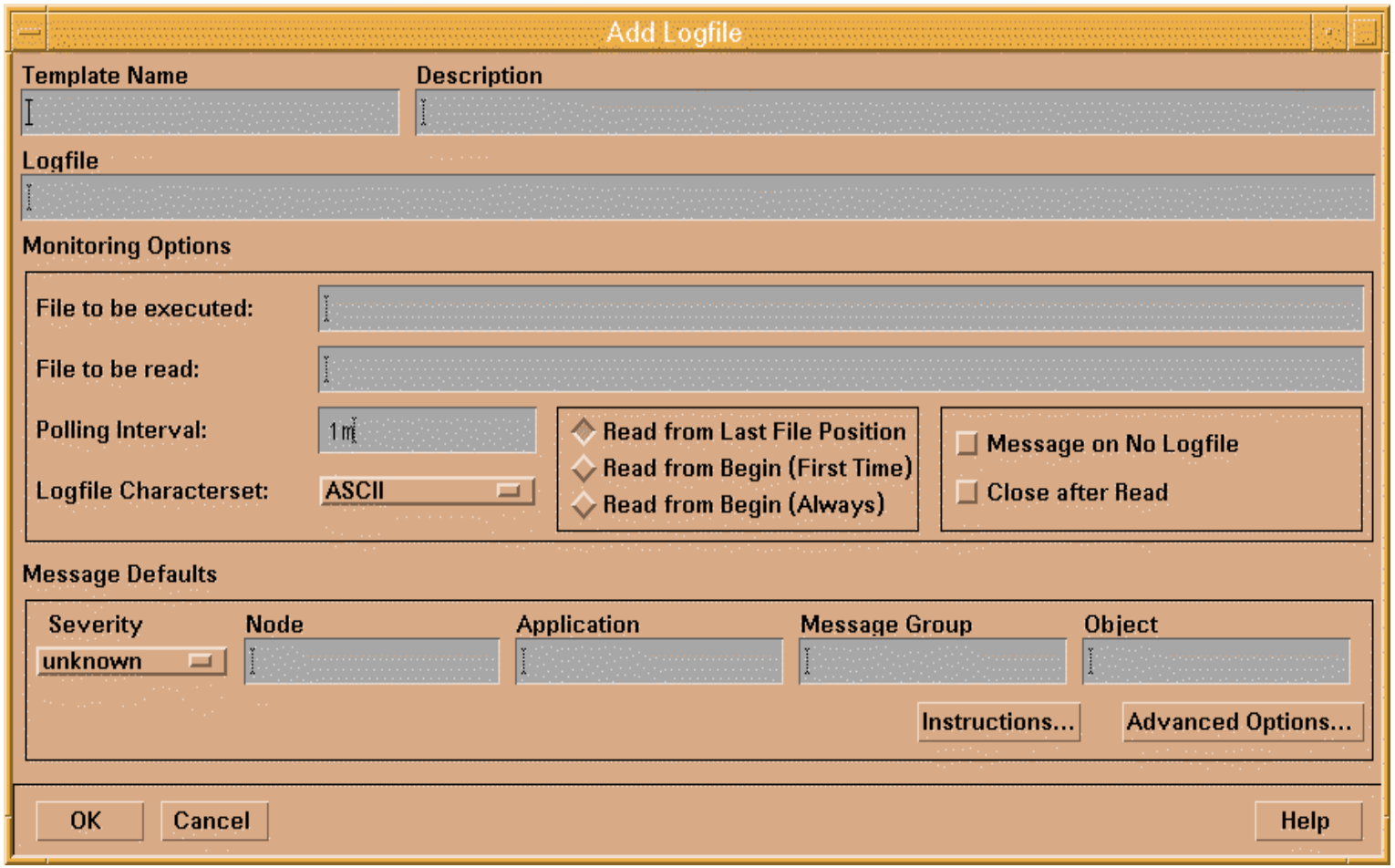
Java GUI Client Area



Template Management



Log File Template Configuration

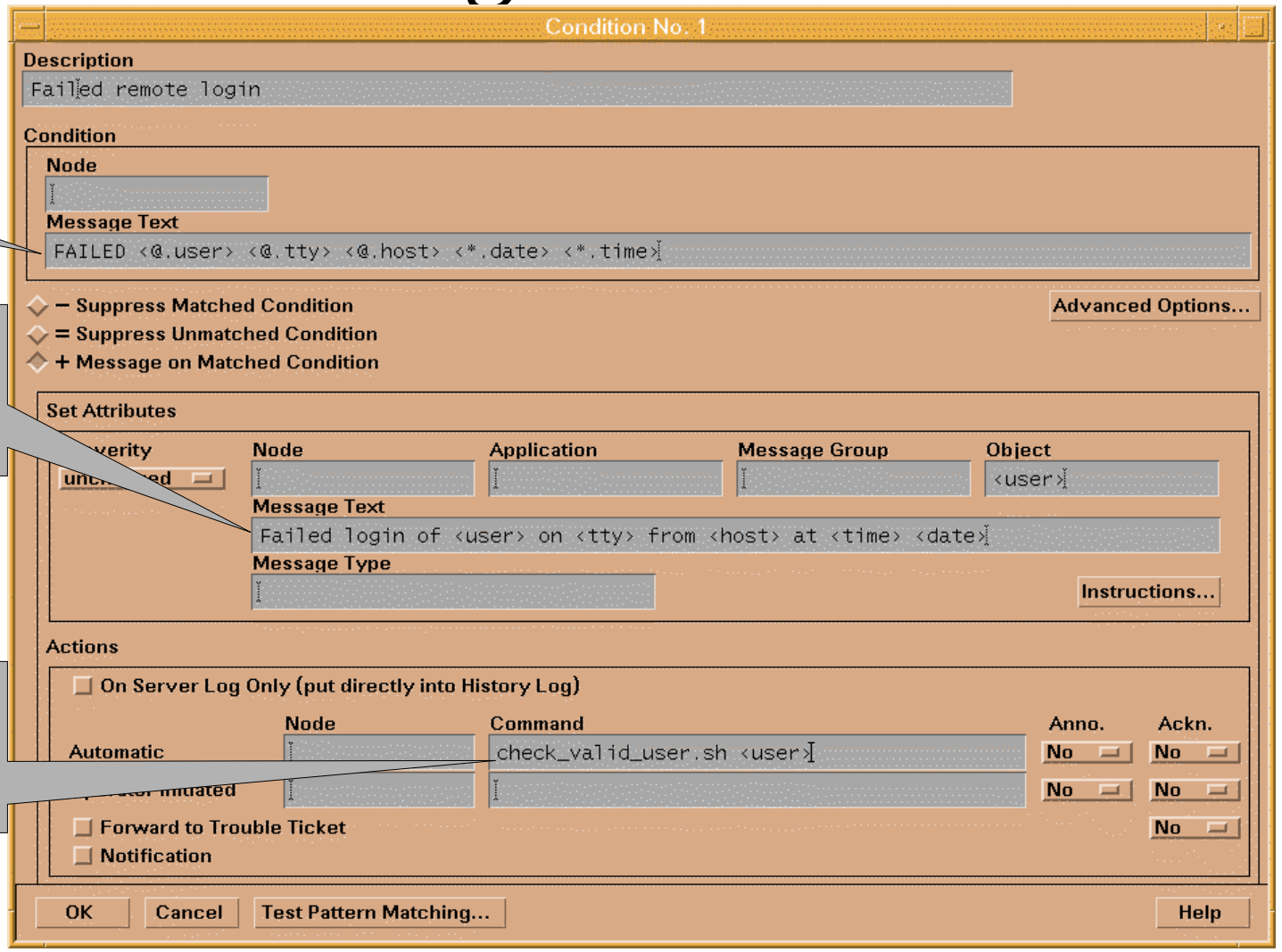


Pattern Matching in Conditions

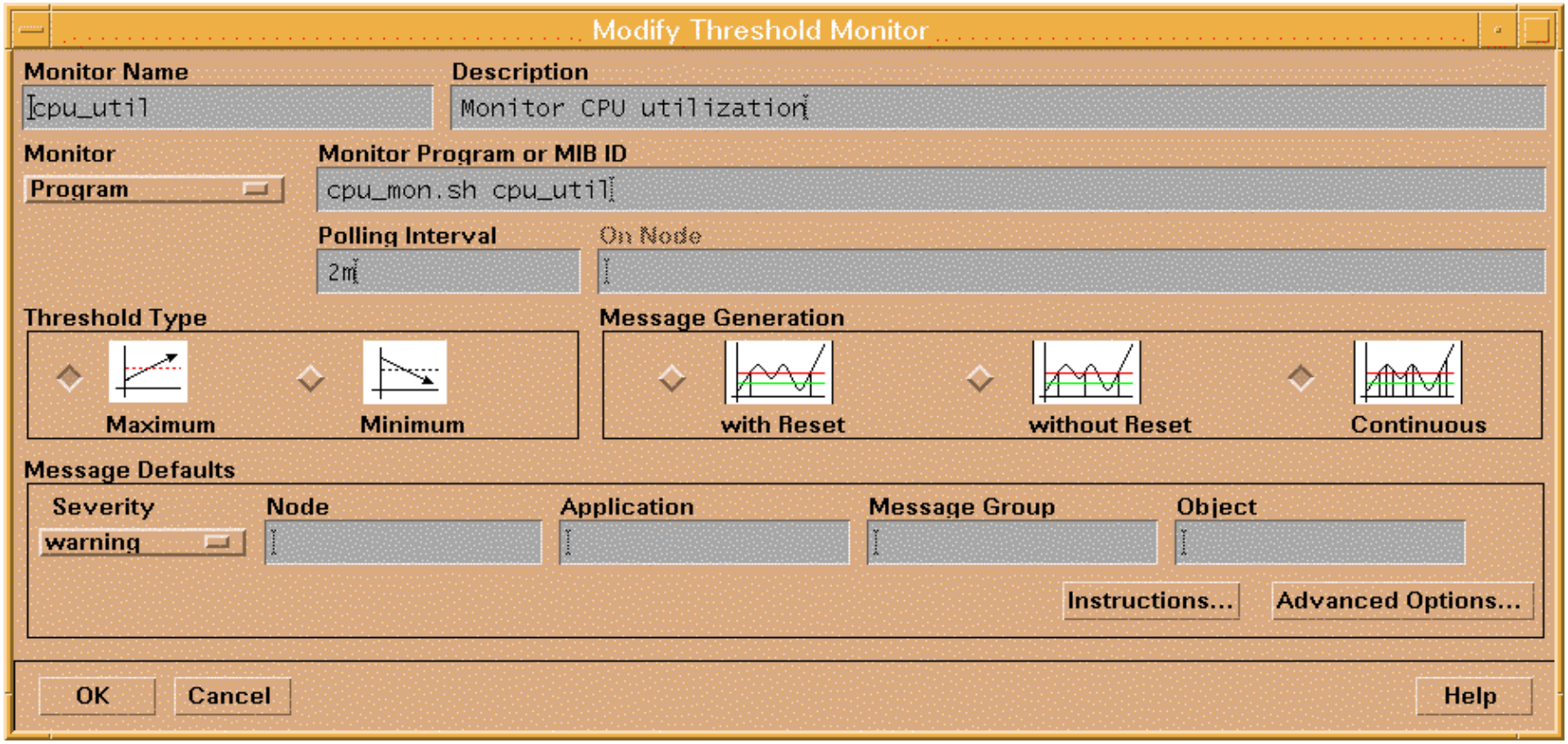
Match the incoming pattern to variables

Use variable as parameters to alter message text

Use parameters as part of running actions



Monitor Configuration GUI



Agent Technology

- Intelligent Automous
- Monitoring any aspect of system and applications
  - Logfiles
  - Scheduled commands
  - API for programs to send alarms

Linux specific Support

- Default templates for Linux
- What they do

Templates

- Logfiles
  - Cron: /var/log/cron
  - Logins : /var/log/wtmp
  - Messages : /var/log/messages
- Monitors
  - MailQueueLength
  - Sendmail
  - Performance Monitors: CPU Util ,Disk Util,Swap Util
- OpCmsg
  - Same as standard opcmsg API

IT Operations Summary

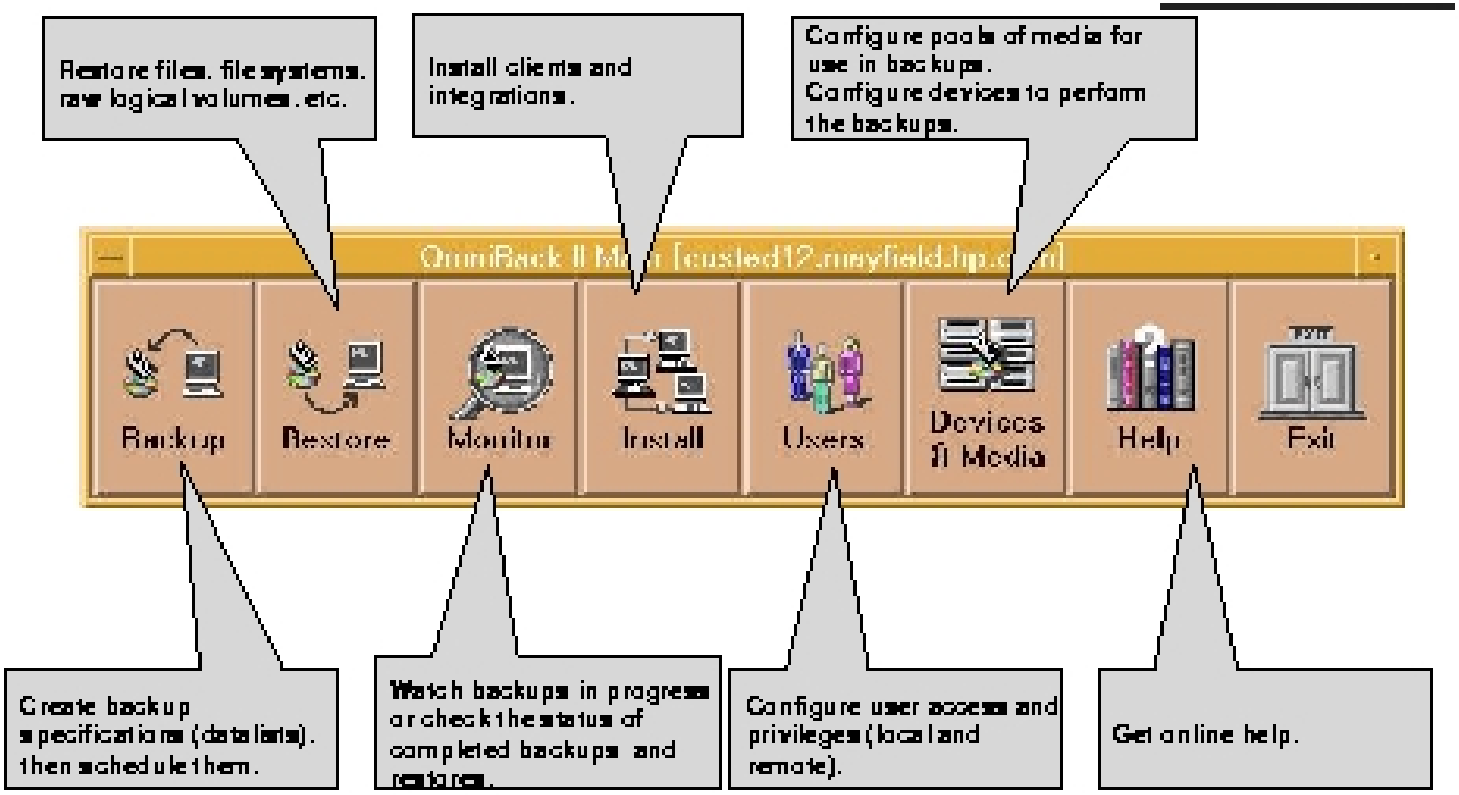
- Versions of Product that support Linux Agents
  - 4.X Supports Redhat 5.2
  - 5.0 Supports Redhat 5.2 with Patch
  - 5.3 Supports Redhat 5.2
    - (Standard All Agents bundle)

OmniBack II

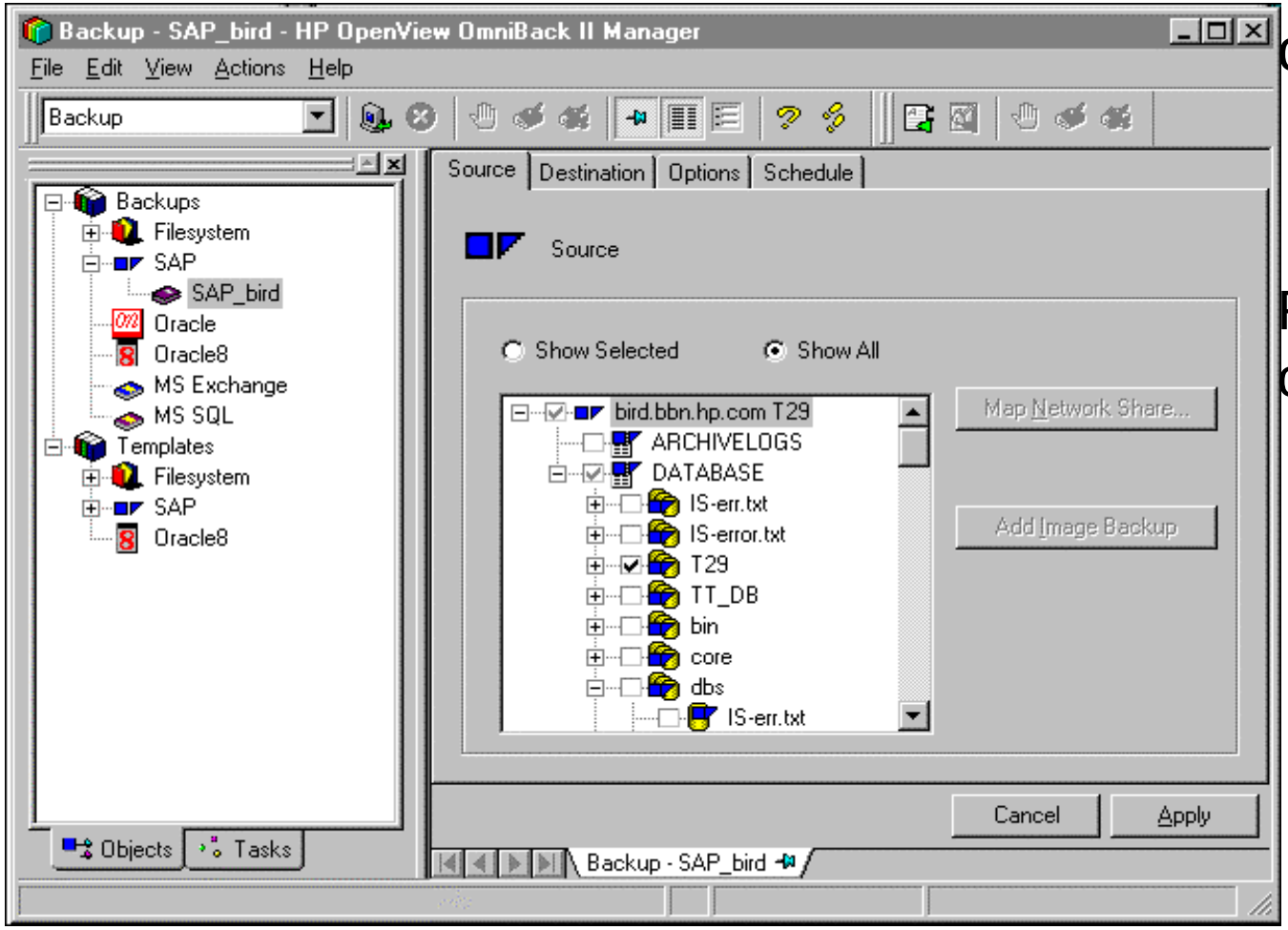
- What is it
  - Centralized and Decentralized Backup tool
- Product Features
  - Utlization of High Capacity Backup Devices
  - Cetralized scheduling and Management
  - User Interface may be on multiple different Operating Systems

HP OpenView OmniBack II Main GUI

HP OmniBack II



Omniback II NT GUI



Reduced operational cost

- Central control through Manager-of-Managers

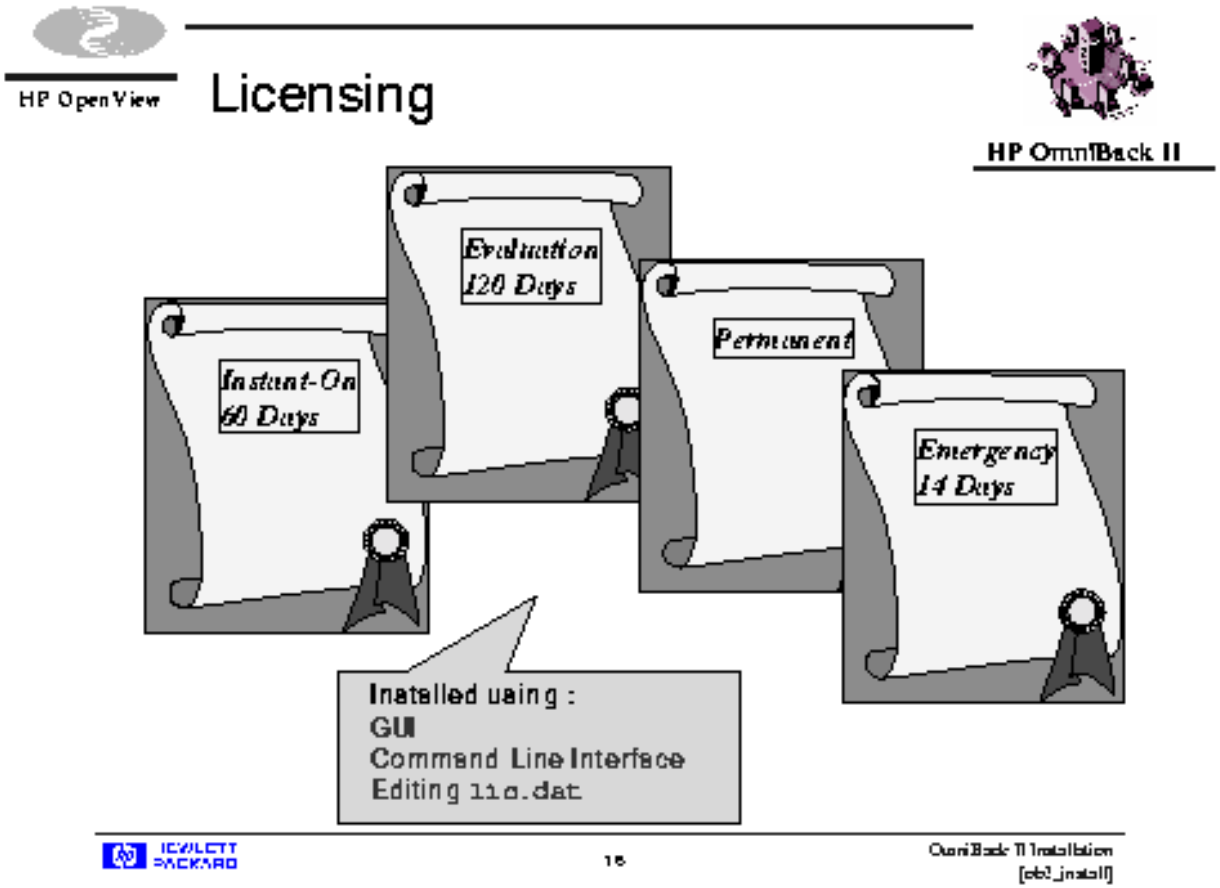
Reduced equipment costs

- Library sharing between multiple systems
- Investment protection through support of large tape libraries and silos (HP, StorageTek, EMASS/GRAU, ATL,)

Backup Concept

- Network Backup
- Disk Agent
- Media Agent
- Datalists
- Scheduling
- GUI
- Web management

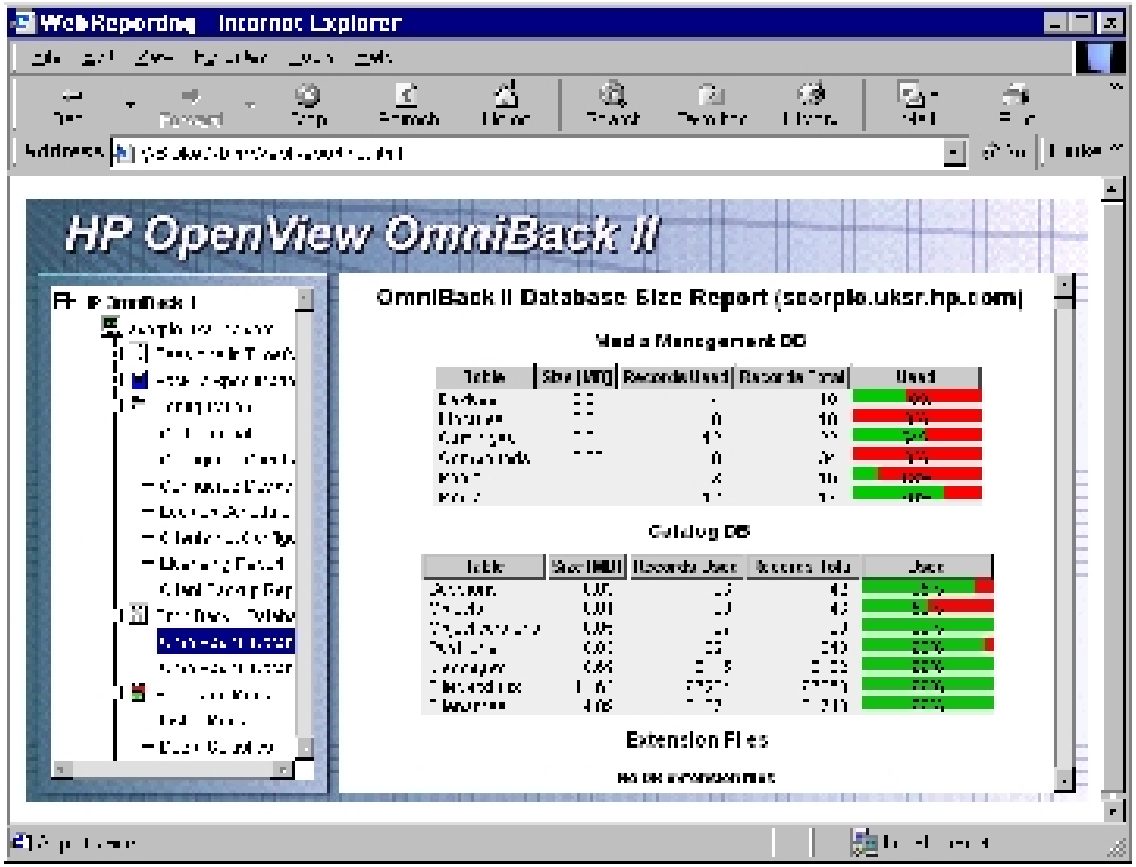
OmniBack Licensing



HP OpenView

Reporting - Web Interface

HP OmniBack II



Agent Initialization

- Works with inetd daemon
- installs in /usr/omni
- started through request to inetd process

Linux Support

- Installation of Disk Agent
  - Cannot push it from Cell Server (2.55, 3.0)
  - Push available wit OmniBack 3.1
- Import System
- No GUI Available on Linux system
- Linux Backup Devices cannot be used

Version support

- OmniBack 2.55
  - Unsupported Agent (install tarball)
- OmniBack 3.0
  - Unsupported Agent (install tarball)
- OmniBack 3.1
  - Supported Feature

Integration Summary

- NNM
- ITO
- OmniBack

Questions