

HP OpenView OS/390 Management

Concepts Guide

HP OpenView



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HP OpenView OS/390 Conventions

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Documentation Map

HP OpenView OS/390 Management (OV OS/390) 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.

NOTE

In addition to OS/390 documentation, related OpenView products provide a comprehensive set of manuals that help you use the products and improve your understanding of the underlying concepts.

OS/390 Printed Manuals

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

HP OpenView OS/390 Management Concepts Guide

Explains OV OS/390 features, functions, architecture, and data flow. Describes OV OS/390 agent and server components, process management, SNA discovery process, network topology, and message windows.

HP OpenView OS/390 Management Installation Guide

Explains how to upload OS/390 installation files from the OVO management server, update OS/390, NetView/390, and SOLVE:NETMASTER software, and start and stop OV OS/390. Also describes OS/390 console commands.

HP OpenView OS/390 Management Administrator's Reference

Explains how to install, de-install, configure, and use OV OS/390. Also includes detailed troubleshooting procedures and explanations of OS/390 system messages.

OS/390 Online Information

The following information is available online:

- o *OV OS/390 Software Release Notes*

1 **About OV OS/390**

This chapter describes HP OpenView OS/390 Management (OV OS/390). It also provides a brief overview of its benefits, architecture, and data flow.

What is OV OS/390?

HP OpenView OS/390 Management (OV OS/390) integrates the OS/390 mainframe platform into HP OpenView Operations (OVO). With the addition of OV OS/390, OVO provides you with true end-to-end management of your information technology (IT) environment, from PCs to mainframe computers.

What OV OS/390 Does

OV OS/390 is closely integrated into the OVO management server. An OV OS/390 agent monitors the S/390 mainframe environment for important events and critical situations. These event and situation messages are communicated via TCP/IP to the OVO management server, where an appropriate automatic or operator action can be issued back to the mainframe.

Benefits of OV OS/390

OV OS/390 provides you with the following benefits:

- o **Compatibility with OS/390**
Ability to co-exist with currently installed OS/390 management solutions.
- o **Health Monitoring for S/390 Systems**
Health monitors for S/390 systems and their standard business applications.
- o **Consolidated Management View**
Consolidated end-to-end management view, which gives you a business-centric perspective.
- o **Automatic Problem Resolution**
Two-way communication with S/390 systems to resolve problems quickly and automatically.

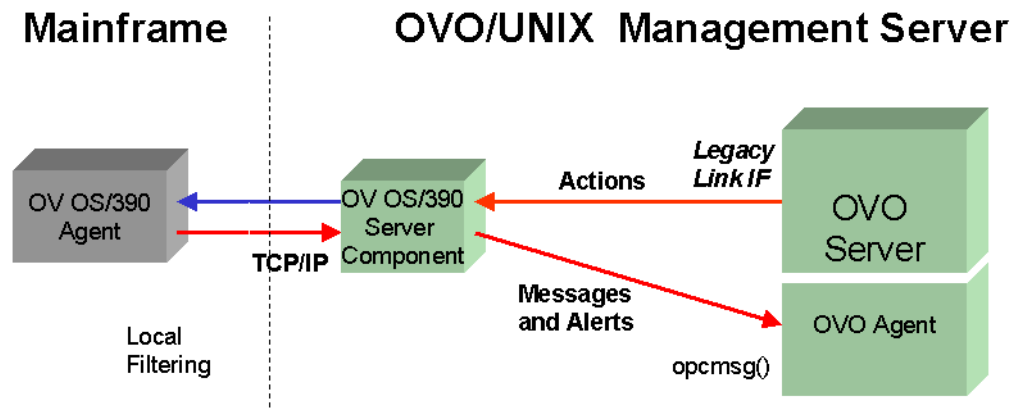
About OV OS/390 Architecture and Data Flow

OV OS/390 consists of two main components: the agent component which runs on the S/390 mainframe, and the server component which runs on the OVO Unix management server. OV OS/390 differs from OVO SPIs in that message templates are not distributed to the agent. Instead, collected messages are forwarded from the agent to the OVO server and template processing is done within the agent portion on the OVO server. This pulls most of the message processing work off of the mainframe, where CPU time is a more valued resource.

Figure 1-1 shows the data flow between the S/390 mainframe and the OVO management server provided by OV OS/390.

Figure 1-1

OV OS/390 Data Flow



Similar to other OVO agents, OV OS/390 enables you to respond to critical S/390 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 S/390 are routed into existing OVO message groups and included in the OVO Message Browser. After a critical situation is resolved, the messages are acknowledged in OVO.

Increasing Productivity

Consolidating the management of mainframes and other systems with OVO enables you to act proactively on critical events and messages. Using this intuitive and cost-effective solution as the central end-user interface provides the basis for service level management.

2 **About the OV OS/390 Agent**

This chapter describes the agent and agent components provided with OV OS/390.

What the OV OS/390 Agent Does

The OV OS/390 agent operates as an OS/390 started task. Mainframe messages are collected by the agent from several sources, outlined below. Pre-defined messages filters identify important messages which are then packaged into a common data structure and forwarded via TCP/IP to the OVO Unix Server for processing.

Forwarding OS/390 Messages

OS/390 messages can include information from about the following:

- Operating System
- DB2 (Data Base 2)
- JES2 (Job Entry Subsystem 2)
- MQSeries (Message Queuing Series)
- CICS (Customer Information Central System) utilizing an OV OS/390 exit program in the CICS address space
- WebSphere

Forwarding VTAM Messages

The OS/390 network task, VTAM, issues messages regarding the mainframe SNA network. The OV OS/390 agent collects these VTAM messages through the VTAM PPO interface (see “About the PPO Subtask”).

Forwarding CNM Alerts

Mainframe-connected devices may issue hardware-generated alerts (comparable to SNMP alarms). The OV OS/390 agent collects these alerts through the VTAM task’s CNM interface (see “About the CNM Subtask”).

Forwarding DB2 Management Data

OV OS/390 provides the ability to monitor DB2 messages that are sent to the OS/390 system console, including additions to the default templates for monitoring critical DB2 messages and processes.

Forwarding Performance and Utilization Data

OV OS/390 performance and resource utilization data is provided by an API interface to the OV OS/390 agent to retrieve direct access storage devices (DASD) utilization statistics. An interface to the IBM Resource Monitoring Facility (RMF) is provided to collect and forward performance information to the OVO Server and OV Performance Agent.

Forwarding WebSphere Management Data

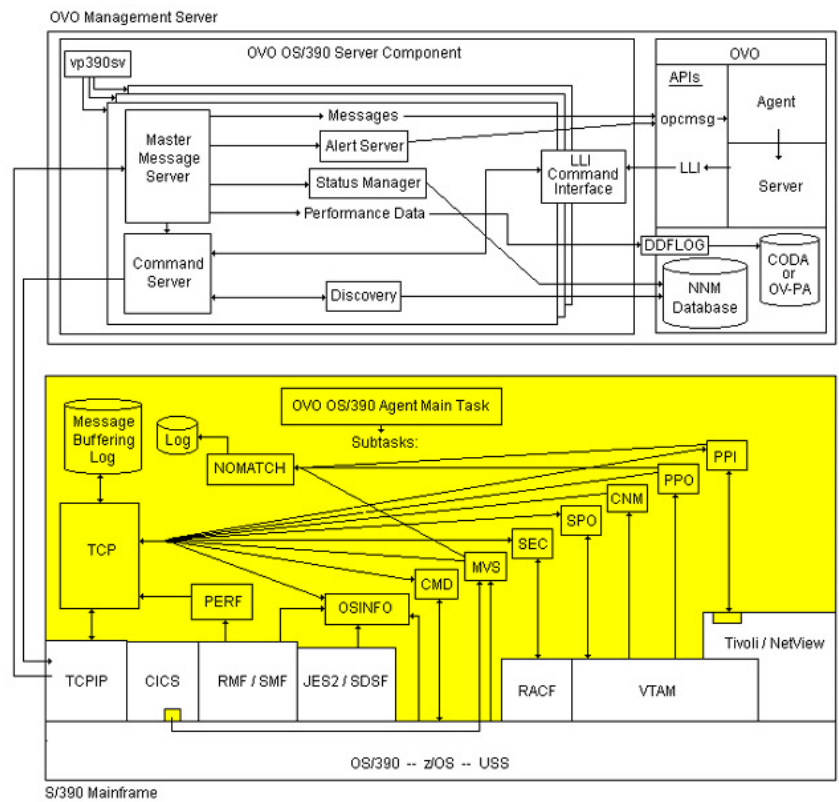
OV OS/390 provides the ability to monitor WebSphere messages that are sent to the OS/390 system console. Included are additions to the default templates for monitoring critical WebSphere messages and processes.

Components of the OV OS/390 Agent

In the OV OS/390 agent, the main task activates several subtasks which interact with the various mainframe message sources. Collected messages are transferred to the TCP subtask, which is responsible for forwarding the information to the OV OS/390 component on the OVO Server.

Figure 2-1 highlights the components of the OV OS/390 agent.

Figure 2-1 OV OS/390 Agent Components



About the OV OS/390 Main Task

The OV OS/390 agent executes as a started task or batch job on the mainframe system. The Job Control Language (JCL) starts the main task program. The main task program opens and reads initialization cards from System Input (SYSIN). Each SYSIN card specifies a subtask to be started. As the cards are processed, a set of interprocess communication queues are set up in storage to be shared by the main task and all subtasks. All communication between tasks within the OV OS/390 agent are accomplished by these queues. The OV OS/390 agent starts the identified subtask for each SYSIN card. After SYSIN card processing is complete, the OV OS/390 agent main task routes messages between the subtask queues and processes maintenance commands from the console operator.

About OV OS/390 Subtasks

The OV OS/390 agent subtasks collectively provide all the necessary communications and system interfaces. Each of the subtasks are dedicated to a particular interface function and communicates with other subtasks using the OV OS/390 agent interprocess communications queues.

Types of Subtask Queues

Each subtask uses the following two queues:

- o **Subtask Input Queue**

Queue used for messages destined for processing in the subtask interface. These messages can be commands for execution or messages to be transmitted to the OV OS/390 server component.

- o **Subtask Output Queue**

Queue used for messages that are the result of subtask processing. Messages from this queue are routed by the main task to other subtasks for processing.

About the TCP Subtask

The TCP/IP Workstation (TCP) subtask is an executable that requests the opening of two TCP/IP ports from the TCP/IP address space on the mainframe, then waits for the OV OS/390 server component to start communication with the OV OS/390 agent mainframe component through these ports. The TCP subtask accepts commands from the OV OS/390 server component, routes them to the appropriate subtask for execution, and sends the replies back to the OVO server component over a TCP/IP port.

As a rule, you must have one TCP subtask defined for each OV OS/390 server component that will be connecting to the mainframe through TCP/IP.

About the CMD Subtask

The Command (CMD) subtask is an executable that does the following:

1. Establishes an extended Multiple Console Support (MCS) console to OV OS/390.
2. Receives OV OS/390 commands (for example, Modify) from the OV OS/390 server components.
3. Sends the commands to the defined console.
4. Receives the response messages from OV OS/390.
5. Sends the OV OS/390 responses back to the OV OS/390 server component that initiated the command.

About the MVS Subtask

The MVS Messages (MVS) subtask is an executable that does the following:

1. Establishes an extended MCS console to OV OS/390.
2. Receives OV OS/390 messages.
3. Forwards OV OS/390 messages to all active OV OS/390 server components.

About the SEC Subtask

The Security Access (SEC) subtask is an executable that issues user ID and password requests to the mainframe security product.

The OV OS/390 agent has been tested successfully with the following software products:

- o RACF (IBM Resource Access Control Facility)

- o ACF2 (Computer Associates Advanced Communications Functions 2)

The SEC subtask accepts user IDs, passwords, and (optionally) new passwords to be sent to RACF or ACF2 for verification. It also sends one of several return codes back to the requesting OV OS/390 server component subtask based on the response from RACF or ACF2.

About the SPO Subtask

The Secondary Program Operator (SPO) subtask is an executable that does the following:

1. Initializes a SPO Active Control Block (ACB) to VTAM.
2. Receives VTAM commands (for example, Vary or Display) from OV OS/390 server component subtasks.
3. Sends the commands to VTAM over the SPO.
4. Receives the response messages from VTAM.
5. Sends response messages back to the OV OS/390 server component subtask that initiated the command.

If several commands arrive at nearly the same time from different OVO operators, the OV OS/390 agent allows multiple SPO subtasks to distribute the work.

About the CNM Subtask

The Communications Network Monitoring (CNM) subtask is an executable that initializes a CNM ACB to VTAM. This initialization enables the ACB to receive unsolicited hardware alerts from VTAM. The CNM subtask passes these alerts in their raw hexadecimal format on to all active OV OS/390 server component subtasks.

Because VTAM allows only one application on the system to act as the CNM receiver, you should define the CNM subtask only if the system does *not* have NetView/390 or SOLVE:NETMASTER running. If NetView/390 or SOLVE:NETMASTER is present, use the PPI subtask instead.

About the PPO Subtask

The Primary Program Operator (PPO) subtask is an executable that initializes a PPO ACB to VTAM. This initialization enables the ACB to receive unsolicited messages from VTAM, most importantly messages about status changes of VTAM resources. The PPO subtask forwards these messages to all active OV OS/390 server subtasks.

Because VTAM allows only one application on the system to act as the PPO

receiver, you should define the PPO subtask only if the system does *not* have NetView/390 or SOLVE:NETMASTER running. If NetView/390 or SOLVE:NETMASTER is present, use the PPI subtask instead.

About the PPI Subtask

The Program-to-Program Interface (PPI) subtask is an executable that communicates with the NTIPPI executable that runs as a user exit in the NetView/390 or SOLVE:NETMASTER address space. Because the NetView/390 or SOLVE:NETMASTER application controls the PPO and CNM connections to VTAM, the OV OS/390 agent requires that the NTIPPI exit be installed to pass on incoming VTAM information to the OV OS/390 agent. The PPI subtask then passes the VTAM message and alert data to active OV OS/390 server component subtasks.

Use the PPI subtask only if a NetView/390 or SOLVE:NETMASTER is present on the system. Otherwise, use the PPO and CNM subtasks.

About the PERF Subtask

The Performance subtask uses an API into IBM's Resource Monitoring Facility (RMF) to collect a wide range of data regarding the mainframe and jobs running on it. The PERF subtask solicits the RMF information on a user-defined time interval, and forwards the collected information to the OpenView performance sub-agent (CODA) or the OpenView Management Server.

OSINFO Subtask

The Operating System Information subtask collects on-demand information about the mainframe system, its active address spaces, DASD statistics, memory usage, and submitted jobs. These data can be requested at any time using a command script on the management server to allow users to develop customized queries about the status of the mainframe.

About the Subtask Restart Function

As an extension to the OVO main task, the OV OS/390 agent has a subtask restart function that automatically restarts the mainframe subtasks when communication is lost from the host. This restart function eliminates the need to restart the entire OV OS/390 agent address space.

3 About the OV OS/390 Server

This chapter describes the server components and process management provided by HP OpenView OS/390 Management (OV OS/390).

About Server Components

Figure 3-1 shows the HP OpenView OS/390 Management (OV OS/390) server components running on the HP OpenView Operations (OVO) for UNIX management server.

Figure 3-1 OVO OS/390 Server Components

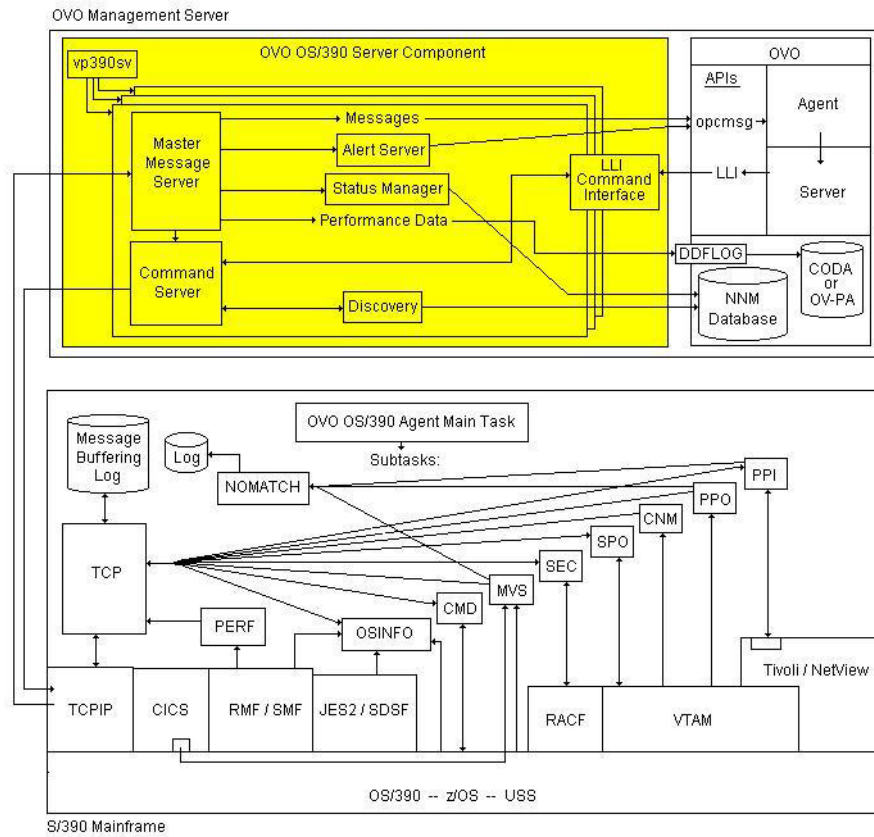
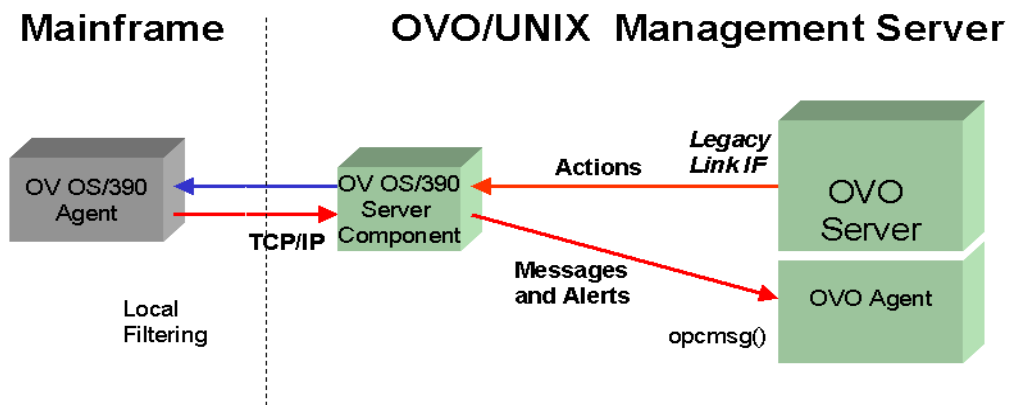


Figure 3-2 shows the data flow between the OV OS/390 managed node and the UNIX management server.

Figure 3-2 Data Flow Between OV OS/390 Manage Node and OVO Management Server



Integrating OV OS/390 Server Components

The OV OS/390 server components are integrated into OVO through the following:

- o ovstart and ovstop commands
- o opcmsg() application program interface (API)
- Legacy Link Interface (LLI) API
- o OVO Motif and JAVA graphical user interface (GUI)
- o Service Navigator “XML” mapping

The OV OS/390 Command Interface and Command Server components use opcmsg() and LLI APIs to enable automatic and operator-initiated actions. These actions are based on recommended responses received from customized OVO templates on the

management server. The OV OS/390 server components use the OpenView Motif operator console to graphically display discovered System Network Architecture (SNA) resources and topology.

Types of OV OS/390 Server Components

For each mainframe computer monitored and controlled by OVO, there are four server components:

- o Master Message Server (MMS)
For details, see “About the Master Message Server” below.
- o Command Server
For details, see “About the Command Server” below.
- o Alert Server
For details, see “About the Alert Server” below.
- o Status Manager
For details, see “About the Status Manager” below

You must install these OV OS/390 server components before you install the OV OS/390 mainframe agent.

About Process Management

The OV OS/390 program may be run from the command line at any time, with parameters to start, stop, or check the status of the OV OS/390 processes for a particular S/390 mainframe computer.

Starting Up and Shutting Down Servers (vp390sv)

To ensure that the OpenView software and the OV OS/390 components of the OVO management server start up and shut down in the appropriate sequence, the OV OS/390 process management program (vp390sv) is registered in the HP-UX boot process. The vp/390sv program may be run from the command line at any time with parameters to start, stop, or check the status of the OV OS/390 processes for a particular mainframe computer.

About the Master Message Server (MMS)

The Master Message Server (MMS) is the primary server for OV OS/390 on the

OVO management server. All incoming mainframe messages and performance data comes through the MMS, and is then forwarded to the OVO agents, as well as the OV OS/390 Alert Server, Status Manager, and to Dynamic Data Feed (DDF) log for Common Observation Distributed Agent (CODA) or OVPA.

About the Command Server

The Command Server forwards OVO server action requests through the LLI API and command interface to the S/390 mainframe for execution, then delivers the responses back to OVO.

About the Alert Server

The Alert Server process receives SNA hardware and software alerts from the Master Message Server (MMS), and analyzes the alerts to determine the originator and alert description. The Alert Server then forwards the alerts to OVO, where the original alert data is stored in the Original Message Text field.

About the Status Manager

The Status Manager receives status messages generated by the mainframe VTAM program. The Status Manager updates mainframe resource icons in the SNA network map.

About the OVO Instruction Text

The OVO Instruction Text interface is used to display the translation for SNA alerts. Instruction text for alerts consists of a text translation of the alert's binary code points, which includes an alert description, probable causes, and operator actions.

About the SNA Discovery Process

The OV OS/390 SNA Discovery process issues commands on S/390 mainframe computers to discover VTAM resources. Discovered resources are stored in the OpenView object database (ovwdb). These discovered resources are sent to the SNA Map Application.

About the LLI Command Interface

The OV OS/390 Legacy Link Interface (LLI) command interface communicates

with the OVO LLI and the Command Server to receive messages, process messages, and send commands.

Mapping VTAM Resources (SNA Map Application)

The SNA Map Application builds a hierarchical map of OS/390 VTAM resources from database objects created by the SNA Discovery process. The SNA Map Application creates icons to represent each object in the SNA hierarchy. It then sets the status of each object with OVO Server Components.

Adding a Mainframe to OVO (vp390addagt)

The vp390390addagt program adds a new mainframe computer to be monitored by OVO. After you enter some identifying information about the mainframe, vp390addagt adds the mainframe to the OVO Node Bank, and places it in the mainframe node group.

Discovering Network Topology

OV OS/390 provides a discovery process for building a hierarchical map of OS/390 Virtual Telecommunications Access Method (VTAM) resources. Specific VTAM resource types are represented in the hierarchical map by different icons.

Initiating the Discovery Process

The OS/390 VTAM resources discovery process is initiated by the OVO administrator or authorized operator by dragging and dropping icons in the hierarchical map with the Discovery application, which is located in the VP390 Tools folder of the Applications Bank.

Discovering Resources

The Discovery application discovers major nodes and physical units (PUs) of a selected S/390 domain. Optionally, you can use the application to discover the logical units (LUs) of a selected S/390 domain. You choose these optional resources when you create the mainframe node with the Add 390 Node application.

Storing Information

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

Displaying SNA Resources

To provide a graphical hierarchical view of discovered resources, you can assign the VP390 Map application, located in the VP390 Tools application folder, to operators. The Status Manager monitors status changes, which it indicates with icons representing the VTAM resources on the VP390SNA submap. Operators can select VTAM resource icons from the appropriate submap, and use them to execute actions on the selected resources.

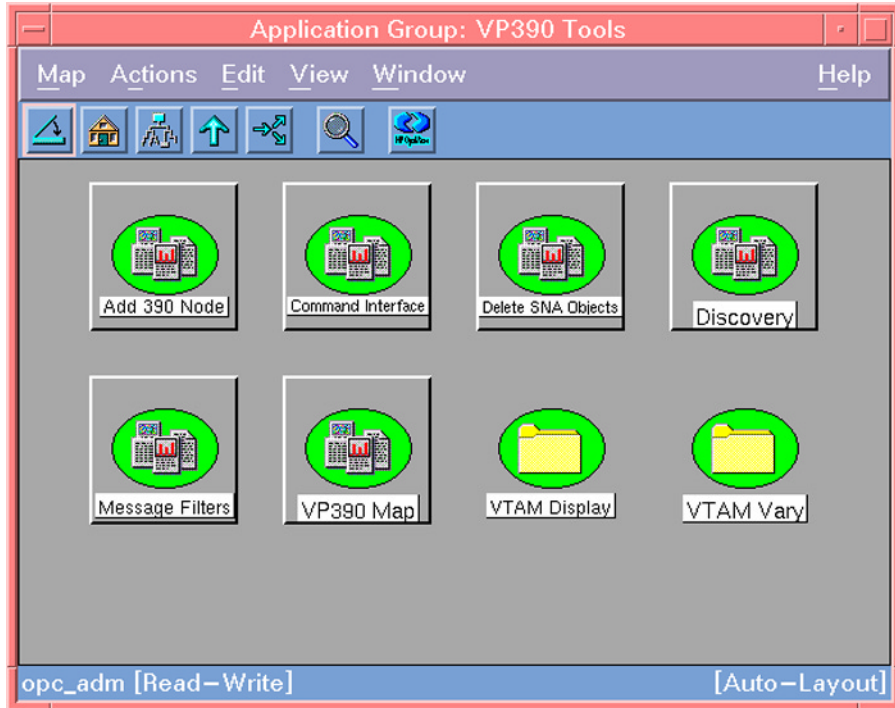
About the Application Group Window

The VP390 Tools Application Group window contains a logical grouping of applications that can be assigned to individual OVO operators to help monitor and manage the S/390 mainframe environment. For specific actions that can be performed this window, see the *OV OS/390 Administrator's Reference*.

Figure 4-1 on page 36 shows the Application Group: VP390 Tools window.

Figure 4-1

OV OS/390 Application Group: VP390 Tools Window

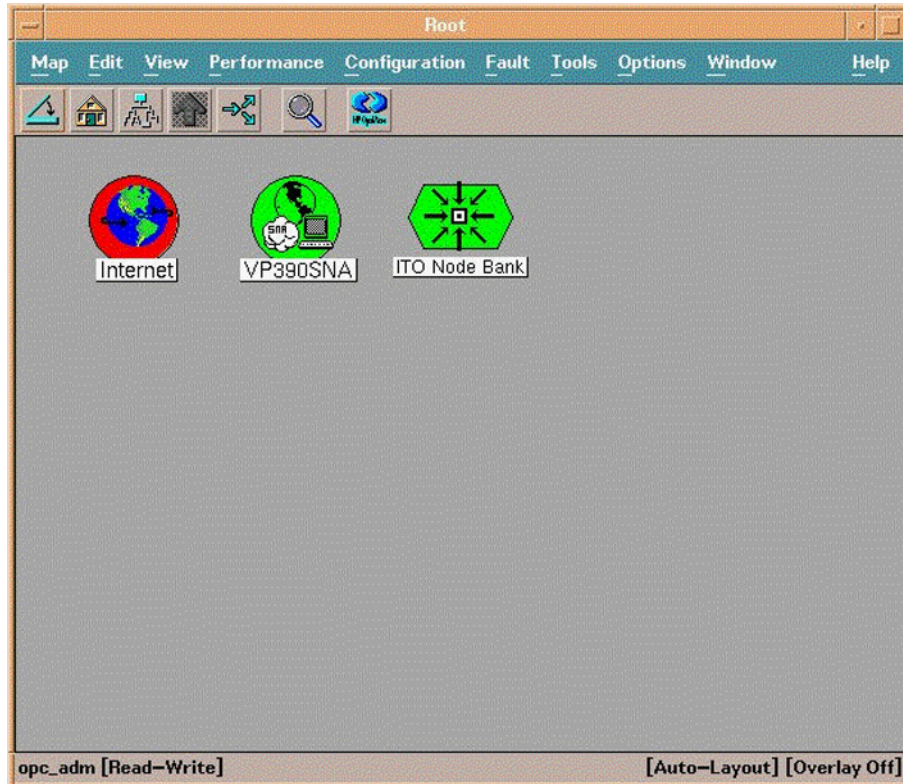


About the OVO Root Window

Figure 4-2 shows the OVO Root window following a discovery.

Figure 4-2

OVO Root Window Following a Discovery



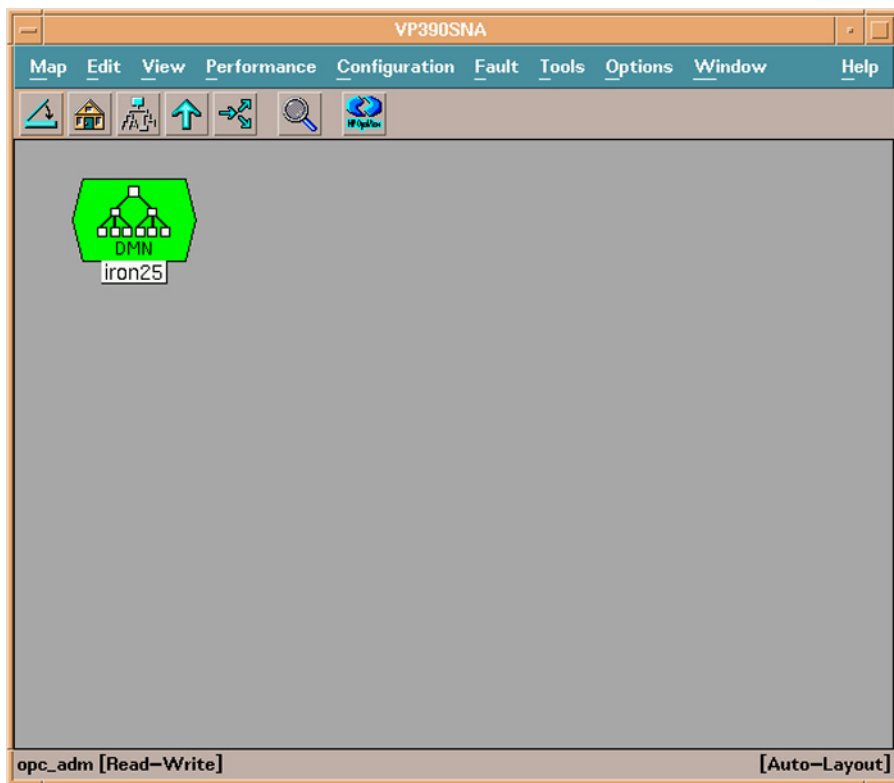
About the OV OS/390 Domain Submap

The VP390SNA Domain submap contains an icon for each S/390 domain defined and discovered by the OV OS/390 Discovery process (see “Discovering Network Topology” on page 34).

Figure 4-3 shows the VP390SNA Domain submap.

Figure 4-3

VP390SNA Domain Submap



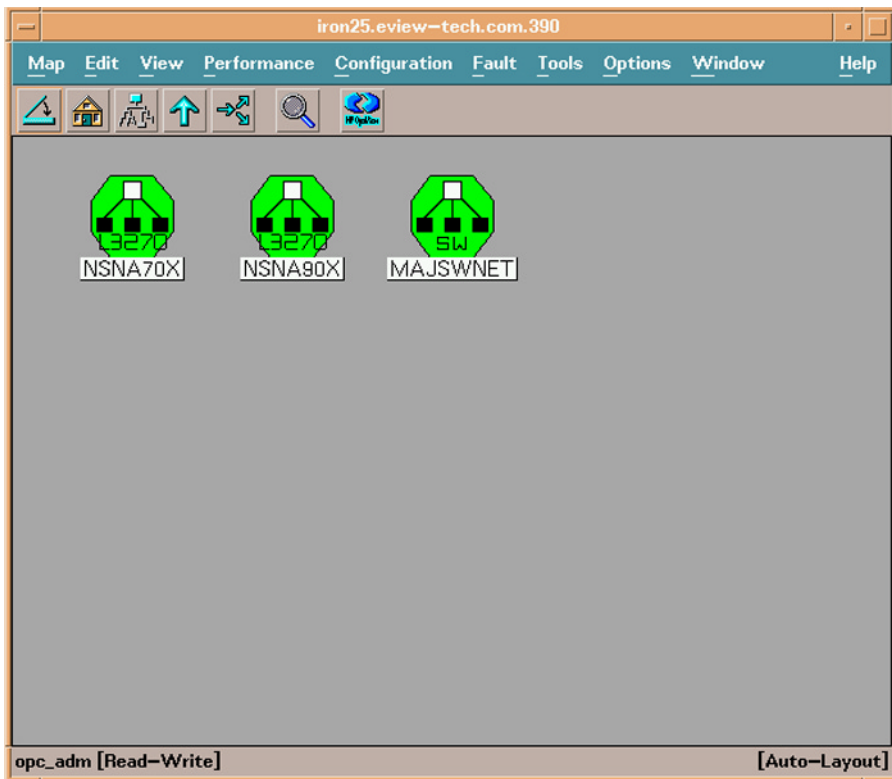
About the Major Node Submap

The OV OS/390 Major Node submap graphically displays the major VTAM nodes associated with the domain you selected in the discover process (see “Discovering Network Topology” on page 34).

Figure 4-4 shows the Major Node submap.

Figure 4-4

OV OS/390 Major Node Submap

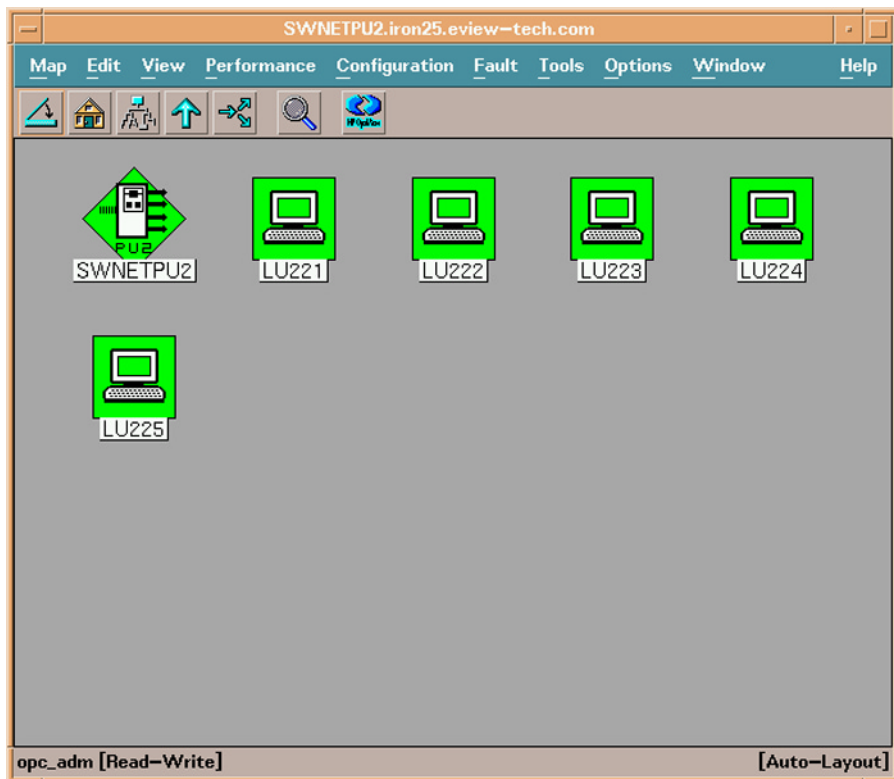


About the Subordinate Resource Submap

The OV OS/390 Subordinate Resource submap displays all known physical units (PUs) and, optionally, logical units (LUs) associated with the physical units you discovered in the discovery process (see “Discovering Resources” on page 34).

Figure 4-5 shows the Subordinate Resource submap.

Figure 4-5 OV OS/390 Subordinate Resource Submap



Types of Message Windows

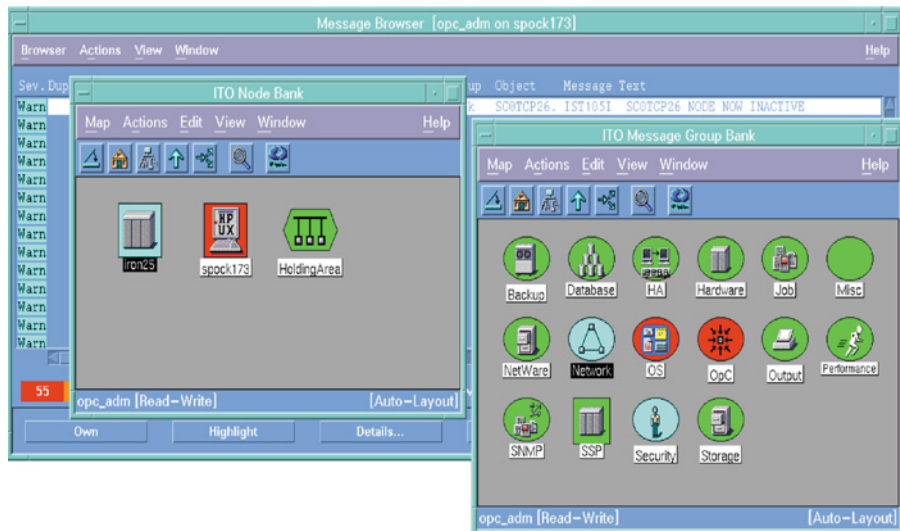
OV OS/390 installation provides instant integration with existing OVO windows:

- o Node Bank
- o Message Browser
- o Message Detail

Figure 5-1 shows how you can use these windows for a consolidated management view of application system messages across your S/390 mainframe environment.

Figure 5-1

Consolidated View of Application and System Messages

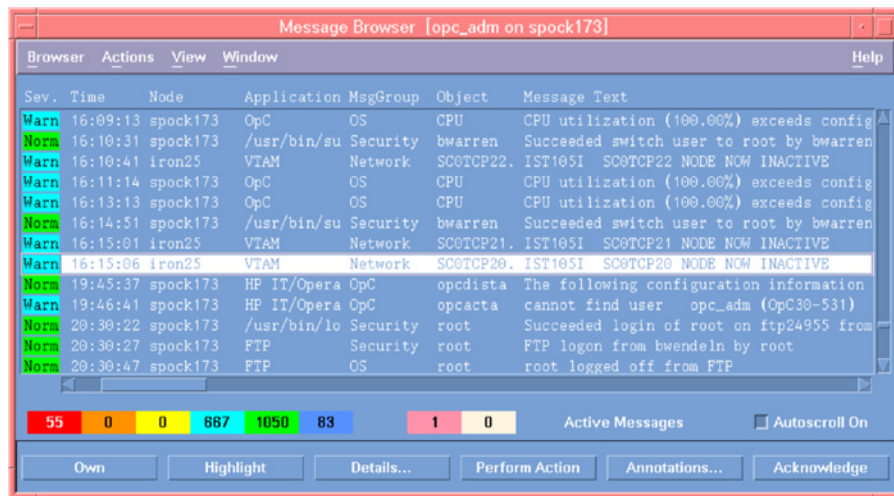


About the Message Browser Window

The Message Browser window is a central information component of 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 5-2 shows a Message Browser window with mainframe messages supplied by OV OS/390.

Figure 5-2 Message Browser Window



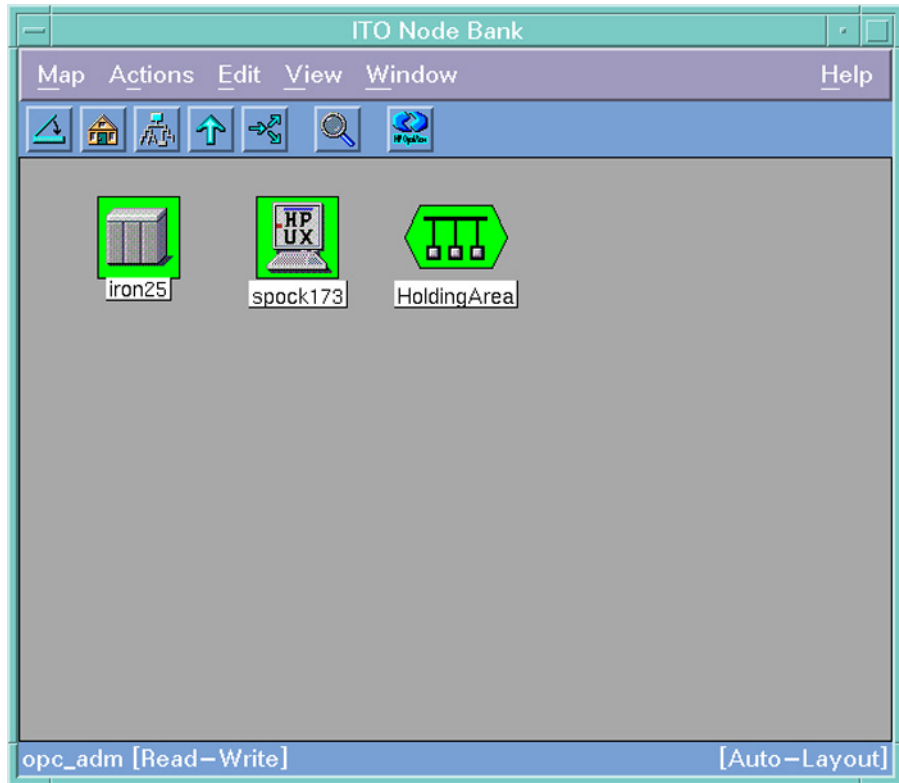
About the Node Bank Window

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. OV OS/390 adds a node for each monitored mainframe LPAR.

Figure 5-3 shows the Node Bank window with an S/390 mainframe node defined.

Figure 5-3

Node Bank Window

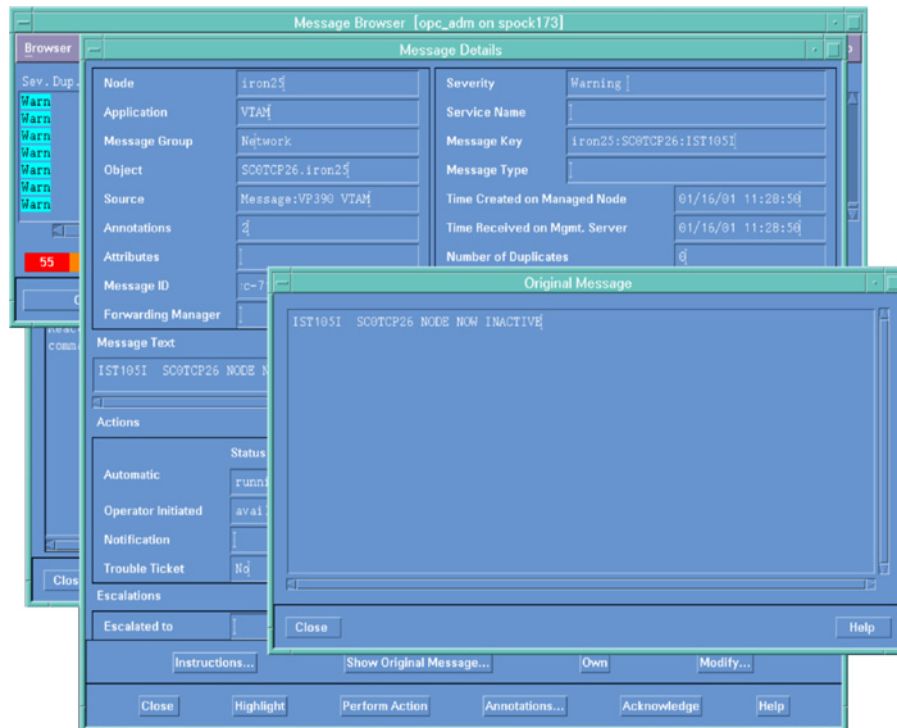


About the Message Detail Window

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 5-4 shows the Message Detail window for a mainframe message received via OV OS/390.

Figure 5-4 Message Detail Window



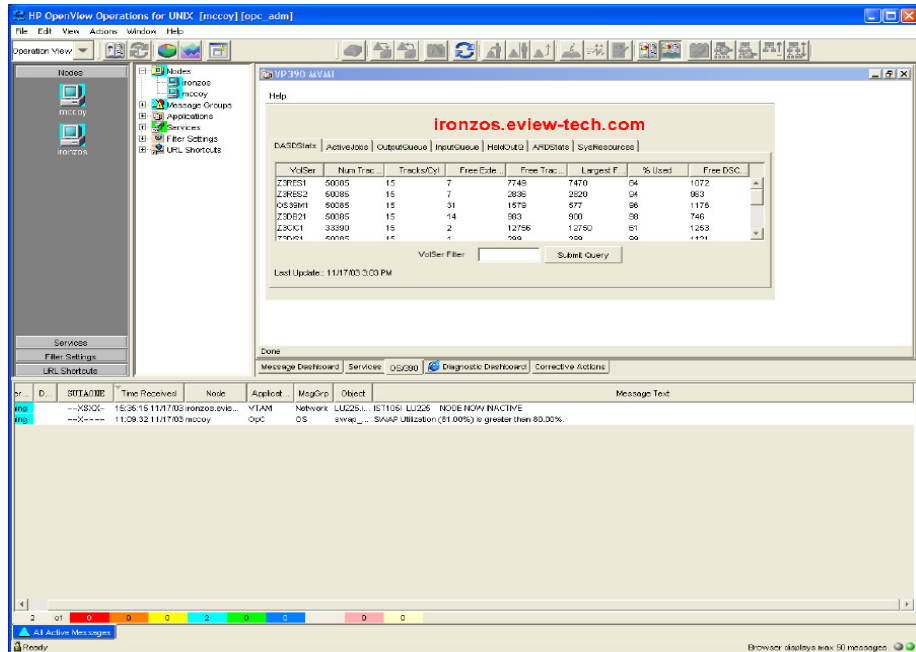
6 Managing Using the Mainframe Visual Management Interface (MVMI)

OV OS/390 integrates with the OpenView Operations Java console. The OV OS/390 Mainframe Visual Management Interface (MVMI) is a Java applet that

provides an interactive tool in which the operator can view and manipulate the following:

- JES2 Held, Output and Input queues
- Direct Access Storage Device (DASD) information
- Active Jobs
- Address Space Performance data
- System Resource statistics

Figure 6-1 OVO Java console with OV OS/390 Mainframe Visual Management Interface



DASD Statistics

The DASD Statistics display enables the operator to monitor online DASD volumes. This display provides information about DASD capacity, utilization and VTOC (Volume Table of Contents) usage.

From the DASD Statistics window, the operator may provide a filter to display a subset of online DASD volumes.

Figure 6-2

DASD Statistics Window

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DASDStats | ActiveJobs | OutputQueue | InputQueue | HeldOutQ | ARDStats | SysResources

VolSer	Num Trac...	Tracks/Cyl	Free Ext...	Free Trac...	Largest F...	% Used	Free DSC...
SCPMV5	26550	15	40	3276	1206	87	679
OS39H6	22500	15	5	2507	2490	88	257
HFSUS1	3000	15	4	223	210	92	258
MVS/WK1	26550	15	74	813	82	96	255
MVS/WK2	26550	15	108	2096	481	92	309
NTIDRD	13275	15	1	3813	3813	71	512

VolSer Filter Submit Query

Last Update:: 8/14/03 1:46 PM

Active Jobs

The Active Jobs display enables the operator to monitor jobs that are currently active on the selected OS/390 system. The process gathers information on the active jobs such as jobname, stepname, and performance group.

From the Active Jobs window the operator may cancel active jobs or adjust the jobs performance by changing the current performance group.

Figure 6-3 shows a Message Browser window with mainframe messages supplied by OV OS/390.

Figure 6-3

Active Jobs Display

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DASDStats | ActiveJobs | OutputQueue | InputQueue | HeldOutQ | ARDStats | SysResources

Job Na...	Step N...	Proc St...	JobID	Owner	Status	PGN	Disp Prior	Real
PCAUTH	PCAUTH				N/S	5	8B	40
RASP	RASP				N/S	5	FF	98
TRACE	TRACE				N/S	5	8B	41
DUMPSRV	DUMPSRV	DUMPSRV			N/S	0	FF	61

JobName Prefix:

Last Update: 8/14/03 1:50 PM

Search in the sorted column:

JES2 Output Queue

The Output Queue display enables the operator to view a list of jobs awaiting output. Output information such as destination, number of records, and creation date is displayed in the window.

From the Output Queue window the operator can purge, hold, release or change priority of jobs.

Figure 6-4

JES2 Output Queue

The screenshot shows the JES2 Output Queue window. At the top, the URL **iron25.eview-tech.com** is displayed in red. Below the URL is a navigation bar with tabs: DASDStats, ActiveJobs, OutputQueue (selected), InputQueue, HeldOutQ, ARDStats, and SysResources. The main area contains a table with the following data:

Job Na...	Job ID	Owner	Priority	Class	Forms	Destina...	TOT-REC	CRDATE
BJWTEST	JOB00457	NTIBJW	144	A	STD	LOCAL	511	6/5/01
BJWTEST	JOB00469	NTIBJW	144	A	STD	LOCAL	511	6/5/01
BJWSPZAP	JOB00809	NTIBJW	144	A	STD	LOCAL	22	8/13/01
NTIBJWZP	JOB00811	NTIBJW	144	A	STD	LOCAL	22	8/13/01

Below the table is a control area with a "JobName Prefix" input field, a "Submit Query" button, and four buttons: "Purge", "Hold", "Release", and "Change Priority". The "Last Update" timestamp is 8/14/03 1:51 PM. At the bottom, there is a search bar labeled "Search in the sorted column".

JES2 Input Queue

The Input queue display enables the operator to view a list of jobs on the input queue waiting for execution.

From the Input Queue window the operator can cancel, hold or change the priority of the waiting jobs.

Figure 6-5

JES2 Input Queue

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DASDStats | ActiveJobs | OutputQueue | **InputQueue** | HeldOutQ | ARDStats | SysResources

Job N...	Job ID	Owner	Priority	Class	Postition	PRT D...	RMT	Node	SAFF
IBMUSERS	JOB07734	IBMUSER	9	A		LOCAL			1
IBMUSERS	JOB07735	IBMUSER	9	A		LOCAL			1
IBMUSERS	JOB07736	IBMUSER	9	A		LOCAL			1
IBMUSERS	JOB07733	IBMUSER	8	A		LOCAL			1

JobName Prefix: Submit Query Cancel Hold Change Priority

Last Update: 8/14/03 1:52 PM

Search in the sorted column:

JES2 Held Queue

The Held Queue display provides the operator with a list of jobs that have held output. Output information such as destination, number of records is provided in the display.

From the Held Queue display the operator can purge or release jobs.

Figure 6-6

JES2 Held Queue

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DASDStats | ActiveJobs | OutputQueue | InputQueue | HeldOutQ | ARDStats | SysResources

Job Na...	Job ID	Owner	Priority	Class	ODISP	Destina...	TOT-REC	CRDATE
BJWTEST	JOB00457	NTIBJW	144	A	HOLD	LOCAL	156	6/5/01
BJWTEST	JOB00469	NTIBJW	144	A	HOLD	LOCAL	160	6/5/01
BJWSPZAP	JOB00809	NTIBJW	144	A	HOLD	LOCAL	41	8/13/01
NTIBJWZP	JOB00810	NTIBJW	144	D	HOLD	LOCAL	41	8/13/01

JobName Prefix

Last Update: 8/14/03 1:53 PM

Search in the sorted column

Address Space Statistics

The Address Space displays performance information about current address spaces on the OS/390 system. Information about memory usage, cpu usage and I/O activity is displayed for the operator.

Figure 6-7

Address Space Statistics

Job N...	Dev Conn	FF 16M	PRIV FF	LSQA CSF	TCB Time	CPU Time	EXCPs
MASTER	0.0	0	178	85	991465.0	5260675.0	4560.0
PCAUTH	0.0	1	2	28	288.0	300.0	16.0
RASP	0.0	0	0	0	97.0	11308.0	2.0
TRACE	0.0	0	3	37	62.0	71.0	9.0
DUMPSRV	0.0	0	2	59	987.0	1126.0	164.0
VCFAS	0.0	0	53	443	2750613.0	2850600.0	75.0

JobName Prefix

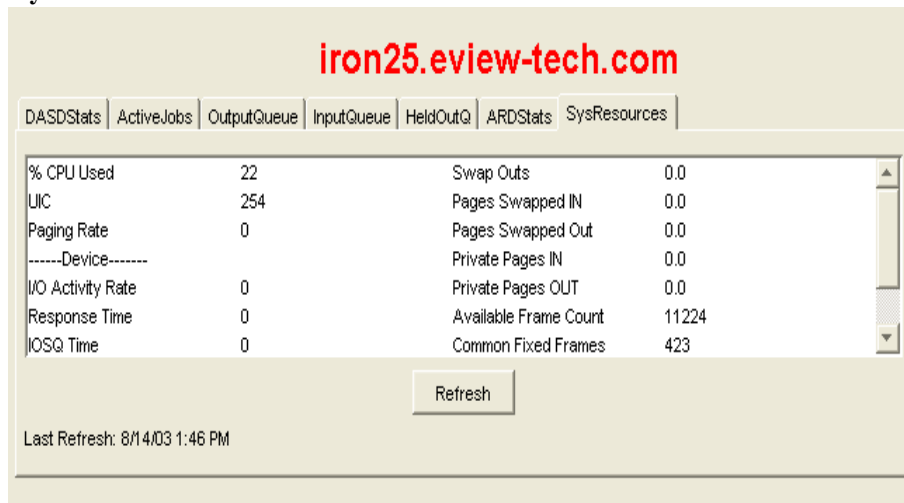
Last Update: 8/14/03 1:54 PM

System Resource Statistics

The System Resource Statistics displays information about current overall system performance.

Figure 6-8

System Resource Statistics





Collecting OS/390 Performance and DASD Utilization Data

Reporting on Performance and DASD Utilization Data

OV OS/390 provides the capability to collect a subset of performance data that is collected by the IBM Resource Monitor Facility (RMF) and utilization statistics for online Direct Access Storage Device (DASD) volumes.

Collected data is stored in either the OVO agent performance sub-agent (CODA) data store or in OV Performance agent (OVPA) log files.

Collected data is available for reporting for using available OpenView products such as OpenView Performance Manager for OpenView Reporter.

