

HP OpenView Operations OS/400 Management

Concepts Guide

Software Version: A.05.00

HP OpenView



February 2005

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The printing date and part number of the manual indicate the edition of the manual. The printing date will change when a new edition is printed. Minor changes may be made at reprint without changing the printing date. The part number of the manual will change when extensive changes are made.

Manual updates may be issued between editions to correct errors or document product changes. To ensure that you receive the updated or new editions, you should subscribe to the appropriate product support service. See your HP sales representative for details.

Third Edition: February 2005

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Revision History

This manual's title page contains the following identifying information:

- Version number, which indicates the software version.
- Print date, which changes each time the document is updated.

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Table 1 indicates changes made to this document since the last released edition.

Table 1: Changes to This Document

Date	Description

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Conventions

The following typographical conventions are used in this manual.


Table 1: Typographical Conventions

Font	Meaning	Example
<i>Italic</i>	Book or manual titles, and man page names	See the <i>EView/400 Management for OVO Windows</i> for more information.
	Provides emphasis	You <i>must</i> follow these steps.
	Specifies a variable that you must supply when entering a command	At the prompt, enter rlogin <i>your_name</i> where you supply your login name.
	Parameters to a function	The <i>oper_name</i> parameter returns an integer response.
Bold	New terms	The monitor agent observes...
Computer	Text and items on the computer screen	The system replies: Press Enter
	Command names	Use the <code>grep</code> command ...
	Function names	Use the <code>opc_connect()</code> function to connect...
	File and directory names	<code>/opt/OV/bin/OpC/</code>
	Process names	Check to see if <code>opcmona</code> is running.
	Window/dialog box names	In the Add Logfile window...
Computer Bold	Text that you must enter	At the prompt, enter <code>ls -l</code>
Keycap	Keyboard keys	Press Return .
[Button]	Buttons on the user interface.	Click [Operator]. Click the [Apply] button.

Font	Meaning	Example
Menu Items	A menu name followed by a colon (:) means that you select the menu, then the item. When the item is followed by an arrow (->), a cascading menu follows.	Select Actions:Utilities->Reports ...

Documentation Map

HP OpenView Operations OS/400 Management (OV OS/400) provides a set of manuals that help you use the product and understand the concepts underlying the product. This section describes what information is available and where you can find it.

 In addition to OV OS/400 documentation, related OpenView products provide a comprehensive set of manuals that help you use the products and improve your understanding of the underlying concepts.

OV OS/400 Printed Manuals

This section provides an overview of the printed manuals and their contents.

HP OpenView Operations OS/400 Management Concepts Guide

Explains OV OS/400 features, functions, architecture, and data flow. Describes OV OS/400 agent and server components, process management, SNA discovery process, network topology, and message windows.

HP OpenView Operations OS/400 Management Installation Guide

Explains how to install, de-install, and configure OV OS/400. Also includes how to upload installation files from the OVO management server, and start and stop OV OS/400. Also describes OS/400 console commands.

HP OpenView Operations OS/400 Management Administrator's Reference

Explains how to customize and use OV OS/400. Also includes detailed troubleshooting procedures and explanations of OV OS/400 system messages. OV OS/400 Online Information

OV OS/400 Online Information

The following information is available online.

- *HP OpenView Operations OS/400 Management Concepts Guide*
- *HP OpenView Operations OS/400 Installation Guide*
- *HP OpenView Operations OS/400 Administrator's Reference*
- *HP OpenView Operations OS/400 Software Release Notes*

About OV OS/400

This chapter describes HP OpenView OS/400 Management (OV OS/400). It also provides a brief overview of its benefits, architecture, and data flow.

What is OV OS/400?

HP OpenView OS400 Management (OV OS/400) integrates the AS/400(iSeries) system platform into HP OpenView Operations (OVO). With the addition of OV OS/400, OVO provides you with true end-to-end management of your information technology (IT) environment, from PCs to AS/400(iSeries) computers.

What OV OS/400 Does

OV OS/400 is closely integrated into the OVO Management Server. The OV OS/400 Agent monitors the AS/400 system environment in order to capture system statistics and AS/400 and application messages that correlate to important events and critical situations. This data is then communicated to the OVO Management Server through the Transmission Control Protocol/Internet Protocol (TCP/IP).

Benefits of OV OS/400

OV OS/400 provides you with the following benefits:

- **Health Monitoring for AS/400 Systems**
Health monitors for AS/400 systems.
- **Consolidated Management View**
Consolidated end-to-end management view, which gives you a business-centric perspective.
- **Automatic Problem Resolution**
Provides two-way communication with the AS/400 systems to resolve problems quickly and automatically.
- **Multiple Connectivity**
Allows more than one OVO Management Server to be connected to an OV OS/400 Agent simultaneously.

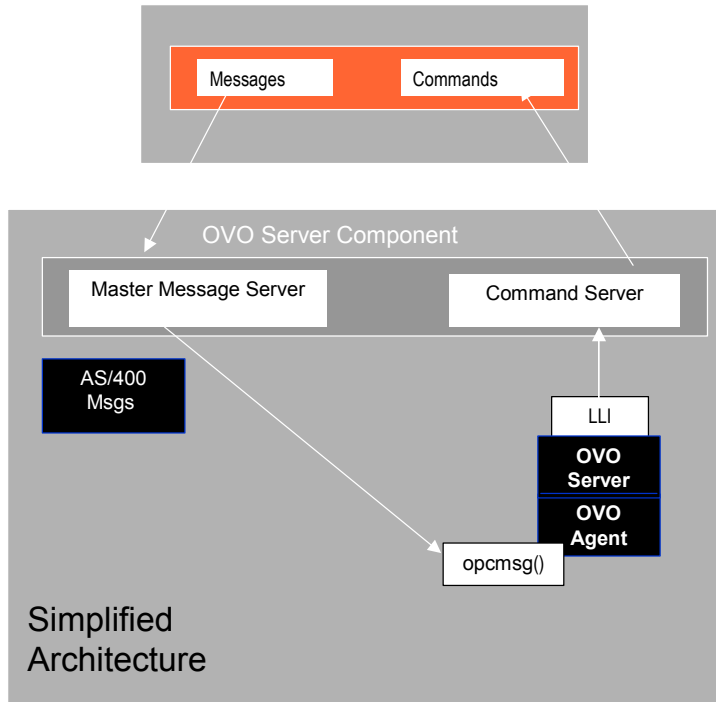
About OV OS/400 Architecture and Data Flow

HP OpenView OS/400 Management (OV OS/400) employs a discovery process that detects all AS/400 communication lines, controllers, and device resources that composes the AS/400 environment. OV OS/400 continuously monitors the status of these AS/400 resources. Monitoring messages that are generated to QHST history log, QSYSOPR and other message queues provides additional system management. The message filtering functionality of OV OS/400 allows you to select the messages to be captured and transmitted to the OVO Management Server making the information data stream more efficient.

Consolidating Your Business Environment

Figure 3-1 shows the consolidated data flow between the AS/400 systems and the OVO management servers provided by OV OS/400.

Figure 3-1: OV OS/400 Simplified Data Flow



- **Master Message Server**
Distributes incoming messages to the OVO agent via an API call.
- **Command Server connection to OVO's Legacy Link Interface (LLI)**
enables automatic and/or Operator initiated actions.

Increasing Productivity

The consolidated view provided by the OV OS/400 architecture helps maximize the availability of your system and increase the productivity of your operations. OV OS/400 responds to critical AS/400 events and messages through pre-defined automatic actions and resolution instructions or by creating trouble tickets to notify your operations staff. Messages coming from the AS/400 are routed into existing OVO message groups and included in the OVO Message Browser. Message responses can be issued to the AS/400 automatically or interactively from OVO.

About the OV OS/400 Agent

This chapter describes the agent and agent components provided with HP OpenView Operations OS/400 Management (OV OS/400).

What the OV OS/400 Agent Does

The OV OS/400 agent operates as an AS/400 application that monitors your AS/400 environment. The agent captures all AS/400 system and application generated messages. These messages are then filtered based on values you have configured and then distributed to the primary and, if chosen, to all secondary OVO Management Servers. The agent also collects system statistics and allows the operator to perform interactive processing on everyday tasks from the OVO Management Server without using the traditional AS/400 “green screen”.

Processing AS/400 Messages

The OV OS/400 Agent processes all messages that are generated by the operating system as well as any messages generated by system and software applications. The system administrator filters messages based primarily on message IDs configured. Any AS/400 message queue can be monitored to capture specific and/or general messages.

The OV OS/400 agent packages this message into a defined data structure, and then forwards them via Transmission Control Protocol/Internet Protocol (TCP/IP) for processing by the OVO server.

Interactive Capabilities

The OV OS/400 Agent allows operators and/or system administrators to interactively manage the AS/400 Job Queues, Output Queues, and Active Jobs.

Job Queues

Through the use of native OS/400 APIs the OV OS/400 Agent allows the system administrator and/or the operator to “drill-down” within specific job queues to manage and manipulate jobs. The system administrator and/or operator will be able to:

- Work With Job Queue, displaying all jobs on the queue
- Hold Job
- End Job
- Release Job

Output Queue

The OV OS/400 Agent uses native OS/400 APIs to allow the system administrator and/or the operator to “drill-down” within specific output queues to manage and manipulate output queues and spool files. The system administrator and/or operator will be able to:

- Work With Output Queue, displaying all spool files on the queue
- Hold Output Queue
- Release Output Queue
- Hold Spool File
- Release Spool File

- Delete Spool File

Active Jobs

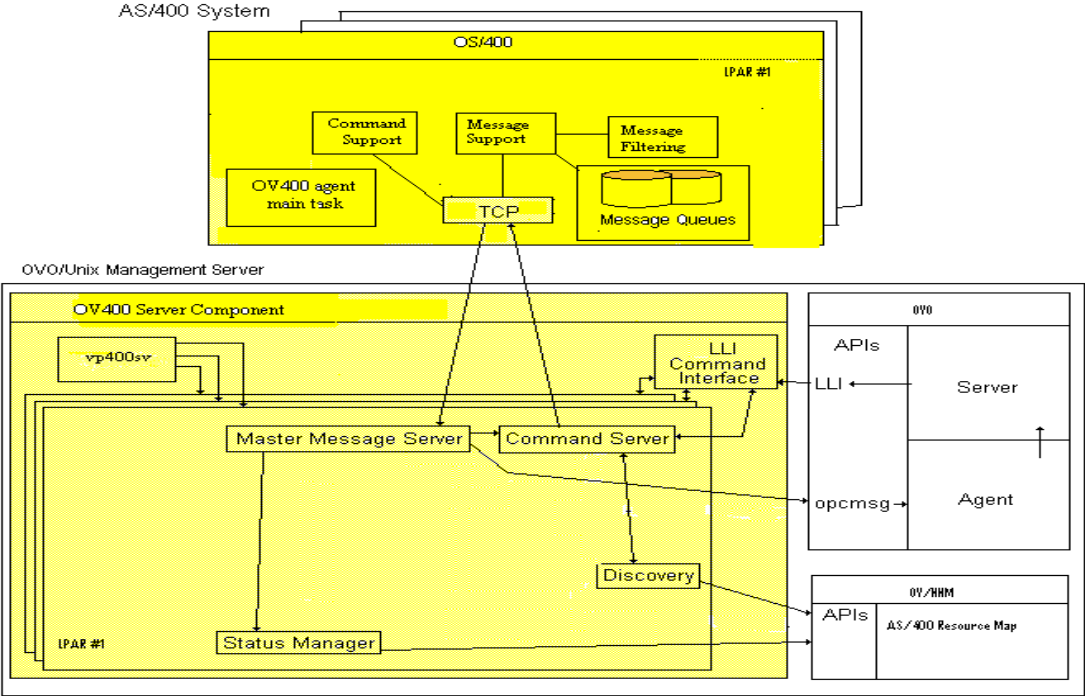
Through the use of native OS/400 APIs the OV OS/400 Agent allows the system administrator and/or the operator to drill down through active jobs to manage and manipulate specific active jobs. The system administrator and/or operator will be able to:

- Display Active Job Attributes
- Hold Active Job
- Release Active Job
- End Active Job

Components of the OV OS/400 Agent

In OV OS/400 messages and statistics generated by the AS/400 are collected by the OV OS/400 agent tasks. They are then filtered, processed, and forwarded to the OV OS/400 Master Message Server component on the OVO server. The results will be displayed on the OVO Management Server.

Figure 4-1: OV OS/400 Data Flow



About the OV OS/400 Subsystem

The OV OS/400 agent is a subsystem on the AS/400. A Control Language (CL) command starts the subsystem. Once the subsystem's procedures are active the OV OS/400 Agent filters and routes messages from the AS/400 message queues, collects statistics, processes commands, and executes APIs from the OVO Management console operator. The results of each of these are then returned to the OVO Management Server console.

About OV OS/400 Procedures

The OV OS/400 agent procedures collectively provide all the necessary communications and system interfaces. Each of the procedures is dedicated to a particular interface function and communicates with other procedures and message queues.

EVACMDPROC Procedure

1. Establishes a socket connection for the command port.
2. Begins a heartbeat monitoring process that verifies the connection between the Management Server and the Agent.
3. Receives AS/400 commands and API instructions from the OVO Management Server.
4. Distinguishes between commands and API instructions then forwards to respective pre-defined data queue for processing.

EVCCTLPROC Procedure

1. Receives the API requests from a pre-defined data queue.
2. Determines the proper format to use in order to carry out the API instruction.
3. Makes the appropriate OS/400 API call.
4. Sends API instruction results to a pre-defined data queue to be sent back to the OVO Management Server.

EVMSGQMON Procedure

1. Determines message queues to be monitored from the EVMSGQCFG file with the SCAN option.
2. Checks configured messages queues for new messages.
3. Selects messages based on filtering and message queue configuration options and forwards messages to a pre-defined data queue.

EVPERFM Procedure

1. Gathers system and job performance data.
2. Forwards performance data on a specified interval to a pre-defined data queue.

EVSCMDPROC Procedure

1. Receives commands from the pre-defined data queue.
2. Sends commands through the command processor.
3. Forwards the command responses to a pre-defined data queue.

EVMSGPROC Procedure

1. Receives messages from message queues you wish to capture messages from.
2. Processes messages through the message filtering process.
3. Forwards all AS/400 messages that match the filter to pre-defined data queue.

EVSHSTPROC Procedure

1. If the OV OS/400 Agent is configured to monitor QHST the following is executed:
2. Reads the QHST messages.
3. Messages are sent through the filtering process.
4. Forwards all matched messages to a pre-defined data queue.

EVSRSCPROC Procedure

1. If the OV OS/400 Agent is configured to monitor resources, the following is executed:
2. Receives a list of configured lines, controllers, and devices.
3. Performs a continuous test based on configurable time intervals to determine the status of the resources.
4. Sends status messages to a pre-defined data queue.

EVSTCPPROC Procedure

1. Allows a TCP/IP connection from the OV OS/400 Control Procedure EVTCTLPROC.
2. Receives processed AS/400 messages, commands, and API instructions from a central data queue.
3. Forwards the processed information to the OV OS/400 Control Procedure.

EVTCTLCPROC Procedure

1. Establishes a TCP/IP connection to the primary management server and to all secondary management servers.
2. Establishes a TCP/IP connection with the Message Procedure EVSTCPPROC.
3. Manages multiple connectivity functionality between OV OS/400 Management Agent and the multiple OV OS/400 Management Servers.
4. Forwards processed results to the correct OV OS/400 Management Server.

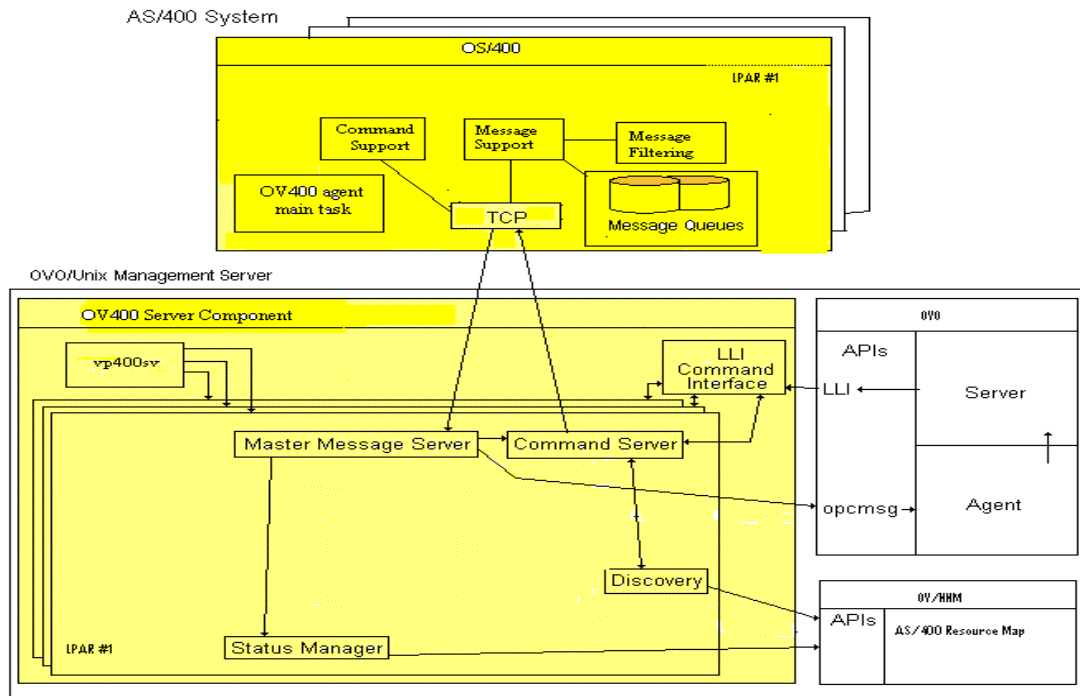
About OV OS/400 Server

This chapter describes the server components and process management provided by HP OpenView Operations OS/400 Management (OV OS/400).

About Server Components

Figure 5-1 shows the OV OS/400 server components running alongside OVO on the Unix management server, and the data flow to the AS/400 agent.

Figure 5-1: OV OS/400 Data Flow



OV OS/400 Server Components

For each AS/400 system monitored and controlled by OVO there are four server components:

- **Master Message Server (MMS)**

The Master Message Server (MMS) is the primary server for OV OS/400 on the OVO management server. All incoming OV OS/400 data comes through the MMS and is then forwarded to the OVO agents, as well as the OV OS/400 Status Manager.

- **Command Server**

The Command Server forwards OVO action requests to an AS/400 system for execution, then delivers the response back to OVO.

- **Status Manager**

The Status Manager receives status messages generated by the AS/400 system. The Status Manager updates resource icons on the AS/400 submaps.

- **Resource Discovery**

The OV OS/400 Resource Discovery process issues commands to the AS/400 system to detect resources, such as lines, controllers, and devices. Discovered resources are stored in the OpenView object database (ovwdb). These discovered resources are sent to the AS/400 Map Application. See Chapter 6 for more information about the Discovery process.

Additional Server Components

Starting Up and Shutting Down Servers (vp400sv)

To ensure that the OpenView software and the OV OS/400 components of the OVO management server start up and shut down in the appropriate sequence, the OV OS/400 process management program (vp400sv) is registered in the HP-UX or Solaris boot process. The vp400sv program may also be run from the command line at any time with parameters to start, stop, or check the status of the OV OS/400 processes for a particular AS/400 system. For specific instructions to start or stop the OV OS/400 servers see Phase 5 of the *OV OS/400 Management Administrator's Reference*.

Adding an AS/400 to OVO (vp400configurator)

The vp400configurator is a GUI interface for adding and configuring AS/400 nodes and agents. The program adds a new AS/400 system to be monitored by OVO. After you enter some identifying information about the AS/400, the configuration program adds the AS/400 to the OVO Node Bank, and places it under the AS/400 node group. Specific instructions on adding an AS/400 node can be found in Phase 2 of the *OV OS/400 Management Administrator's Reference*.

About the LLI Command Interface

The OV OS/400 Legacy Link Interface (vp400elli) runs as a process under OpenView. This process captures native OS/400 commands that have been entered as automatic actions or operator actions in the OVO message templates. vp400elli directs these commands to the appropriate OV OS/400 Command Server and returns the command output to OVO.

AS/400 Map Application

The AS/400 Map Application builds a hierarchical map of AS/400 resources from database objects created by the Discovery process. The AS/400 Map Application creates icons to represent each object in the hierarchy. It then sets the status color of each object.

Discovering Network Resources

This chapter describes how to discover AS/400 configuration topology and graphically display these resources and their status with HP OpenView Operations OS/400 Management (OV OS/400).

Discovering Network Topology

OV OS/400 provides a discovery process for building a hierarchical map of AS/400 configured resources. Specific resource types are represented in the hierarchical map by different icons.

Initiating the Discovery Process

The discovery process is initiated by the OVO administrator or authorized operator by dragging and dropping icons from the AS/400 Node Group to the Discovery application, which is located in the AS/400 Tools folder of the Application Bank.

Discovering Resources

The Discovery application discovers all lines, controllers, and devices of a selected AS/400 domain.

Storing Information

Information about discovered resources is maintained in the OpenView object database.

Displaying AS/400 Resources

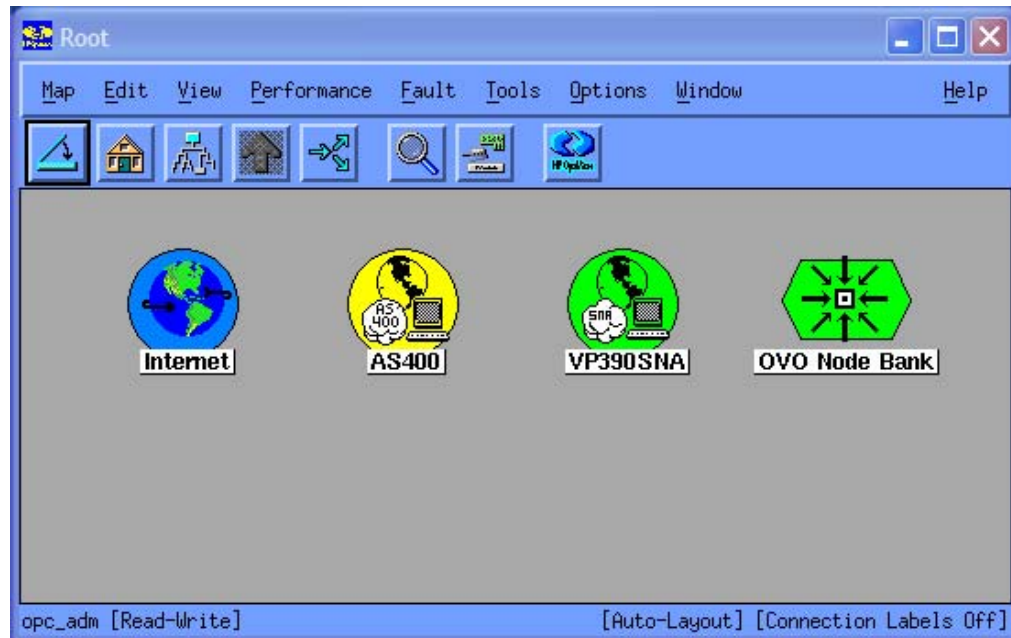
To provide a graphical hierarchical view of discovered resources, you can assign the AS/400 Map application, located in the AS/400 Tools application folder, to operators. The Status Manager monitors status changes, which it indicates with icons representing the resources on the AS/400 submap. Operators can select resource icons from the appropriate submap and use them to execute actions on the selected resources.

About the OVO Root Window

The Discovery process adds an AS/400 icon to the Root window, which is the parent icon for all discovered AS/400 domains.

Figure 6-1 shows the OVO Root window following a discovery. Double-click on this icon to open the AS/400 Network Submap.

Figure 6-1: OVO Root Window

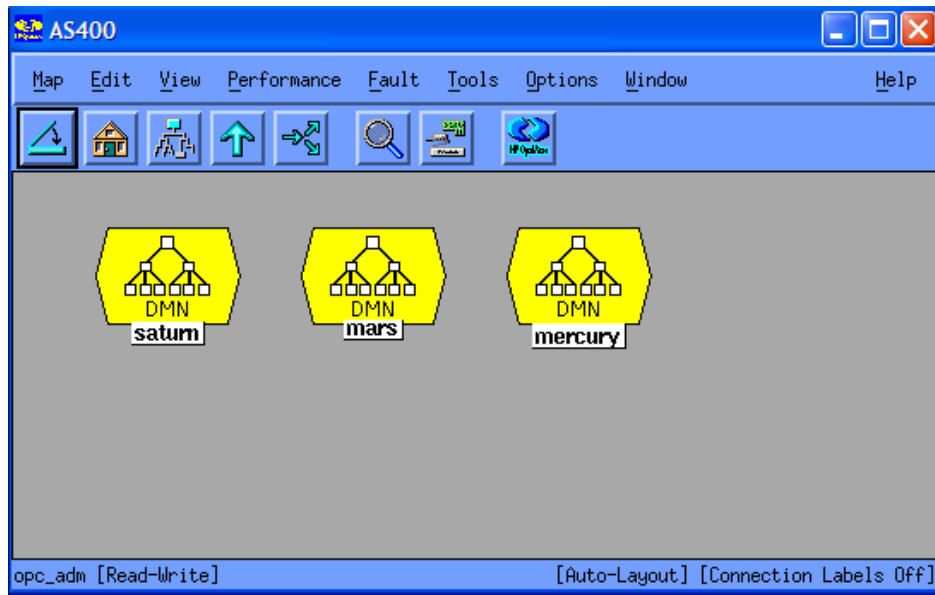


About the AS/400 Domain Submap

The OV OS/400 Network Submap contains an icon for each AS/400 defined and discovered by the OV OS/400 discover process.

Figure 6-2 shows the AS/400 Network Submap. Double-click on an AS/400 domain icon to open its Domain Submap.

Figure 6-2: AS/400 Network Submap

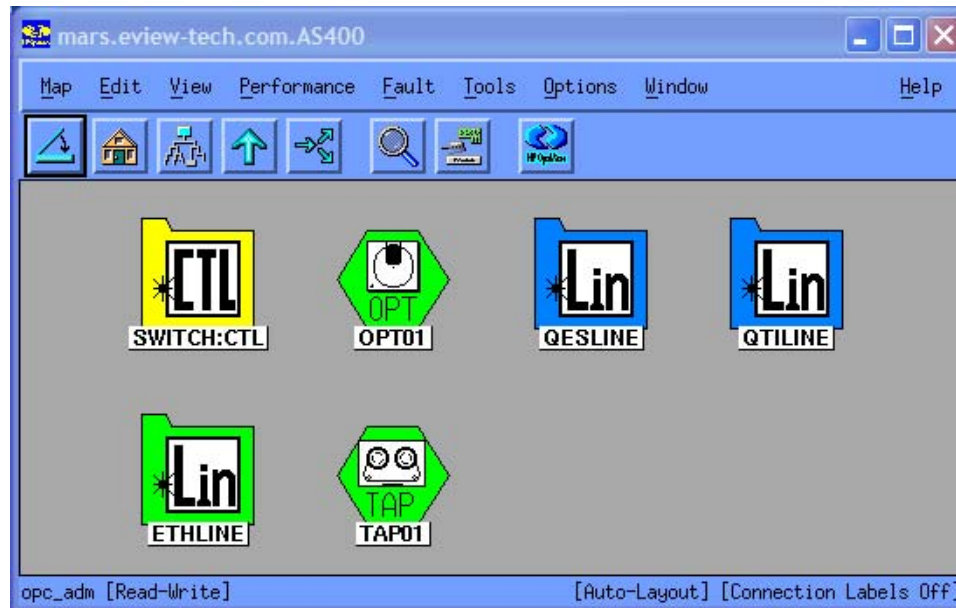


About the Lines Submap

The OV OS/400 Domain Submap displays the defined lines of the AS/400. It also displays any devices that do not have parent controllers, such as tape drives. Switched controllers that are not currently connected to a line are grouped together under the SWITCH: CTL icon.

Figure 6-3 shows the Lines submap. Double-click on any line to open its Controller Submap.

Figure 6-3: AS/400 Lines Submap

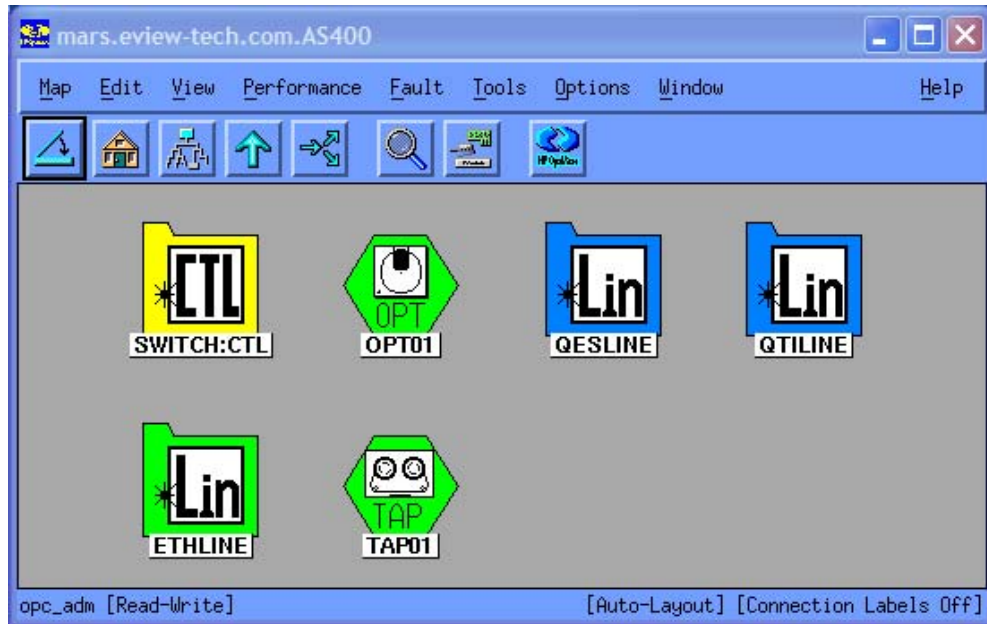


About the Controller Submap

The OV OS/400 Controller submap displays all known controller units discovered in the discovery process (see “Discovering Resources” on page 32).

Figure 6-4 shows the Controller submap.

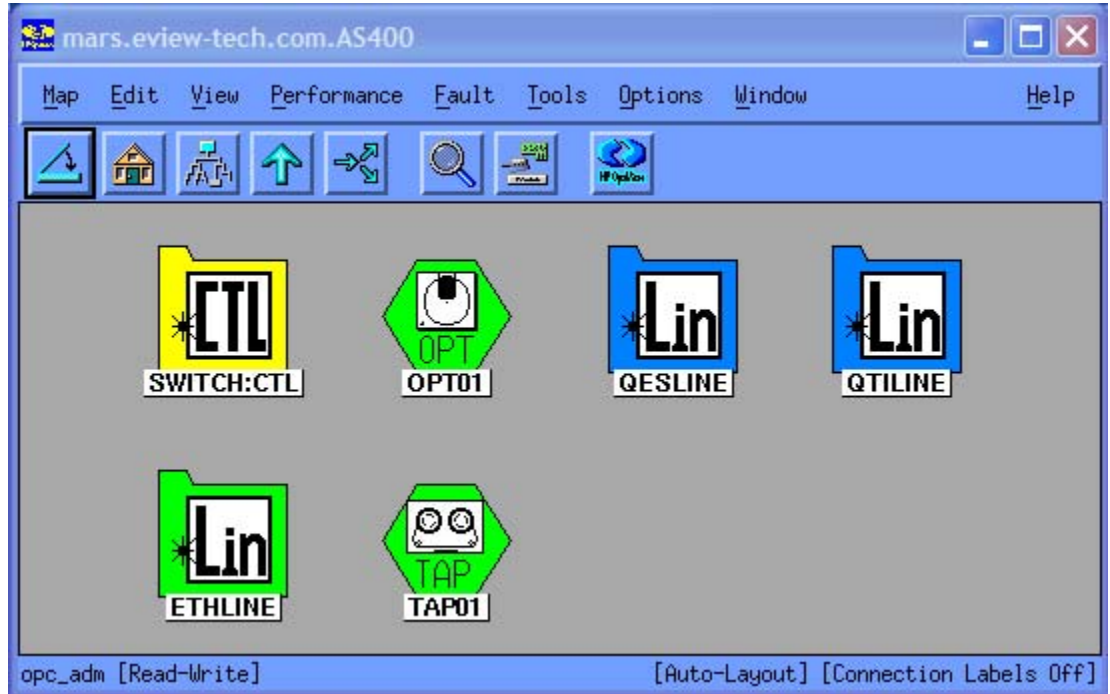
Figure 6-4: AS/400 Controller Submap



About the Device Submap

The OV OS/400 Device submap displays all known device units discovered in the discovery process. Figure 6-5 shows the Device submap.

Figure 6-5: AS/400 Device Submap





OV OS/400 Java User Interface Applet

This chapter describes the Java User Interface provided with HP OpenView Operations OS/400 Management (OV OS/400).

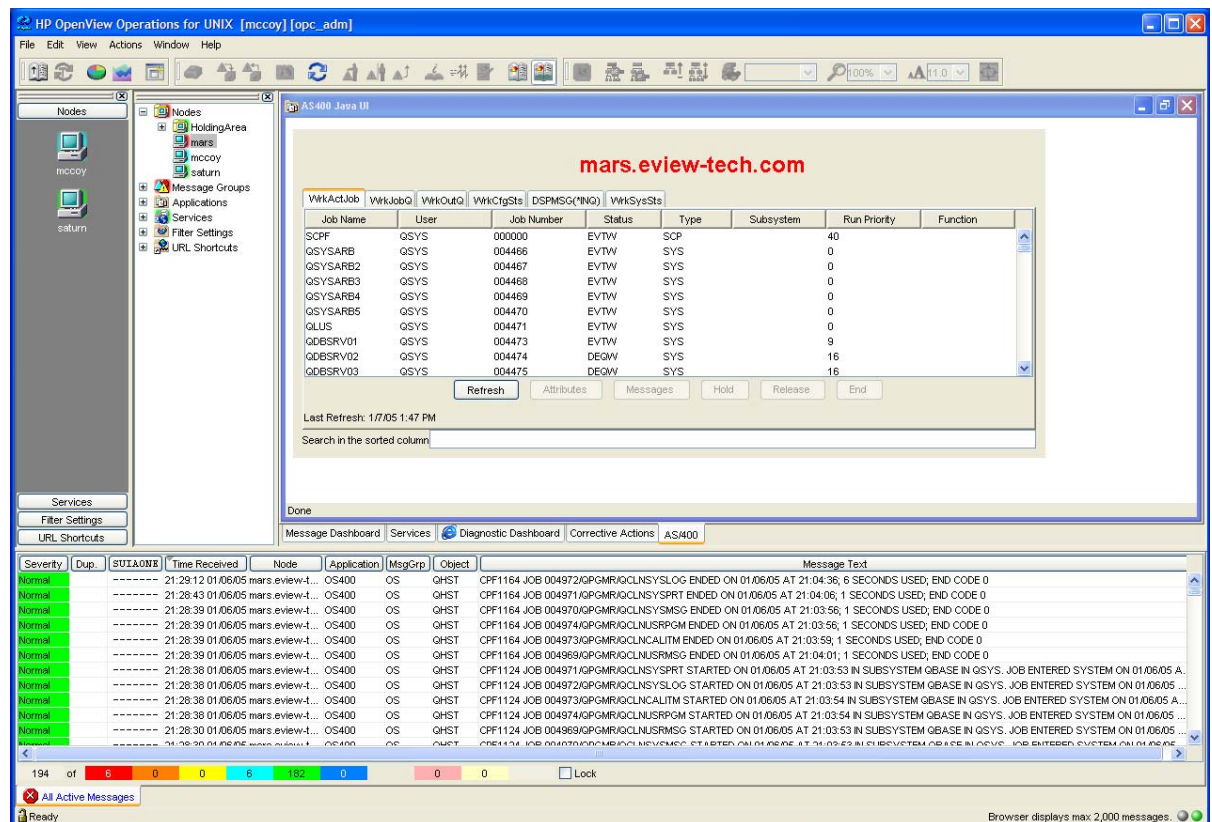
Managing Status with the Java User Interface

OV OS/400 integrates with the OpenView Java GUI window. The applet generated by OV OS/400 provides an interactive tool in which the operator can manage or manipulate the following:

- Job Queues
- Output Queues
- Active Jobs
- Outstanding Inquiry Messages
- Resource Status (Lines/Controllers/Devices)
- System Status

Figure 7-1 shows the window (with the Active Jobs tab selected).

Figure 7-1: Java User Interface



Monitor Active Jobs

The Monitor Active Jobs display enables the operator to monitor the jobs on the AS/400 domain that are currently active. This process measures system performance by measuring aspects such as CPU usage and response time.

From the Monitor Active Jobs window the operator may perform the following actions on any active job in the window:

- View Job Attributes
- Hold
- Release
- End

Figure 7-2 shows the Monitor Active Jobs window

Figure 7-2: Monitor Active Jobs Window

Job Name	User	Job Number	Status	Type	Subsystem	Run Priority	Function
SCPF	QSYS	000000	EVTW	SCP		40	
QSYSARB	QSYS	004466	EVTW	SYS		0	
QSYSARB2	QSYS	004467	EVTW	SYS		0	
QSYSARB3	QSYS	004468	EVTW	SYS		0	
QSYSARB4	QSYS	004469	EVTW	SYS		0	
QSYSARB5	QSYS	004470	EVTW	SYS		0	
QLUS	QSYS	004471	EVTW	SYS		0	
QDBSRV01	QSYS	004473	EVTW	SYS		9	
QDBSRV02	QSYS	004474	DEGW	SYS		16	
QDBSRV03	QSYS	004475	DEGW	SYS		16	
QDBSRV04	QSYS	004476	DEGW	SYS		52	
QDBSRV05	QSYS	004477	DEGW	SYS		52	
QDCPOBJ1	QSYS	004478	EVTW	SYS		60	
QDCPOBJ2	QSYS	004479	EVTW	SYS		60	
QPFRADJ	QSYS	004480	EVTW	SYS		0	
QSPLMAINT	QSYS	004481	EVTW	SYS		20	
QJOBSCD	QSYS	004482	EVTW	SYS		0	
QALERT	QSYS	004483	DEGW	SYS		20	
QLUR	QSYS	004484	EVTW	SYS		0	
QFILESYS1	QSYS	004485	TIMW	SYS		0	

Refresh Attributes Messages Hold Release End

Last Refresh: 1/7/05 1:48 PM

Search in the sorted column

Manage Job Queues

The Manage Job Queues portion of the applet enables the operator to manipulate jobs in individual job queues. Through the use of OS/400 system APIs an operator may “drill-down” to a specific queue listed on the window in order to complete a task on a specific job.

Figure 7-3 shows the Manage Job Queues window.

Figure 7-3: Manage Job Queue Window

Queue Name	Library	Jobs	Subsystem	Status
Q1XTSRCH	QGPL	0		RELEASED
QZHBHTP	QHTTPSYR	0		RELEASED
QIJSSTD	QIJS	0	QSYSWRK	RELEASED
QSVCDRCTR	QSVCDRCTR	0		RELEASED
QCTL	QSYS	0	QBASE	RELEASED
QESAUTON	QSYS	0	QSYSWRK	RELEASED
QLPINSTALL	QSYS	0		RELEASED
QNMMSVQ	QSYS	0	QSYSWRK	RELEASED
QPDAUTOPAR	QSYS	0	QSYSWRK	RELEASED
QPWFSEVER	QSYS	0	QSERVER	RELEASED
QSYSNOMAX	QSYS	0	QSYSWRK	RELEASED
QSYSBSD	QSYS	0		RELEASED
QUSRNOMAX	QSYS	0	QUSRWRK	RELEASED
Q1PSCHQ	QSYS	0	QSYSWRK	RELEASED
Q1PSCHQ2	QSYS	0	QSYSWRK	RELEASED
Q1PSCHQ3	QSYS	0	QSYSWRK	RELEASED
QESAUTON	QSYS2924	0		RELEASED
QPDAUTOPAR	QSYS2924	0		RELEASED
Q1PSCHQ	QSYS2924	0		RELEASED
Q1PSCHQ2	QSYS2924	0		RELEASED
Q1PSCHQ3	QSYS2924	0		RELEASED

From the Manage Job Queues applet window the operator may perform the following actions on any job queue listed in the window:

- Work With queue, displaying the jobs in the selected queue
- Hold
- Release

From a specific job queue the operator may perform the following actions on individual jobs:

- Display attributes
- Hold
- Release
- End

Manage Output Queues

The Manage Output Queues portion of the applet enables the operator to manage output queues and to manipulate the spool files contained within the output queues. Through the use of OS/400 system APIs, an operator can “drill-down” through a specific output queue to work with specific spool files.

Figure 7-4 shows the Manage Output Queue window.

Figure 7-4: Manage Output Queues

Queue Name	Library	Files	Writer	Status
EVCMD	EVIEW	2		RELEASED
EVHSTOQ	EVIEW	1080		RELEASED
EVTRACE	EVIEW	36		RELEASED
EVCMD	EVIEW5	0		RELEASED
EVHSTOQ	EVIEW5	0		RELEASED
EVTRACE	EVIEW5	0		RELEASED
EVCMD	EVIEW5GOLD	0		RELEASED
EVHSTOQ	EVIEW5GOLD	0		RELEASED
EVTRACE	EVIEW5GOLD	0		RELEASED
QDKT	QGGL	0		RELEASED
QPFROUTQ	QGGL	0		RELEASED
QPRINT	QGGL	234		RELEASED
QPRINTS	QGGL	0		RELEASED
QPRINT2	QGGL	0		RELEASED
QJSOUTQ	QJJS	0		RELEASED
QSPRCLOUTQ	QRCL	0		RELEASED
QSCAPAROQ	QSC5156215	0		RELEASED
QSVCDRCTR	QSVCDRCTR	0		RELEASED
QEZDEBUG	QUSRSYS	0		RELEASED
QEZJOBLOG	QUSRSYS	109		RELEASED
QTPPOLITQ	QUSRSYS	0		RELEASED

Buttons: Refresh, Work With, Hold, release

Last Refresh: 1/7/05 1:50 PM

Search in the sorted column

From the Manage Output Queues applet window the operator may perform the following actions on any output queue listed in the window:

- Work With queue, displaying the spool files in the selected queue
- Hold
- Release

From a specific output queue the operator can perform the following tasks on individual spool files:

- Hold
- Release
- Delete

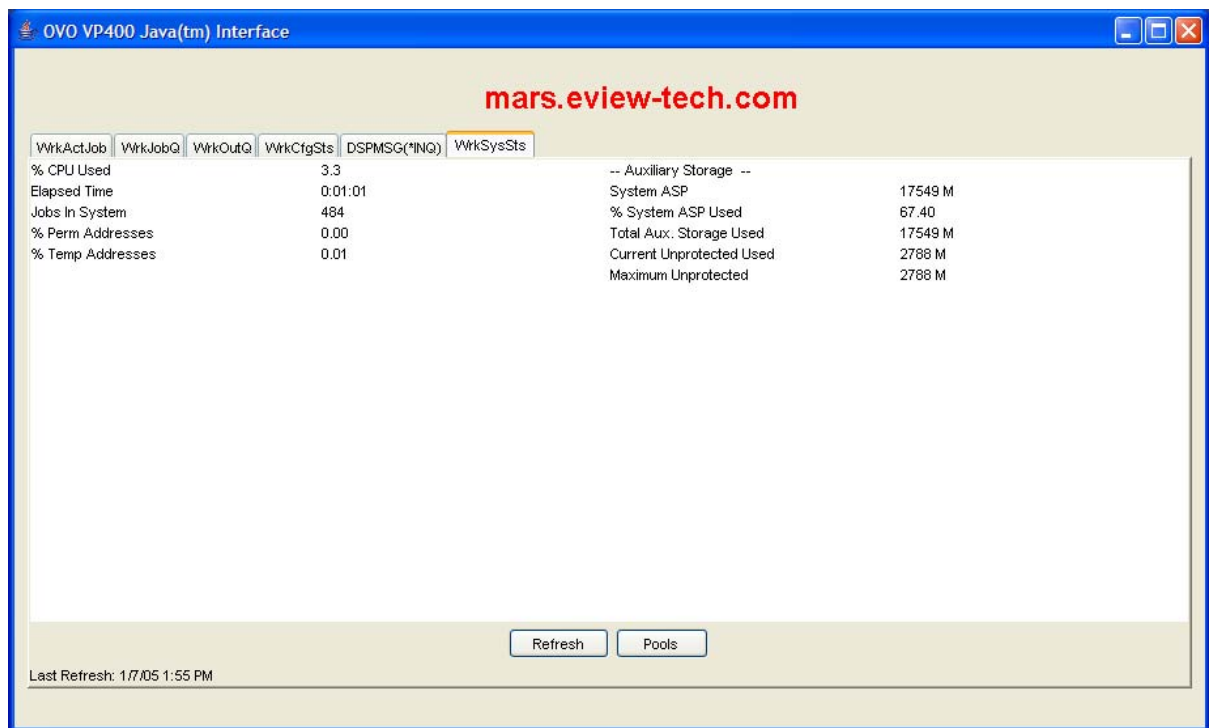
Monitor System Status

The Monitor System Status portion of the applet allows the operator to see the operating system's status. Through the use of OS/400 system APIs the operator can view such system status information as:

- CPU utilization
- Database capability
- Number of jobs in system
- Auxiliary storage

Figure 7-5 shows the Monitor System Status window.

Figure 7-5: Monitor Active Jobs Window



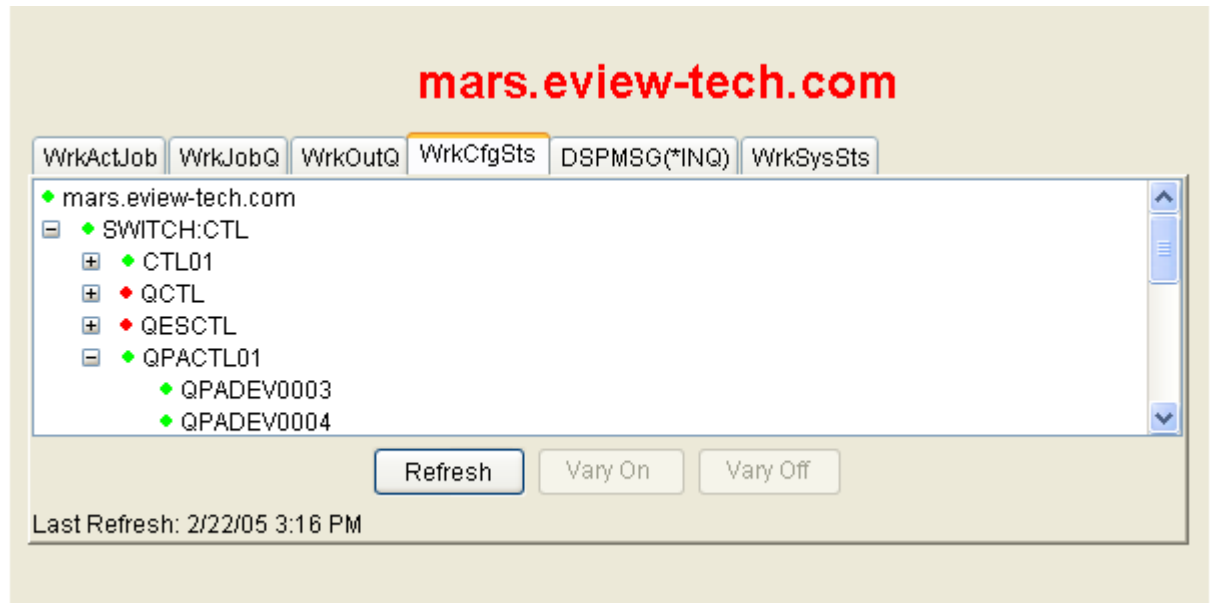
From the Monitor System Status applet the operator is able to examine system pool information by clicking on the “Pools” button.

Monitor Resource Status

The Monitor Resource Status allows the operator to see the status of lines, controllers, and devices. The operator is able to select resources and change the status of the resource as required.

Figure 7-6 shows the Monitor Resource Status window.

Figure 7-6 Monitor Resource Status

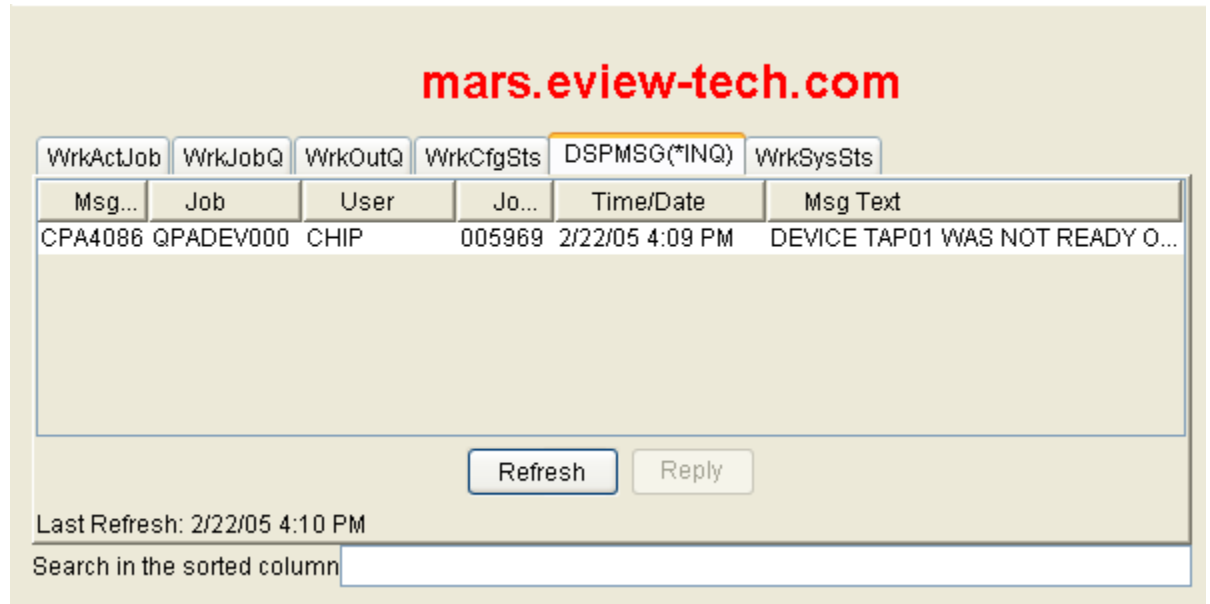


Monitor Inquiry Messages

The Monitor Inquiry Messages allows the operator to see outstanding inquiry messages (messages needing a reply) from the QSYSOPR message queue. The operator may also select messages from the list of messages and enter a reply for the message.

Figure 7-7 shows the Monitor Inquiry Messages window.

Figure 7-7 Monitor Inquiry Messages





OV OS/400 Motif User Interface

This chapter describes the windows provided with HP OpenView Operations OS/400 Management (OV OS/400).

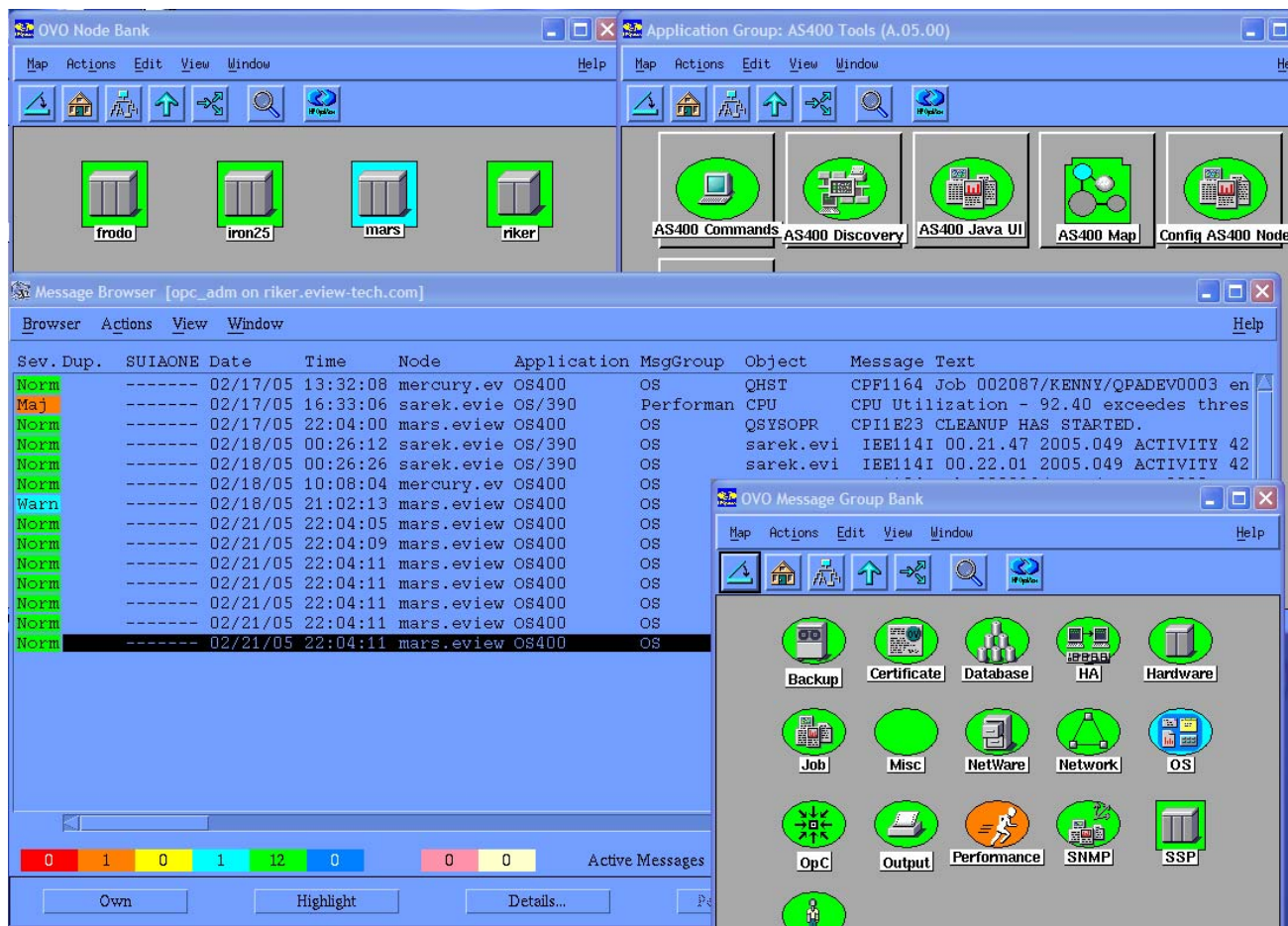
Types of OVO Windows

OV OS/400 integrates with the following OVO windows:

- Root
- Node Bank
- Application Bank
- AS/400 Tools
- Message Browser
- Message Detail

Figure 8-1 shows how you can use these windows for a consolidated end-to-end management view of application system messages across your AS/400 system environment.

Figure 8-1: Consolidated View of Application and System Messages

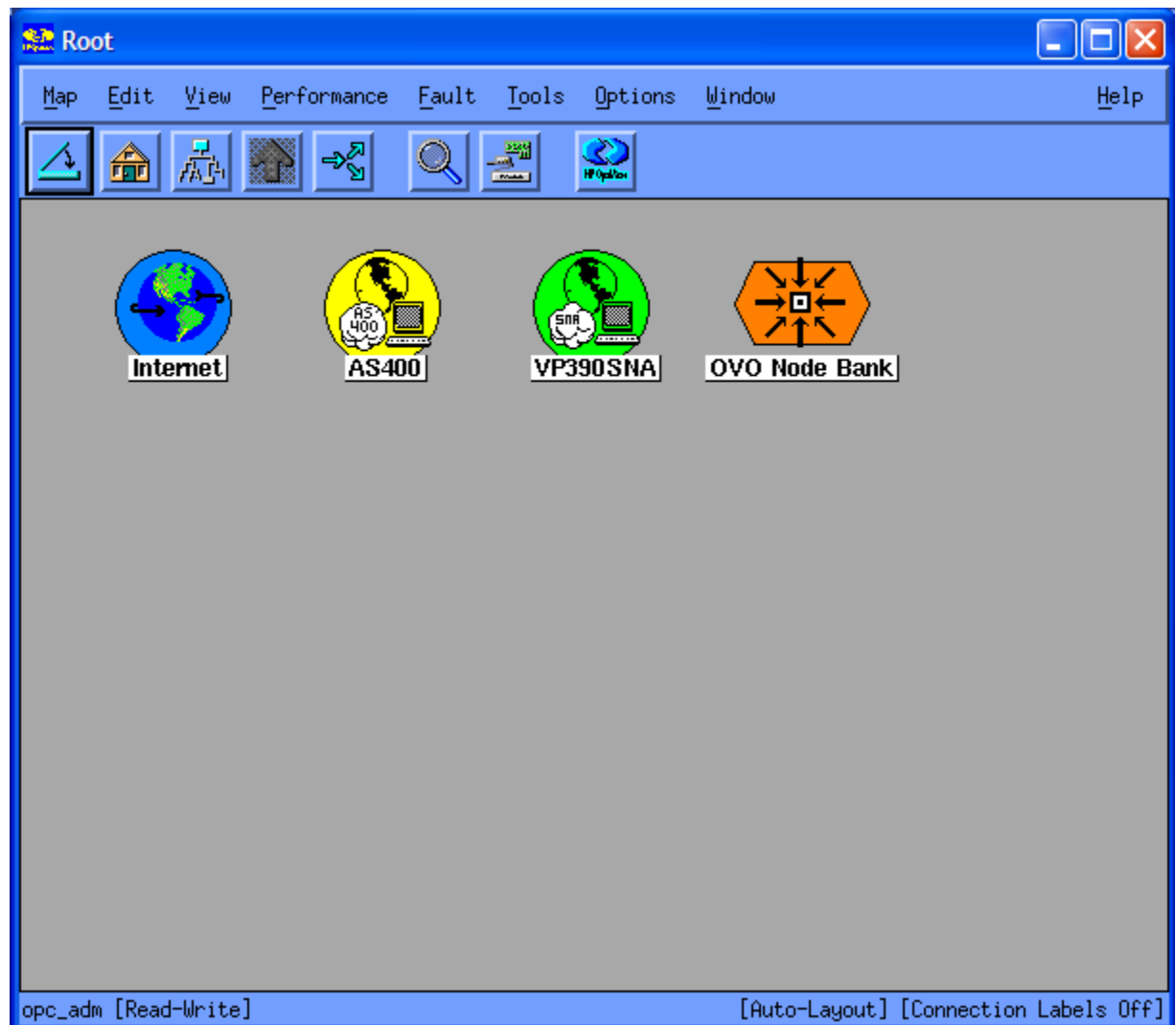


About the Root Window

The Root window holds the AS/400 object icon. By drilling down through this AS/400 icon the system administrator and/or operator can display the AS/400s that are being monitored and their discovered resources.

Figure 7-2 shows the Root Window

Figure 7-2: Root Window

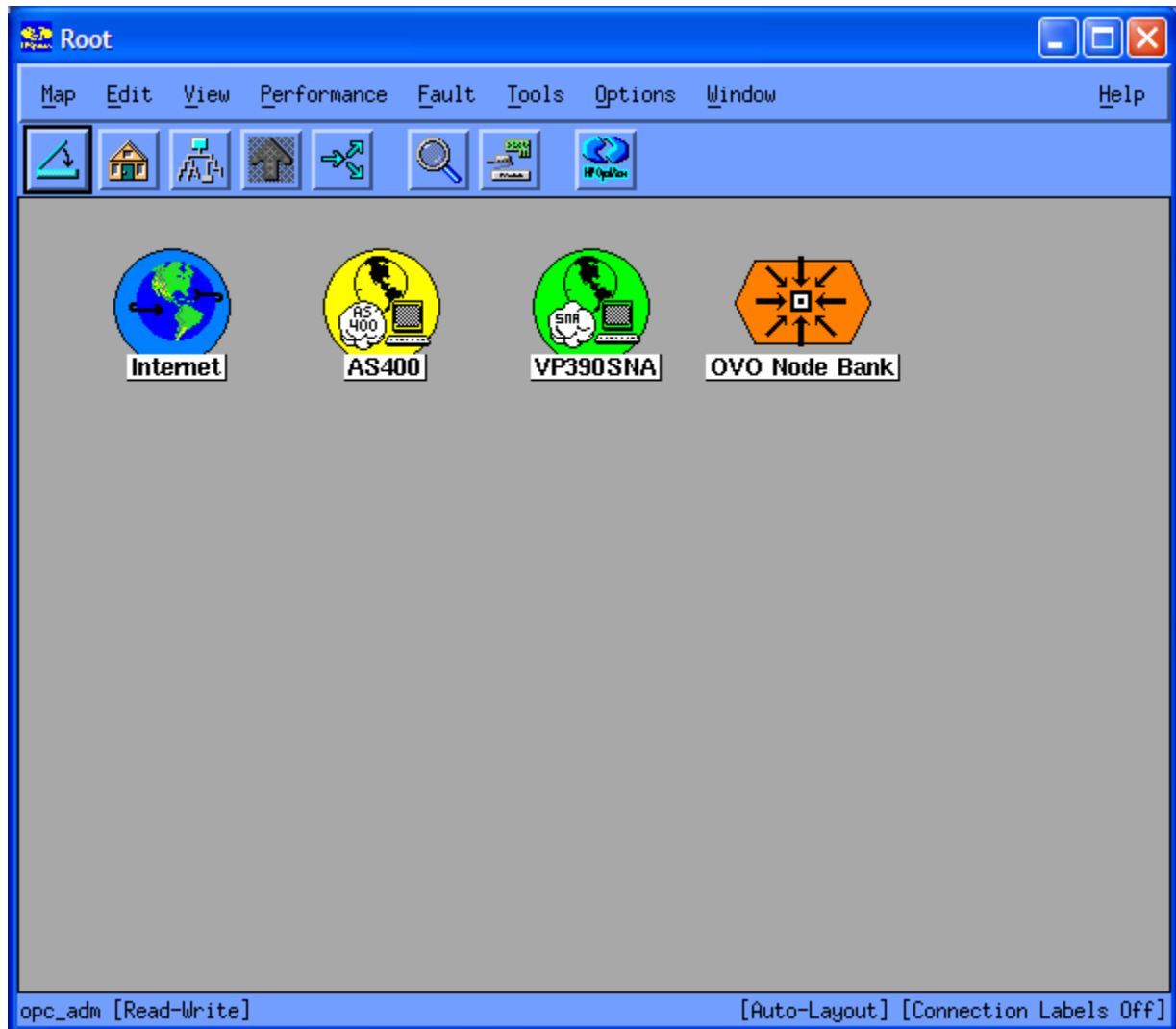


About the Node Bank Window

The Node Bank window shows all nodes for which an individual OVO operator is responsible. It also provides an overview of node hierarchies for larger message environments. Like the Message Browser window the Node Bank window provides color-coded status information.

Figure 8-3 shows a Node Bank window with AS/400 systems seamlessly integrated into it.

Figure 8-3: Node Bank Window

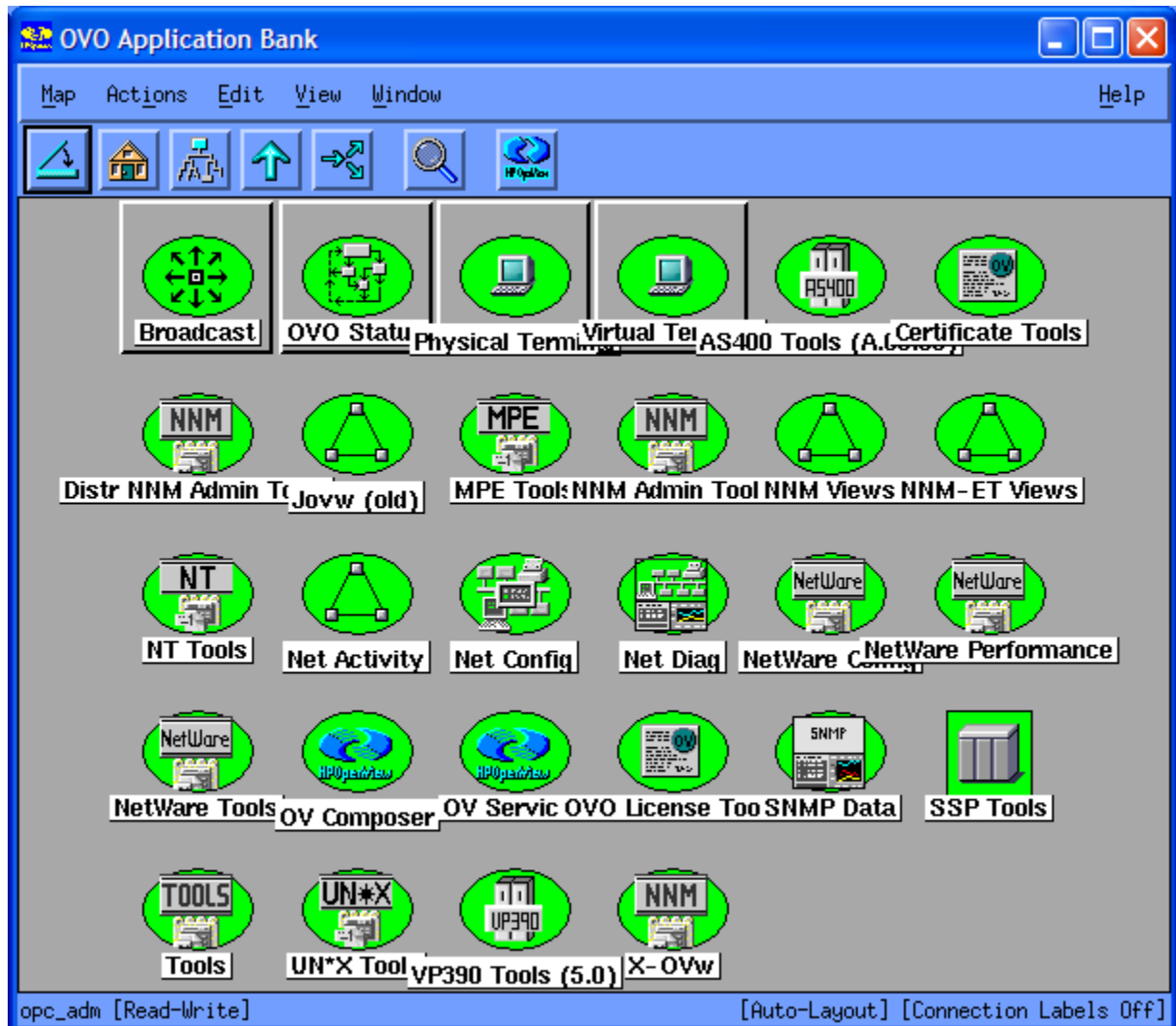


About the Application Bank

The Application Bank window holds the AS/400 Tools icon. When the AS/400 Tools window is opened the system administrator and/or operator is presented with various options in order to manage and maintain the OV OS/400 Agent.

Figure 8-4 shows the Application Bank window.

Figure 8-4: Application Bank Window

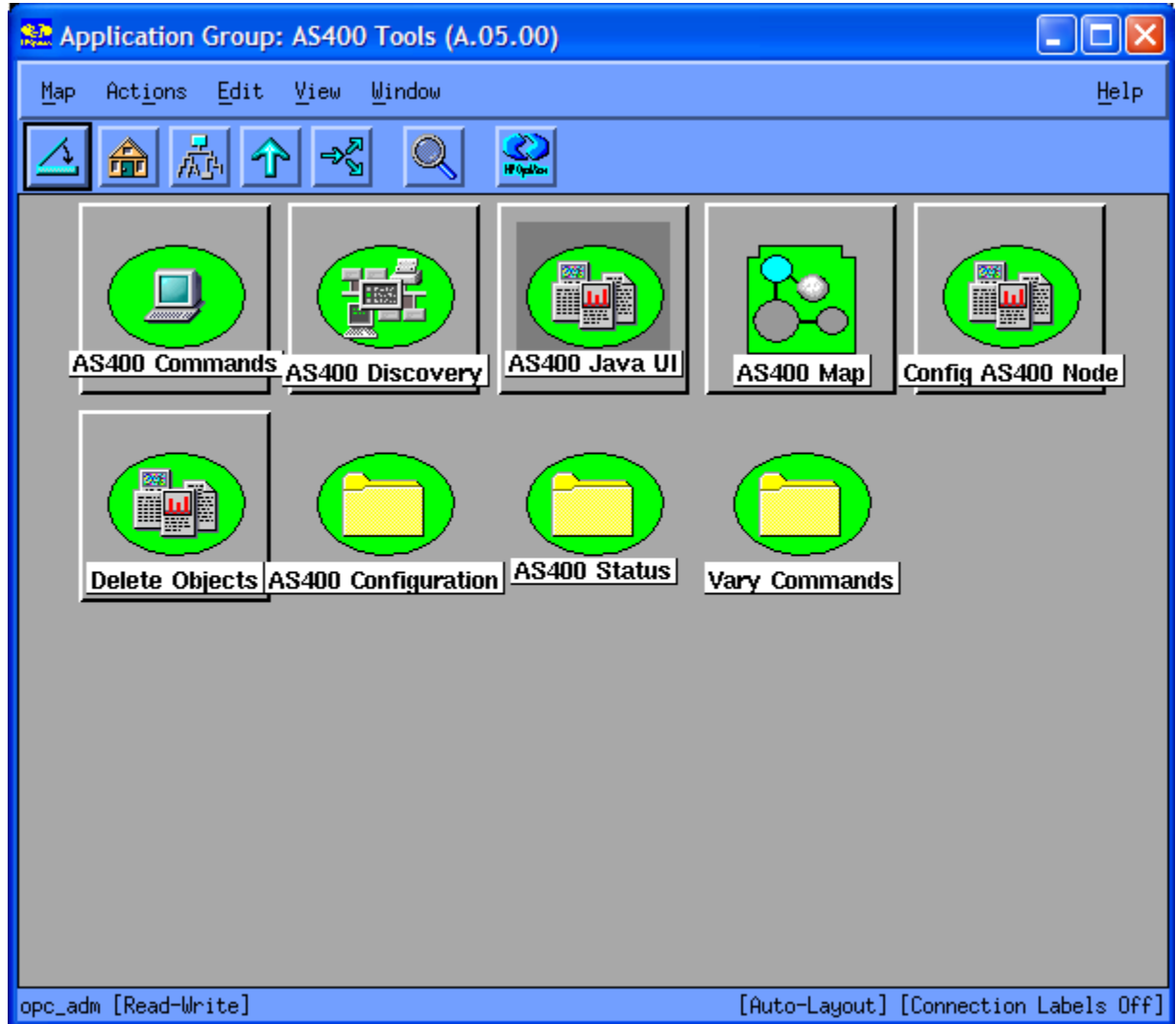


About the AS/400 Tools Window

The AS/400 Tools window holds the icons that an operator will use in order to manage and maintain the AS/400.

Figure 8-5 shows the AS/400 Tools window.

Figure 8-5: AS/400 Tools Window

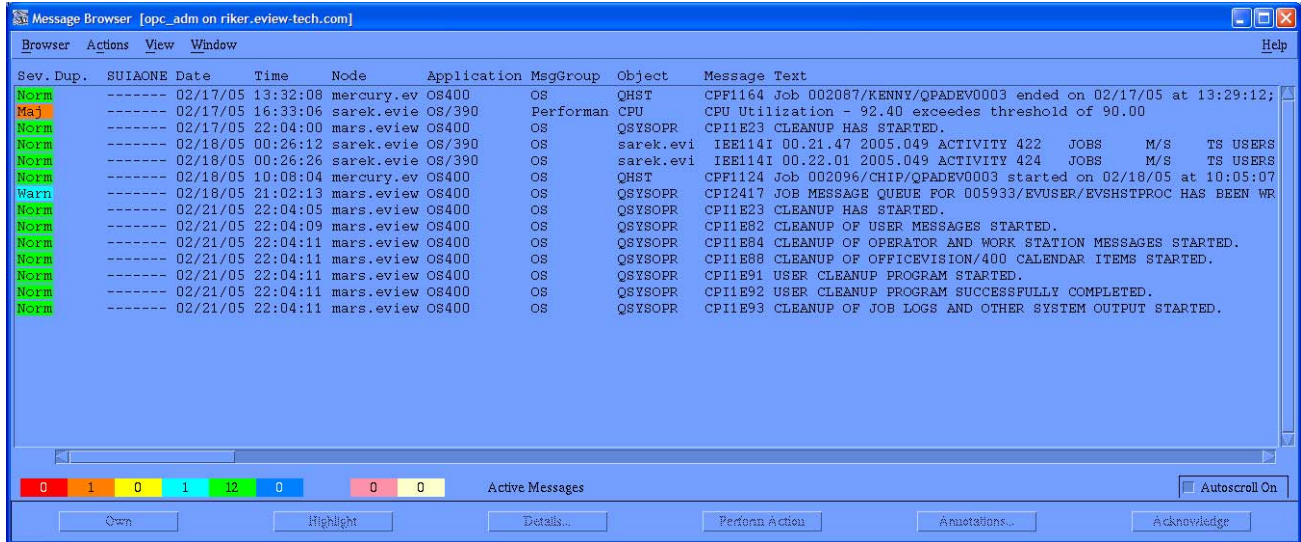


About the Message Browser Window

The Message Browser window is a central information component of HP OpenView Operations (OVO). This window lists all events for which an individual OVO operator is responsible. It is also a point of control for all operator actions.

Figure 8-6 shows a Message Browser window with AS/400 messages delivered by OV OS/400.

Figure 8-6: Message Browser Window



About the Message Detail Window

The Message Detail window shows detailed information about all message attributes. It also provides full access to all actions, annotations, escalations, and other activities associate with application and system messages.

Figure 8-7 shows a Message Detail window for an AS/400 message received through OV OS/400.

Figure 8-7: Message Detail Window

The screenshot shows a 'Message Details' window with the following sections:

- Message Attributes:**
 - Node: mars.eview-tech.com
 - Application: OS400
 - Message Group: OS
 - Object: OSYSOPR
 - Source: Message:OS400 Message
 - Annotations: 0
 - Attributes: 1
 - Message ID: 6bd90668-847e-71d9-1c
 - Forwarding Manager: 1
 - Severity: Normal
 - Service Name: 1
 - Message Key: 1
 - Message Type: 1
 - Time First Created on Managed Node: 02/21/05 22:04:09
 - Time First Received on Mgmt. Server: 02/21/05 22:04:11
 - Number of Duplicates: 0
 - Time Last Received on Mgmt. Server: 02/21/05 22:04:11
 - Owned by: 1 at 1
- Message Text:**

CP11E93 CLEANUP OF JOB LOGS AND OTHER SYSTEM OUTPUT STARTED.
- Actions:**

	Status	Node	Command	Anno.	Ackn.
Automatic	1	1	1	No	No
Operator Initiated	1	1	1	No	No
Notification	1	1	1	1	1
Trouble Ticket	No	1	1	1	No
- Escalations:**

Escalated to: 1 by 1 at 1
- Buttons:**

Show Original Message... Own Modify... Close Highlight Annotations... Acknowledge Help



User generated messages with no message ID will be assigned a generic ID of "EVM9999".



OV OS/400 Performance Data Collection

This chapter describes performance data collection with OV OS/400.

About Performance Data Collection

The OV OS/400 product provides the ability to configure performance data collection for AS/400 managed nodes. Two different sets of performance data are available for collection by the agent. Collected data is forwarded to the OVO management server where it is stored in the local OVO agent performance data store (CODA subagent), or if the OpenView Performance Agent (OVPA) is installed it will be stored by OVPA.

Collected data may be displayed using the OpenView Performance Manager (OVPM) or can also be extracted and stored in other databases such as the OpenView Reporter database.

The following figures show examples of AS/400 performance data displayed using OpenView Performance Manager.

Figure 9-1 CPU Utilization Graph

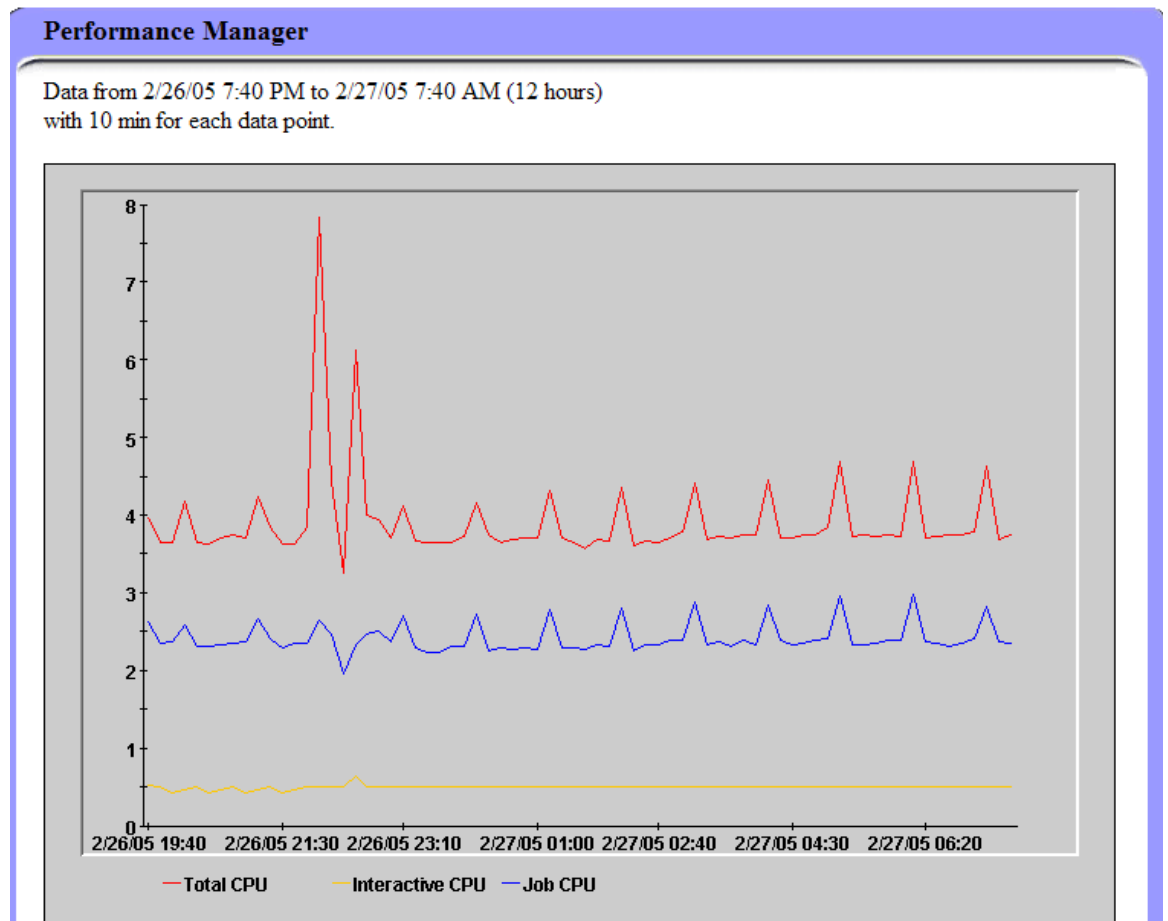
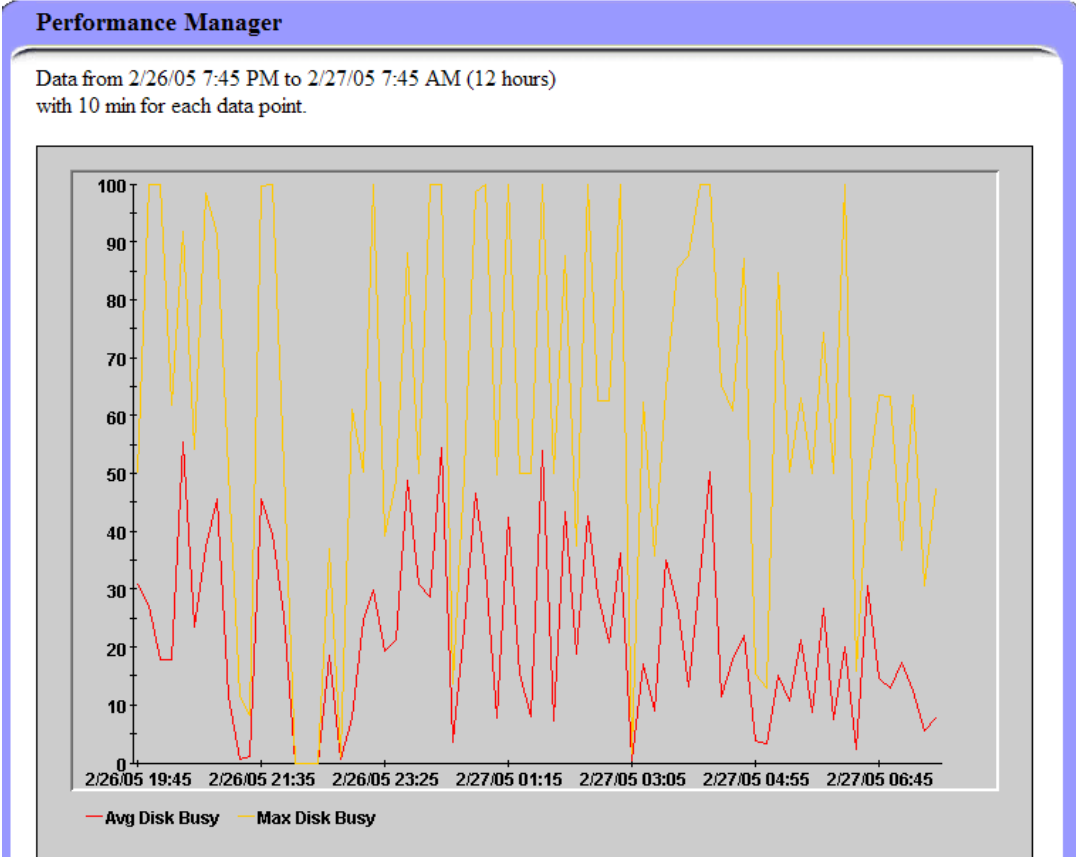


Figure 9-2 Disk Utilization Graph



central processing unit

See CPU.

CPU

central processing unit. Part of computer with circuits that control the interpretation and execution of instructions.

DASD

Direct Access Storage Device. Also known as “disk pack” or “disk drive.” Device in which access time is effectively independent of the data location.

Data Queue

An AS/400 system object that holds data in which a program writes to read from in FIFO order.

disk drive

See DASD.

disk pack

See DASD.

domain

An AS/400, along with all of its lines, controllers and devices.

Export

The command used to set environment variable in ksh shell.

GUI

Graphical user interface.

HP OpenView Windows

See OVW.

IP

Internet Protocol

IPA

Internet address the Internet protocol routes data to.

Initial Program Loader

See IPL.

IPL

Initial Program Loader. Also known as “system restart” or “system startup.” 1. Initialization procedure that causes an operating system to begin operation. 2. Process by which a configuration image is loaded into storage at the beginning of a workday or after a system malfunction. 3. Process of loading system programs and preparing a system to run jobs.

Legacy Link Interface

See LLI.

LLI

Legacy Link Interface. OVO option that allows external processes to connect to OVO action and message managers.

Message Queue

A data queue that holds messages from a specific area of the AS/400. For example QSYSOPR is the message queue for the operating system.

Motif

A set of guidelines that specifies how a user interface for graphical computers should appear on the screen and how the user interacts with it.

Network Node Manager

See NNM.

NNM

Network Node Manager. Comprehensive network management solution that discovers network devices, and provides a map to illustrate the structure of the network and the status of devices and segments. When a major device fails, the event correlation engine evaluates the event stream to pinpoint the root cause of the failure. The manager also helps identify potential trouble spots before a failure occurs.

Node

See Domain.

OpenView Windows

See OVW.

OVW OpenView Windows. Customizable OpenView network management GUI.

Port

An access point for data entry and exit.

Server

1. In general, a functional unit that provides shared services or facilities to workstations over a network (for example, a file server, a print server, or a mail server). 2. In the UNIX operating system, an application program that usually runs in the background and is controlled by the system program controller.

setenv

The command used to set environment variables in C shell.

SNA

System Network Architecture. Network architecture that enables the reliable transfer of data among end users, and provides protocols for controlling the resources of various network configurations.

system restart

See IPL.

system startup

See IPL.

TCP

Transmission Control Protocol. Communications protocol used in the Internet and in any network that follows the U.S. Department of Defense standards for inter-network protocol. This protocol provides reliable host-to-host communication between hosts in packet-switched communications networks and in interconnected systems of such networks. It assumes that the Internet protocol is the underlying protocol.

See also TCP/IP.

TCP/IP

Transmission Control Protocol/Internet Protocol. Set of communications protocols that supports peer-to-peer connectivity functions for both local and wide area networks.

Transmission Control Protocol

See TCP.

Transmission Control Protocol/Internet Protocol

See TCP/IP.

Vp400addagt

Adds a new AS/400 node to be monitored by OVO.