

# OVO Report Pack

For the Windows<sup>®</sup>, HP-UX, Solaris, and Linux operating systems

Software Version: 1.41

HP Performance Insight 5.41

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## User Guide

November 2009



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# 1 Overview

## OVO/HPOM Message Generation

On a high level, OVO/HPOM generates messages in the following way:

- 1 An event occurs on a managed object. The managed object creates a message.
- 2 The OVO/HPOM agent on the managed node receives the message.
- 3 The message is compared to filters. Messages matching suppress conditions or duplicate messages are suppressed. Other messages are forwarded.
- 4 The message is logged locally.
- 5 Messages that match filters are converted to the OVO/HPOM message format, and forwarded to the management server.
- 6 The management server processes the message by taking one of the following actions:
  - Assigns the message to another message group (regrouping).
  - Starts non-local actions configured for the message on the specified node.
  - Forwards the message to external notification interfaces and trouble ticket service.
  - Escalates the message to another preconfigured management server.
  - Buffers the message in the Pending Message Browser.
- 7 The active message is stored in the database.
- 8 The message is displayed in a Message Browser window.
- 9 When the message is acknowledged, it is removed from the active browser and put into the history database.

## Active Messages

- They are messages that have not been acknowledged by an OVO/HPOM operator.
- They display in the OVO/HPOM Message Browser.
- For OVO for UNIX/HPOM for UNIX, they reside in the `opc_act_messages` table.
- For OVO for Windows/HPOM for Windows, they reside in the `OV_MS_Message` table.



OVO for Windows/HPOM for Windows history messages also reside in this table. A field state indicates if the message is active or history. Active messages have a state of 1, 2, or 3. History messages have a state of 4 or 5.

## History Messages

- They are messages that have been acknowledged.
- OVO for UNIX/HPOM for UNIX history messages are stored in the `opc_hist_messages` table for historical analysis.
- OVO for Windows/HPOM for Windows history messages are stored in the `OV_MS_Message` table.



OVO for Windows/HPOM for Windows active messages also reside in this table. A field state indicates if the message is active or history. Active messages have a state of 1, 2, or 3. History messages have a state of 4 or 5.

## Message Groups

A message group is a convenient way to categorize messages. Messages belonging to the same function or task can be collected into a single group. For example, the message group Backup can contain all messages that relate to the backing up and storing of data (for example, messages originating from a network backup program, pieces of hardware used in the backup or storage operation, and so on). Message groups are then assigned to operators, who see and manage only those groups assigned to them.

## Applications

An application can be a program, command, script, utility or service that the operator uses to maintain and control system and network services. For example, a backup program, and the process status command **ps**, can be integrated as applications.

# HP Performance Insight

Performance Insight collects data from many sources, performs in-depth trend analysis, maintains performance baselines, and provides users with convenient, web-based reporting. Following is a partial list of product features:

- Distributed architecture
- Easy to scale (supports data collection from thousands of agents)
- CODA/PA agent support
- Multi-company security model
- Data warehousing
- Near Real Time reporting
- Forecasting
- Location Independent Reporting (LIR)
- Archiving via Long Term Retention (LTR)
- Multiple aggregation options (by hour, day, week, month; by location, by customer)
- Thresholding and alerting
- Easy identification of bottlenecks via top-10 ranking
- Easy identification of capacity trends
- Accurate and timely documentation for management
- Integration with Network Node Manager (NNM)
- Integration with OpenView Operations (OVO)

The reporting solutions created for Performance Insight cover many areas of business technology optimization. For details, see [Appendix B, PI Report Packs](#).

# OVO Report Pack

The OVO Report Pack processes the following data from one or multiple OVO/HPOM servers:

- Message patterns based on OVO/HPOM Active message tables
- Message patterns based on OVO/HPOM History message tables
- Service status based on the OVO/HPOM Service Log table

The OVO Report Pack maintains the following data sets:

- Active Messages (currently unacknowledged messages)
- Active + History Messages (consolidated message reporting)
- Service Log
- Configuration

Each data set has four summary tables and four reporting views.

The OVO Report Pack offers the following features:

- Multiple groups and roll-up combinations for:
  - All OVO/HPOM servers
  - Node and Application
  - Node and Template
  - Server and Service
- Server configuration reporting
- Template and condition reporting

## Enhancements in Version 1.41

Version 1.41 of the report pack includes new features and new upgrade packages.

- OVO\_Upgrade\_to\_141.ap
- OVO\_Datapipe\_Upgrade\_to\_14.ap (to upgrade RNS 12.0 or RNS 13.0 to RNS 14.0)
- OVO\_Datapipe\_Upgrade\_14\_to\_141.ap (to upgrade RNS 14.0 to RNS 14.1)
- Support for HPOM 9.0 for Windows, HP-UX, Solaris, and Linux operating systems.



You *can not* upgrade OVO\_Datapipe to version 1.41 (RNS 14.1) directly from version 1.2 (RNS 12.0) or 1.3 (RNS 13.0)

To upgrade to 1.41, follow these steps:

- 1 Launch Package Manager.
- 2 Install OVO\_Datapipe\_Upgrade\_to\_14.ap to upgrade from OVO\_Datapipe version 1.2 or 1.3 to OVO\_Datapipe version 1.4.
- 3 Relaunch Package Manager.
- 4 Install OVO\_Datapipe\_Upgrade\_14\_to\_141.ap to upgrade from OVO\_Datapipe version 1.4 to OVO\_Datapipe version 1.41

## Folders and Reports

OVO reports show summarized statistics or data and the message count is the average message count on hourly, daily, weekly, or monthly basis. This message count might not reflect the real time message count on any particular time period.

Installing the OVO Report Pack deploys the following report folders and reports:

Folder	Contents
Active (14)	<ul style="list-style-type: none"><li>• Message Severity by All Messages Trend</li><li>• Message Severity by Application Trend</li><li>• Message Severity by Message Group Trend</li><li>• Message Severity by Node and Service Trend</li><li>• Message Severity by Server</li><li>• Message Severity by Server and Application</li><li>• Message Severity by Server and Message Group Trend</li><li>• Message Severity by Server and Node Trend</li><li>• Message Severity by Server and Service Trend</li><li>• Message Severity by Server, Node, and Application Trend</li><li>• Message Severity by Server, Node, and Message Group Trend</li><li>• Message Severity by Server, Node, and Service Trend</li><li>• Message Severity by Service Trend</li><li>• OVO/OM Server Summary</li></ul>
Message Weekly (3)	<ul style="list-style-type: none"><li>• Weekly History Dashboard by Template</li><li>• Weekly History Dashboard by Template and Condition</li><li>• Last Week Dashboard by Server and Template</li></ul>
Config (2)	<ul style="list-style-type: none"><li>• Notif Channels</li><li>• Trouble Ticket Channels</li></ul>

Folder	Contents
Message (30)	<ul style="list-style-type: none"> <li>• History Dashboard by Server and Node</li> <li>• History Dashboard by Server Node and Template</li> <li>• Message Age Severity by Server and User Trend</li> <li>• Message OVO/OM Server Summary</li> <li>• Message Severity by All Messages Trend</li> <li>• Message Severity by Application Trend</li> <li>• Message Severity by Message Group Trend</li> <li>• Message Severity by Node Trend</li> <li>• Message Severity by Node and Application Trend</li> <li>• Message Severity by Node and Message Group Trend</li> <li>• Message Severity by Node and Template Trend</li> <li>• Message Severity by Node and Service Trend</li> <li>• Message Severity by Server Trend</li> <li>• Message Severity by Server and Application Trend</li> <li>• Message Severity by Server and Message Group Trend</li> <li>• Message Severity by Server and Node Trend</li> <li>• Message Severity by Server and Service Trend</li> <li>• Message Severity by Server and Template Trend</li> <li>• Message Severity by Server and User Trend</li> <li>• Message Severity by Server, Node, and Application Trend</li> <li>• Message Severity by Server, Node, and Message Group Trend</li> <li>• Message Severity by Server, Node, and Service Trend</li> <li>• Message Severity by Server, Template and Condition Trend</li> <li>• Message Severity by Service Trend</li> <li>• Message Severity by Template Trend</li> <li>• Message Severity by Template and Condition Trend</li> <li>• Message Severity by User Trend</li> <li>• Monthly Server Breakdown with Special Flags</li> <li>• Server Breakdown with Special Flags</li> <li>• Template Breakdown with Special Flags</li> </ul>
OVO9 (6)	<p>This folder contains the reports for HPOM 9.0</p> <ul style="list-style-type: none"> <li>• <b>Weekly:</b> <ul style="list-style-type: none"> <li>• Weekly History Dashboard by Server and Template</li> <li>• Weekly History Dashboard by Template</li> </ul> </li> <li>• History Dashboard by Server Node and Template</li> <li>• Message Severity by Message Template</li> <li>• Message Severity by Template Trend</li> <li>• Template Breakdown with Special Flags</li> </ul>
Service Log (1)	<ul style="list-style-type: none"> <li>• Severity Trend (Daily messages by services, by severity, and duration details daily, weekly, and monthly)</li> </ul>



The templates/policies and conditions have changed for HPOM 9.0 and are no longer available for reporting. Therefore, the HPOM 9.0 reports are based on message source type instead of templates. For a list of available message types in HPOM 9.0, see [Appendix C, Message Types for HPOM 9.0](#).

You can still use all the existing template and conditional reports available in the Message folder. But these reports consider that there is no specific template and all the messages are instances of unknown template. Conditional description is no longer possible and is not available for reporting on HPOM 9.0.

## Metrics Not Available from OVO for Windows/HPOM for Windows

The following metrics are collected from OVO for UNIX/HPOM for UNIX only:

- ESCALATE\_FLAG
- IP\_ADDRESS
- NOTIFY\_SERVICES
- STATUS\_FLAG
- TEMPLATE\_DESCRIPTION

The lack of these metrics has an impact on certain reports. If you are looking at an Active/History Message report, the value in the **Escalate** field will always be zero. The following table lists the specific reports affected:

Folder	Reports with <code>Escalate</code> field always zero
Active	<ul style="list-style-type: none"><li>• Message Severity by All Messages Trend</li><li>• Message Severity by Application Trend</li><li>• Message Severity by Message Group Trend</li><li>• Message Severity by Node and Service Trend</li><li>• Message Severity by Server</li><li>• Message Severity by Server and Application</li><li>• Message Severity by Server and Message Group Trend</li><li>• Message Severity by Server and Node Trend</li><li>• Message Severity by Server and Service Trend</li><li>• Message Severity by Server, Node, and Application Trend</li><li>• Message Severity by Server, Node, and Message Group Trend</li><li>• Message Severity by Server, Node, and Service Trend</li><li>• Message Severity by Service Trend</li><li>• OVO/OM Server Summary</li></ul>

Folder	Reports with Escalate field always zero
Message	<ul style="list-style-type: none"> <li>• History Dashboard by Server and Node</li> <li>• History Dashboard by Server Node and Template</li> <li>• Message OVO Server Summary</li> <li>• Message Severity by All Messages Trend</li> <li>• Message Severity by Application Trend</li> <li>• Message Severity by Message Group Trend</li> <li>• Message Severity by Server Trend</li> <li>• Message Severity by Server and Application Trend</li> <li>• Message Severity by Server and Message Group Trend</li> <li>• Message Severity by Server and Node Trend</li> <li>• Message Severity by Server and Service Trend</li> <li>• Message Severity by Server and User Trend</li> <li>• Message Severity by Server, Node, and Application Trend</li> <li>• Message Severity by Server, Node, and Message Group Trend</li> <li>• Message Severity by Server, Node, and Service Trend</li> <li>• Message Severity by Service Trend</li> <li>• Message Severity by Template Trend</li> <li>• Message Severity by User Trend</li> </ul>

If you are looking at the Monthly Server Breakdown with Special Flags, Server Breakdown with Special Flags, or Template Breakdown with Special Flags, the following fields will always be zero:

- TT only
- Notify only
- TT & Notify only

## Sources for Additional Information

The demo package that comes with OVO Reporting contains a sample of each report in the package. If you have access to the demo package and you want to know what fully-populated reports look like, install the demo package. Like real reports, demo reports are interactive. Unlike real reports, the data in a demo report is static.

For details about known issues and recent enhancements, see *OVO Reporting 1.41 Release Notes*. Manuals for the HP Performance Insight software and manuals for the reporting solutions that run on the HP Performance Insight software can be downloaded from the following site:

**<http://h20230.www2.hp.com/selfsolve/manuals>**

The user guides for PI are listed under **Performance Insight**. The user guides for report packs and datapipes are listed under **Performance Insight Report Packs**. Each manual indicates a date. If a manual is revised and reposted, the date will change. Revised manuals are posted on a regular basis, so make sure to compare your PDF to the PDF on the web and use the web version if it is newer.



## 2 Install and Configuration

### Guidelines for Install/Upgrade

A PI reporting solution has two ingredients, a report pack and a datapipe. Some reporting solutions include multiple datapipes. When you install the datapipe, you configure PI to collect a specific type of performance data at a specific interval. When you install the report pack, you configure PI to summarize and aggregate the data collected by the datapipe.

The report pack CD contains report packs, datapipes, shared packages, and documentation. If you extracted packages from the CD, every package, including the OVO Report Pack and the OVO Datapipe, was copied to the Packages directory on your system and is now ready to install. Your next step is to launch Package Manager and follow the on-screen instructions.

If you did not extract packages from the report pack CD, do that now. The procedure is explained on page 20. Extracting packages to the Packages directory launches Package Manager. Before using Package Manager to install OVO Reporting, make sure that the prerequisites for OVO Reporting have been satisfied.

### Supported Environments

The OVO Report Pack is designed to operate in the following environment:

PI Version	Oracle	Sybase
5.41	10g	15.0.2

### Common Property Tables

If you are running an older version of Common Property Tables, you must upgrade to version 3.91 by installing the upgrade package `CommonPropertyTables_Upgrade_to_391`. If you are not running any version of Common Property Tables, Package Manager will install the latest version of Common Property Tables for you, automatically.

When you upgrade Common Property Tables, do not install the upgrade package *and* other packages at the same time. Instead, install the upgrade package for Common Property Tables and nothing else. Once Common Property Tables is upgraded, restart Package Manager and install more packages. For more information about Common Property Tables, see the *Common Property Tables 3.91 User Guide*.

### Upgrading to Version 1.41

To upgrade, perform the following steps:

- 1 Make sure that you have the latest version of Common Property Tables (version 3.91) installed. If not, upgrade to version 3.91.

- 2 Uninstall the previous version of the OVO Datapipe.
- 3 Launch Package Manager and install the following packages in the given sequence:
  - a OVO\_Reporting\_Upgrade\_to\_141
  - b OVO\_Datapipe\_Upgrade\_to\_14
  - c OVO\_Datapipe\_Upgrade\_14\_to\_141

## Using Package Manager to Install OVO Reporting

This section explains how to install OVO Reporting fresh, for the first time. It covers the following tasks:

- Task 1: Extract packages from the report pack CD
- Task 2: If necessary, upgrade Common Property Tables
- Task 3: Start Package Manager and install the following packages:
  - OVO Reporting 1.41
  - OVO Datapipe 1.41

### Task 1: Extract packages from the report pack CD

- 1 Log on to the system. On UNIX systems, log on as root.
- 2 Stop the PI Timer and wait for processes to terminate.

*Windows:* Select **Settings** → **Control Panel** → **Administrative Tools** → **Services**.

*UNIX:* As root, type one of the following:

HP-UX: **sh /sbin/init.d/ovpi\_timer stop**

Solaris and Linux: **sh /etc/init.d/ovpi\_timer stop**

- 3 Insert the report pack CD in the CD-ROM drive. On Windows, a Main Menu is displayed automatically. On UNIX, mount the CD, navigate to the top-level directory for the CD drive, and type the setup command.
- 4 Select PI report packs by typing **1** in the choice field and pressing **Enter**. The install script displays a percentage complete bar. When the extraction finishes, the install script starts Package Manager. The Package Manager welcome window opens.

If you navigate to the Packages directory on your system, you will see the following directory structure:

```
{DPIPE_HOME}/packages/OVO_Reporting/OVO.ap
{DPIPE_HOME}/packages/OVO_Reporting/OVO_Demo.ap
{DPIPE_HOME}/packages/OVO_Reporting/OVO_Datapipe.ap
{DPIPE_HOME}/packages/UPGRADE_OVO_to_141.ap
{DPIPE_HOME}/packages/UPGRADE_OVO_Datapipe_to_14.ap
{DPIPE_HOME}/packages/UPGRADE_OVO_Datapipe_14_to_141.ap
```


If this is a new install, you can ignore the upgrade package. Installing the demo package is optional.

## Task 2: Upgrade to Common Property Tables 3.91

When performing this upgrade, observe the following rules:

- Do not install anything else. Install the upgrade package and *only* the upgrade package.
- When prompted to accept or disable the option to Deploy Reports, accept the default. If you do not deploy reports, you will not get the forms.
- When the install finishes, click **Done** to return to the Management Console.

## Task 3: Install the OVO/HPOM report pack and the OVO/HPOM datapipe

- 1 If Package Manager is not running, select **Tools** → **Package Manager** from the Management Console. The Package Manager welcome window opens.
- 2 Click **Next**. The Package Location window opens.
- 3 Click **Install**. Approve the default installation directory or use the browse feature to select a different directory if necessary.
- 4 Click **Next**. The Report Deployment window opens. Accept the default for Deploy Reports, application server name, and port. Type your username and password for the PI Application Server.
- 5 Click **Next**. The Package Selection window opens.
- 6 Click the check box next to the following packages:
  - *OVO Reporting 1.41*
  - *OVO\_Datapipe 1.41*
- 7 Click **Next**. The Type Discovery window opens.
- 8 Disable the default to run Type Discovery immediately after package installation.  
 OVO Reporting does not require Type Discovery. If you are installing other report packs in addition to OVO Reporting, you might need to run Type Discovery for those packages.
- 9 Click **Next**. The Selection Summary window opens.
- 10 Click **Install**. The Installation Progress window opens and the install process begins. When the install finishes, a package install complete message appears.
- 11 Click **Done** to return to the Management Console.
- 12 Restart the PI Timer.

*Windows:* Select **Settings** → **Control Panel** → **Administrative Tools** → **Services**.

*UNIX:* As root, type one of the following:

HP-UX: **sh /sbin/init.d/ovpi\_timer start**

Solaris and Linux: **sh /etc/init.d/ovpi\_timer start**

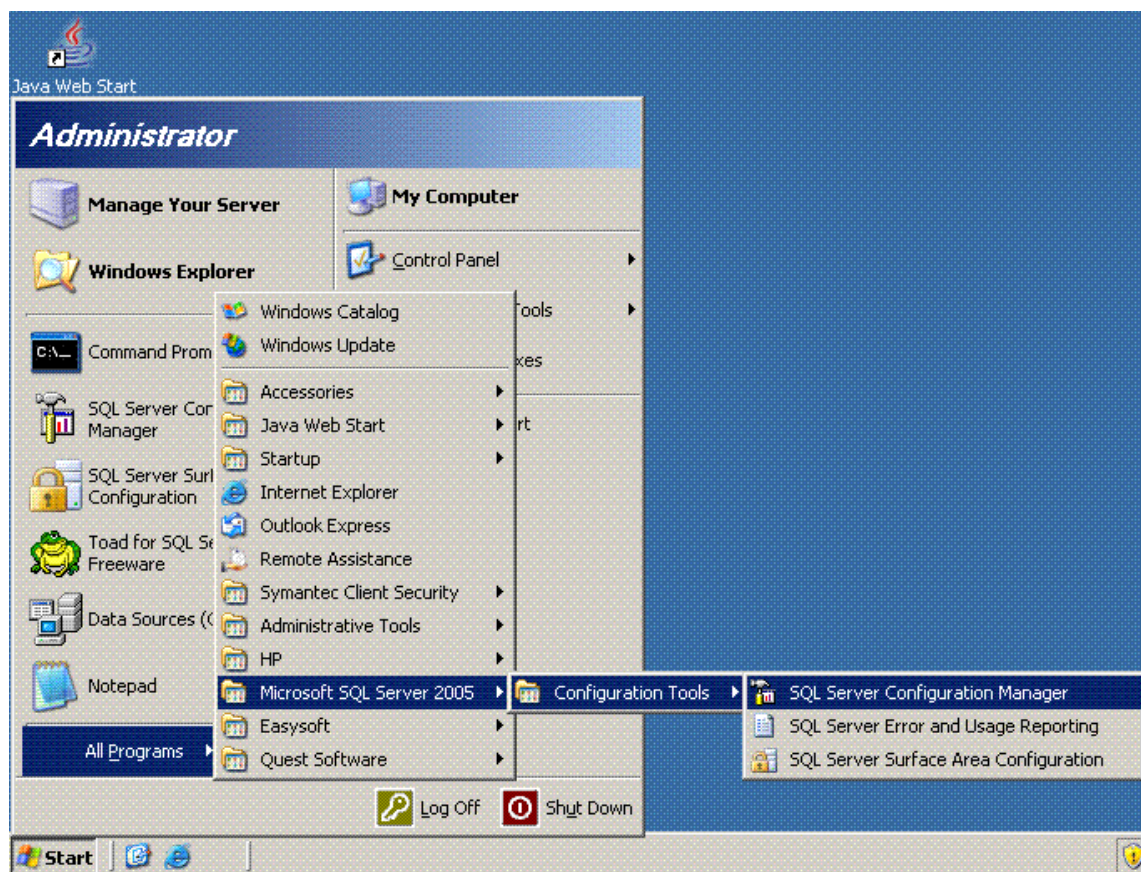
# Configuration Steps

Once the report pack is installed, perform the following configuration steps related to the OVO/HPOM database:

- Enable the TCP/IP protocol on all HPOM for Windows 8.0 servers (applies to HPOM for Windows 8.0 servers only)
- Set Up a Connection to the OVO/HPOM database
- Register OVO/HPOM servers with the OVO Datapipe (add each system name to the .prp file)
- Configure OVO/HPOM for Active Message Export

**Task 1:** Open the TCP/IP Protocol on the HPOM for Windows Server (applies to HPOM for Windows 8.0 only)

- 1 Select **Start** → **All Programs** → **Microsoft SQL Server 2005** → **Configuration Tools** → **SQL Server configuration Manager**.

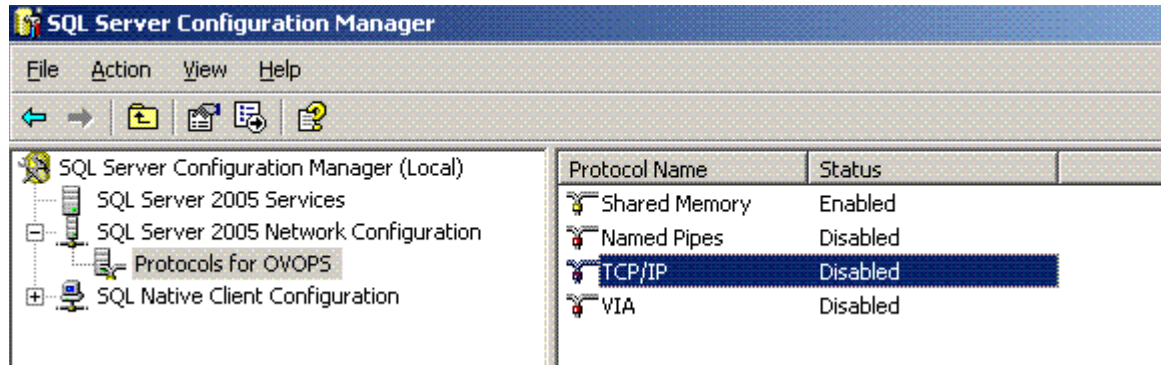


- 2 The SQL Server Configuration Manager window opens.

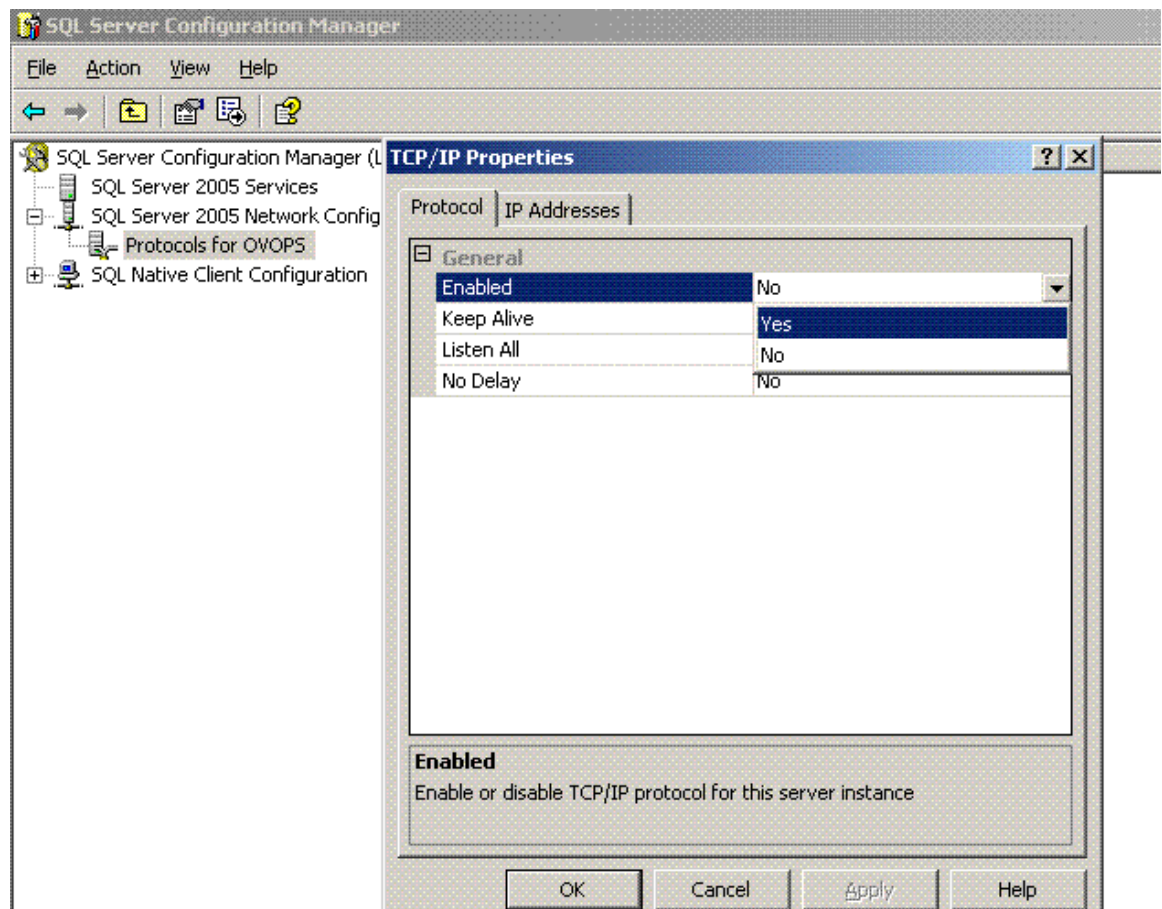
- 3 Select **Protocols for OVOPS**.

➤ OVOPS is a database instance name. The name might be different in your environment.

- 4 In the panel on the right, select **TCP/IP**.

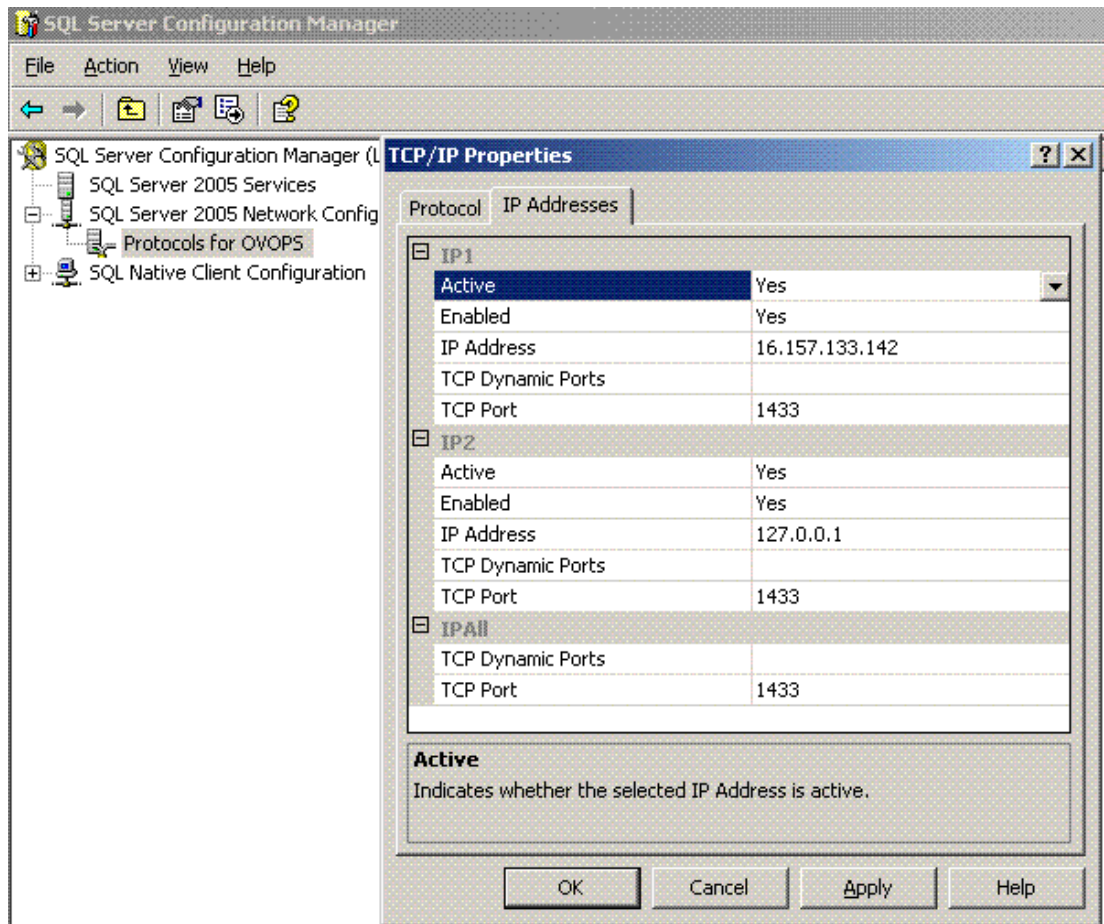


- 5 The TCP/IP Properties window opens.



- 6 In the Protocol tab, opposite **Enabled**, select **Yes**. The TCP/IP protocol is now enabled.
- 7 Select the **IP Addresses** tab.





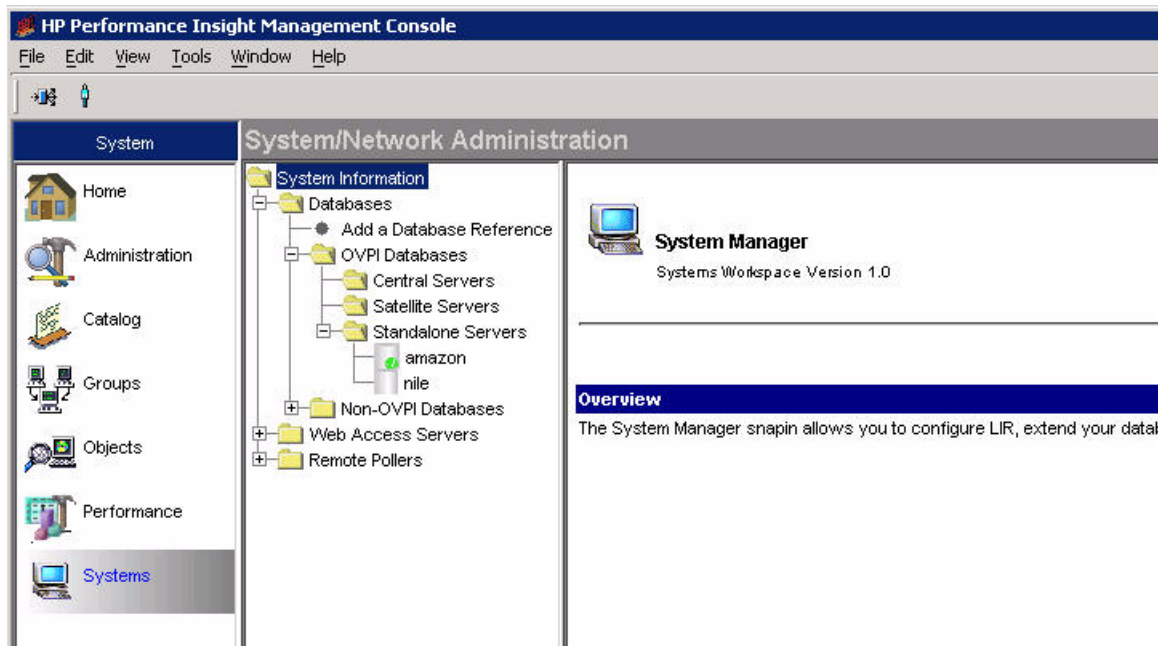
- 8 Set all **Active** to **Yes**.
- 9 Set all **Enabled** to **Yes**.
- 10 Do not modify the IP Address field.
- 11 Set **TCP Dynamic Ports** to null.
- 12 Set the **TCP port** to any port number, ensuring no port conflict. An MS SQL server usually uses port 1433.
- 13 Click **Apply** to apply your changes.
- 14 Click **OK** to close pop-up window.
- 15 Restart the MS SQL service.

#### Task 2: Add an External OVO/HPOM Database to PI

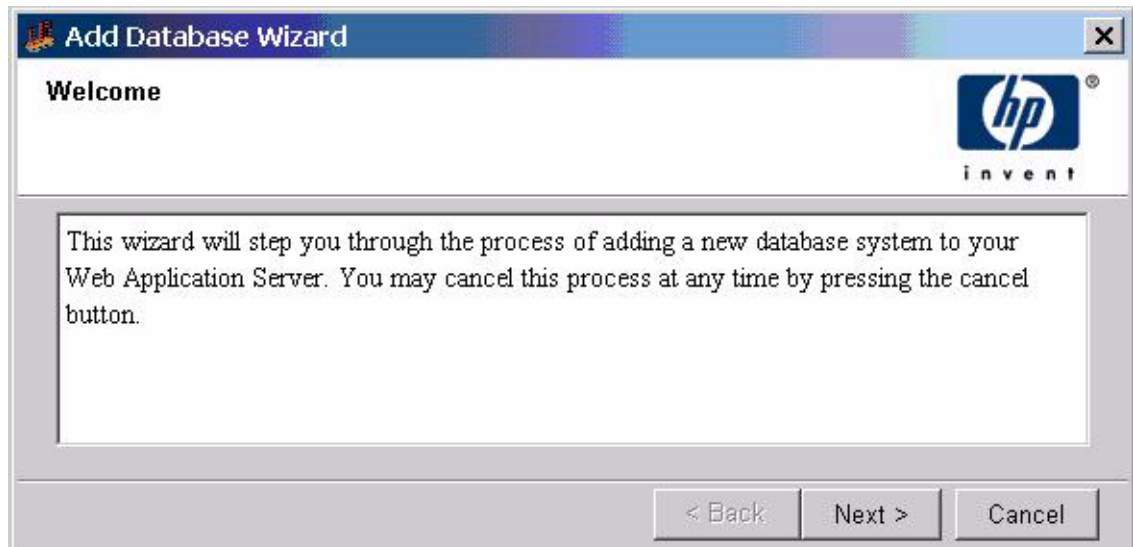
The PI server cannot connect to the OVO/HPOM database unless it has the information it needs to make the connection. Supply this information by running the Add Database Wizard.

Perform the following steps to connect PI to the OVO/HPOM database:

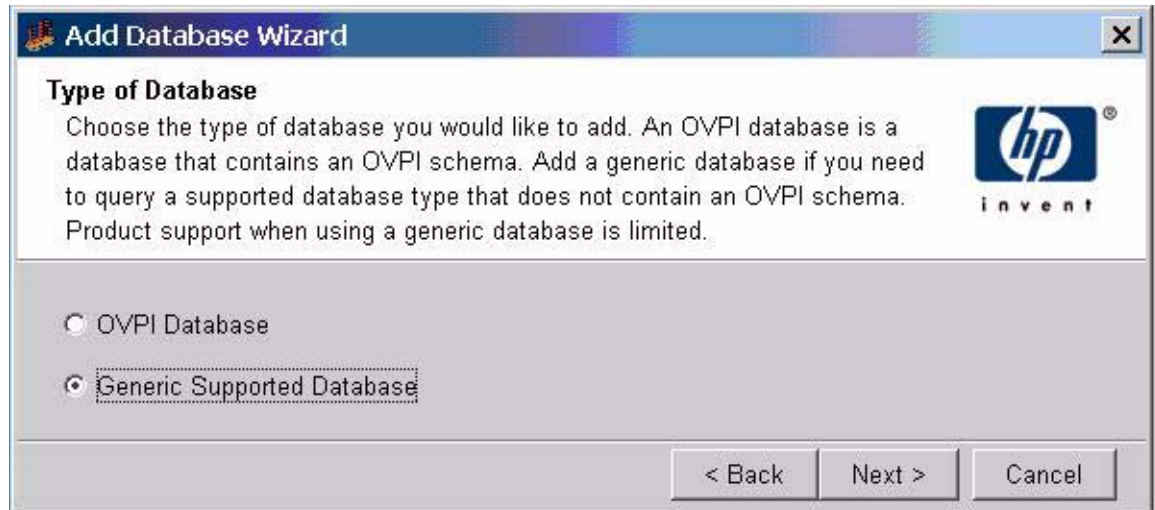
- 1 Start the Management Console and log on as the PI administrator.
- 2 Click the **Systems** icon on the lower left. The System/Network Administration pane opens.



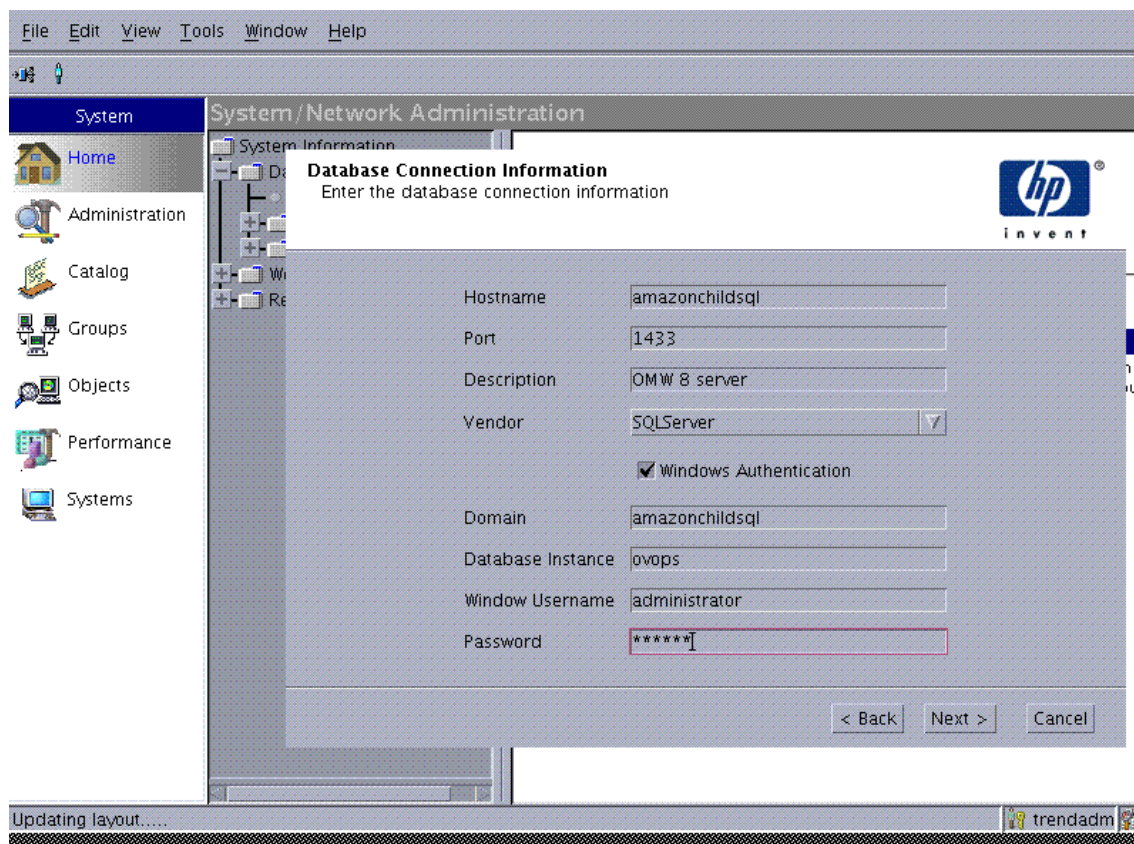
- 3 Expand **Databases** node and click **Add a Database Reference**. The Add Database Wizard opens.



- 4 Click **Next**. The Type of Database window opens.



- 5 Select **Generic Supported Database** and click **Next**.
- 6 In the Database Connectivity Information window, add information about the OVO/HPOM database.



For an OVO for UNIX/HPOM for UNIX Database:

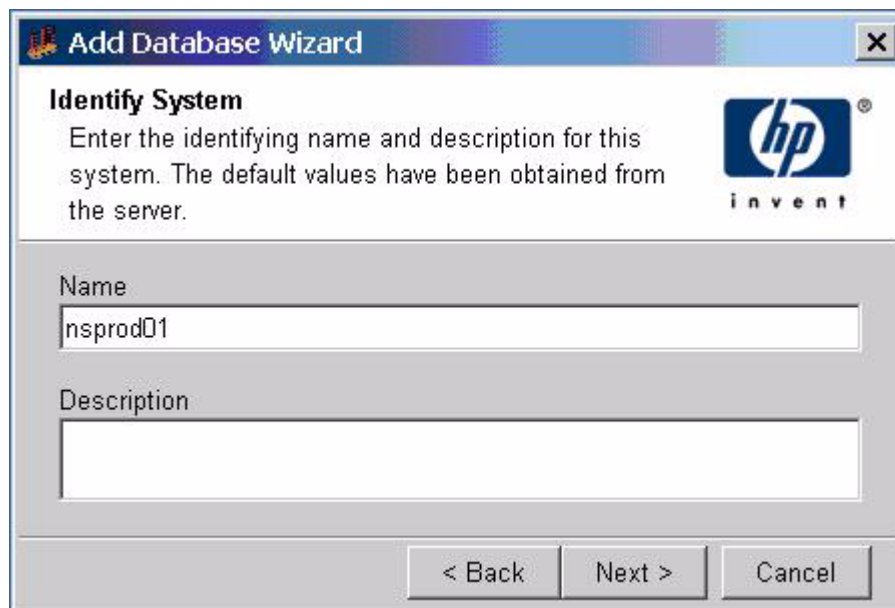
- d **Hostname:** IP address or hostname of the OVO for UNIX/HPOM for UNIX server
- e **Port:** port the database is listening on
- f **Vendor:** Oracle



- g **Database Instance:** SID of OVO/HPOM database
- h **Database Username:** OVO/HPOM database log on. The user selected should have permission to access OVO/HPOM tables and also have permission to create/drop views.  
  
It is recommended to use **opc\_op** user to connect to the OVO for UNIX/HPOM for UNIX database.
- i **Password:** OVO/HPOM database password for log on

For an OVO for Windows/HPOM for Windows Database:

- a **Port:** the SQL Server port
  - b **Vendor:** SQLServer
  - c **Windows Authentication:** check this box (HPOM for Windows 8.0 only)
  - d **Domain:** the domain on the Windows account (HPOM for Windows 8.0 only)
  - e **Window Username:** the Windows account username. The Windows account username must have permission to access MS SQL Server Express (shipped with HPOM for Windows 8.0).
  - f **Password:** the Windows account password, not the database password
- 7 Click **Next**. The Identify System window opens.



- 8 Type a name and a description.

You can use the hostname or any name that is meaningful to you.

The name you specify appears in the <Name> field in the `systems.xml` file, and in reports. The OVO Datapipe uses the name you specify here to locate connectivity information for the OVO/HPOM database.

► You also use this name in Task 3 on [page 27](#).

- 9 Click Next. The Summary Page window opens.

**Add Database Wizard**

**Summary Page**

The properties of the new system are summarized below. Press 'Finish' to add the new system. Pressing 'Cancel' will cancel this action.

**General Properties**

System Name: nsprod01  
Hostname: nsprod01  
IP Address:  
Description:

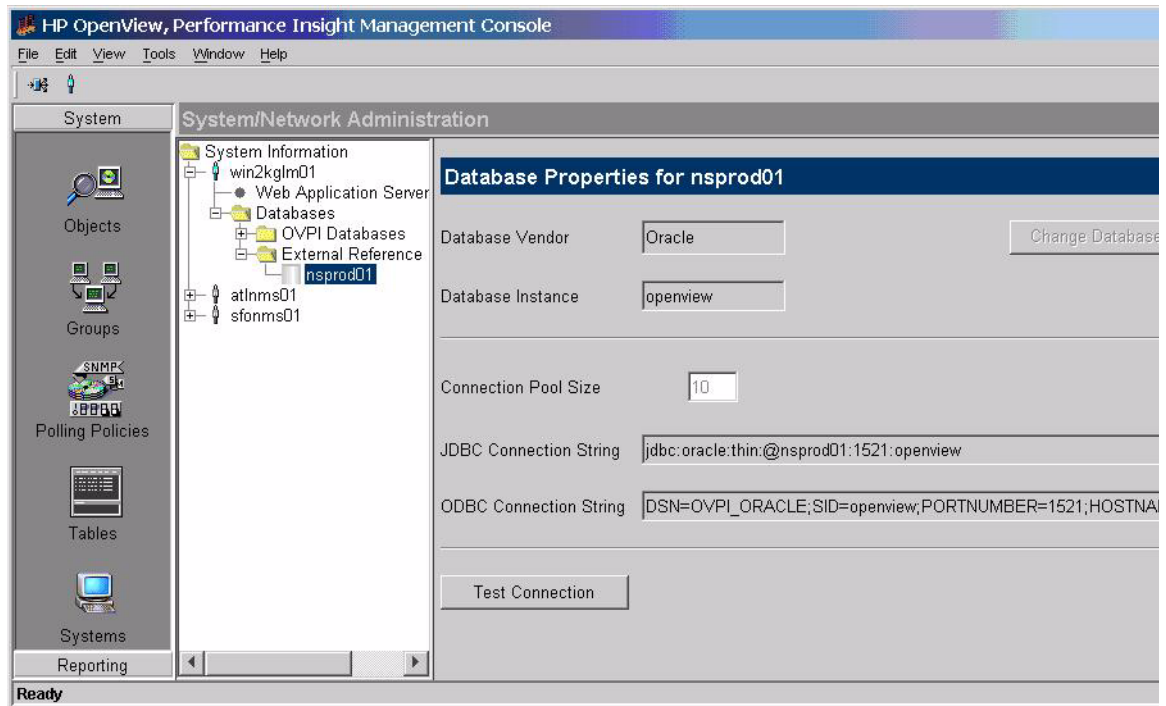
**Database Properties**

Vendor: Oracle  
Instance: openview  
Port: 1521  
Connection Pool Size: 10

< Back   Finish   Cancel

- 10 Review the contents of the Summary Page and click **Finish**.

- 11 Verify that the connection you just added is recognized by PI by selecting the new database in the System/Network Administration pane. Review the connectivity parameters.



- 12 Click the **Test Connection** button to verify that PI can connect to the OVO/HPOM database.

### Task 3: Register OVO/HPOM Servers with the OVO Datapipe

Add each system to the appropriate .prp file:

File	Function
{DPIPE_HOME}/data/ovou9servers.prp	List of HPOM for UNIX and Linux 9.0 servers
{DPIPE_HOME}/data/ovow9servers.prp	List of HPOM for Windows 9.0 servers
{DPIPE_HOME}/data/ovou8servers.prp	List of OVO for UNIX 8.0 servers
{DPIPE_HOME}/data/ovow8servers.prp	List of HPOM for Windows 8.0 servers
{DPIPE_HOME}/data/ovou7servers.prp	List of OVO for UNIX 7.0 servers
{DPIPE_HOME}/data/ovow7servers.prp	List of OVO for Windows 7.5 servers
{DPIPE_HOME}/data/systems.xml	Connectivity details for each database

All the .prp files were added to the data directory when you installed the report pack. The OVO Datapipe uses the .prp file to determine which OVO/HPOM databases it will collect data from and how to connect to each database.

Register each server by adding to the file one line for each OVO/HPOM server you want to collect from. If you are collecting from multiple servers, list each server on a separate line, using the system name you assigned. If you are collecting from a single OVO/HPOM server, the file will contain one line. No other information is allowed in this file. Do not insert comments or any other information.

Each name you add to this file must match the name you typed in the Identify System window. The OVO Datapipe uses these names to locate connectivity information in the `systems.xml` file. These names also appear in reports.

#### Task 4: Configuring OVO/HPOM for Active Message Export

The OVO Datapipe does not export messages from the Active Message table. Instead, it takes a snapshot of current Active Message statistics and summarizes the results to hourly, daily, weekly, and monthly levels. The results are similar to HISTORY statistics. The difference is that taking a snapshot of current statistics produces a summary of “Current Active Messages” as compared to “New HISTORY”.

To make the snapshot of current Active Message statistics possible, you must create three separate export views on the OVO/HPOM database. The OVO Report Pack rollup generates additional levels of data from the data provided by the export views.

The following export views are created for the element level indicated:

OVPI\_ACT\_ONA: OVO\_SERVER – NODE\_NAME – APPLICATION

OVPI\_ACT\_ONS: OVO\_SERVER – NODE\_NAME – SERVICE\_NAME

OVPI\_ACT\_ONM: OVO\_SERVER – NODE\_NAME – MSG\_GROUP

Until you create these views, current Active Message statistics are not exported from that OVO/HPOM server. Perform the following steps to create views:

- 1 Log on to the PI server as the PI administrator (trendadm on Unix).
- 2 Run the following command at the command line:

```
ovo_datapipe -dataset create_view -database <nsprod1> -server <u8>
```

The `-database` parameter takes the same system name that was defined when the database was added. For example, `<nsprod1>` is the same database name you provided in [step 7](#) on page 25.

For each OVO/HPOM database listed in `.prp` file, four blocks of messages are printed on the command line. The messages indicate that SQL statements are being executed to create four table views in each OVO/HPOM database.

- If the views fail to create, verify that you have permission to create and drop views. You can check the OVO/HPOM database to see if the views are created successfully. If not, contact the database administrator for help. You can also use the `-d` option to get more debug information.

## The Export Program

The OVO/HPOM export program connects to the OVO/HPOM database and exports information from Consolidated and Service Log tables.

When the export process runs for the first time, it exports two days of data by default. You can get more days of data by specifying `-prevdays` parameter. See [Export Program Parameters](#) on page 30 for more information.

When the export process runs for the second time, only new records since the last export are exported from the tables.

The export process is driven by a PI `trend_proc` batch file. After installation, the file is located in the following location:

```
{DPIPE_HOME}/scripts/OVO_Datapipe_Hourly.pro
```

This file drives three separate export processes, one for each of the three required OVO/HPOM datasets. The executable command for each dataset is the following:

```
ovo_datapipe -dataset MSG
```

```
ovo_datapipe -dataset SRV_LOG
```

```
ovo_datapipe -dataset ACT
```

The name of the export program is `ovo_datapipe`. Although the program has several configurable parameters as the following table shows, in most cases only the `-dataset` parameter is needed. The following files contain the information that the `ovo_datapipe` export program requires to connect to each OVO/HPOM database:

File	Function
{DPIPE_HOME}/data/ovou9servers.prp	List of HPOM for UNIX and Linux 9.0 servers
{DPIPE_HOME}/data/ovow9servers.prp	List of HPOM for Windows 9.0 servers
{DPIPE_HOME}/data/ovou8servers.prp	List of OVO for UNIX 8.0 servers
{DPIPE_HOME}/data/ovow8servers.prp	List of HPOM for Windows 8.0 servers
{DPIPE_HOME}/data/ovou7servers.prp	List of OVO for UNIX 7.0 servers
{DPIPE_HOME}/data/ovow7servers.prp	List of OVO for Windows 7.5 servers
{DPIPE_HOME}/data/systems.xml	Connectivity details for each database

If the `-dataset` option is the only option specified when the `ovo_datapipe` process is initiated, `ovo_datapipe` will collect data from every OVO/HPOM server listed in the OVO/HPOM `.prp` files. The `ovo_datapipe` process uses the list of servers in the OVO/HPOM `.prp` files to locate connectivity information in the `systems.xml` file.

## Export Program Parameters

The OVO/HPOM export process is flexible. The following table describes each parameter.

Parameter	Description
<b>-dataset</b>	<ACT MSG CFG SRV_LOG create_view drop_view> ACT: export OVO/HPOM Active Message Statistics. HIST: export OVO/HPOM Consolidated Messages. CFG: export OVO/HPOM channel configuration. SRV_LOG: export OVO/HPOM Service Log records. create_view: create OVO/HPOM Active Message Statistics database views. drop_view: remove OVO/HPOM Active Message Statistics database views.
<b>-database</b>	“Name” of OVO/HPOM server to connect to and export OVO/HPOM data from. The specified name must match an entry in PI’s <code>systems.xml</code> file based on the “<Name>” tag field in the <code>systems.xml</code> file. This must also match an entry in the <code>.prp</code> file. Normally, no OVO/HPOM server is specified and data is collected from all OVO/HPOM servers listed in the <code>.prp</code> file.
<b>-datadir</b>	By default, data is exported to <code>\$DPIPE_HOME/data/ImportData/OVO_Reporting</code> . A different location can be specified using this option.
<b>-prevdays</b>	Specifies the number of days prior to today to collect data inclusive of today. Only used if the previous collection time is not stored in the maxtime <code>&lt;TIME_TABLE&gt;_&lt;TIME_FIELD&gt;</code> file or for the first execution. The default value is 2 days. This parameter only applies to History and Service log data.
<b>-debug</b>	Set for Debug output.
<b>-help</b>	Display help information.
<b>-version</b>	Display ovo_datapipe version.
<b>-v</b>	Display ovo_datapipe version.
<b>-server</b>	Either u7, u8, u9, w7, w8 or w9, corresponding to the database specified by <b>-database</b>

The first time the export process runs, an excessive amount of data can be exported from the OVO/HPOM database if the process is allowed to go back too far to locate records to export. You can limit the amount of data that will be exported by configuring the OVO/HPOM datapipe to go back a specific number of days. If you do not specify a value for this parameter, the export adheres to the default, which is to export messages no older than midnight of the previous day.

The **-prevdays** option does not apply to all datasets. For example, the OVO/HPOM Active Message table export process does not actually export message records. Instead, a small number of records are captured that provide a snapshot of “current” record statistics for the OVO/HPOM Active Message table. In this case there is no need to specify a maximum number of days to include in the export process.



OVO/HPOM export files are imported into PI and then deleted by default. If archiving is enabled, you can avoid filling up the filesystem by setting up a process to clean out the export files. Clean the export files from the following location on the PI server:

```
{DPIPE_HOME}/data/ImportData/OVO_Reporting/Archive
```

## Testing the Export Process

### Example:

Run the following command to test the export process:

```
ovo_datapipe -database <XYZ> -server <u9> -dataset ACT
```

To view the results, navigate to the following directory:

```
data/ImportData/OVO_Reporting
```





## 3 Verification Steps

This chapter explains how to confirm that OVO Reporting is properly installed and working correctly. It answers the following questions:

- Does trendtimer.sched contain collection and roll up entries?
- Did the reports deploy as expected during package installation?
- Is the data export program working?
- Is PI importing data?
- Are the hourly tables being populated?
- Are the daily tables being populated?
- How can I remove the OVO report pack?

Following the verification steps in this chapter is not mandatory. Skip them unless you have reason to believe that something is not working properly.

### Collection and Rollup Entries in trendtimer.sched

The installation process adds entries to trendtimer.sched to ensure that processes are executed as needed by trendtimer. The following entries are added to trendtimer.sched:

```
# HP OVO Reporting Project

1:00+5 - - {DPIPE_HOME}/bin/trend_proc -f {DPIPE_HOME}/scripts/
OVO_Datapipe_Hourly.pro

24:00+2:00 - - {DPIPE_HOME}/bin/trend_proc -f {DPIPE_HOME}/scripts/
OVO_Datapipe_Daily.pro

### OVO Reporting Daily Processing

24:00+8:00 - - {DPIPE_HOME}/bin/trend_proc -f {DPIPE_HOME}/scripts/
Daily_OVO_Rollup.pro
```

### Correct Deployment of Reports

If the deploy reports options was selected during the installation process, the reports were deployed to the PI server you specified. To verify that the reports deployed as expected, check this directory:

```
{DPIPE_HOME}/reports/deploy/system/OVO_Reporting
```

## Data Export Program is Working

Data collection takes place for the first time at 5 minutes past the hour (1:00+5 - -), in accordance with entries added to trendtimer.sched for data collection when OVO Reporting was installed. This process exports records from the OVO/HPOM database into flat files on the PI server. The OVO/HPOM data is later imported into the PI database and summarized by the daily rollup process specific to each dataset.



The first time the ovo\_datapipe program runs, by default, the program exports data records received since midnight of the previous day. You can override the default. To force the export process to include records from further back in time, use the **-prevday** option and specify the number of days. This parameter only affects the first time the export program is executed for a specific dataset. After that, the export program keeps track of the last exported timestamps and only exports the records that arrived since the previous export.



To override the default, add the **-prevday** option to the ovo\_datapipe statements before running the datapipe the first time. If there are any timestamp files in {DPIPE\_HOME}/Data/ImportData/OVO\_Reporting, these timestamp files will override the **-prevday** option. They must be deleted for the **-prevday** option to work.

You can run the following command to initiate the ovo\_datapipe export process manually:

```
trend_proc -f {DPIPE_HOME}/scripts/OVO_Datapipe_Hourly.pro
```

The exported data should be located in the following directory:

```
{DPIPE_HOME}/data/ImportData/OVO_Reporting
```

The exported OVO/HPOM data in that directory should be in files with names similar to the following:

```
OVO_ACT_ONA_<OVO/HPOM server name>_<date>_<time>.dat
OVO_ACT_ONM_<OVO/HPOM server name>_<date>_<time>.dat
OVO_ACT_ONS_<OVO/HPOM server name>_<date>_<time>.dat
OVO_MSG_HIST_<OVO/HPOM server name>_<date>_<time>.dat
OVO_MSG_ACT_<OVO/HPOM server name>_<date>_<time>.dat
OVO_SRV_LOG_<OVO/HPOM server name>_<date>_<time>.dat
OVO_CFG_LOG_<OVO/HPOM server name>_<date>_<time>.dat
```

## PI is Importing Data

The OVO/HPOM data is imported into the PI database hourly for Active message, History message, and Service log, and daily for Configuration. Each rollup process imports the appropriate dataset files and then steps through the roll up of that dataset.



The data is imported into PI once per day as part of the daily rollup process.

The import process populates the following data tables in the PI database with records.

- R\_OVO\_MSG\_BASE
- R\_OVO\_ACT\_BASE
- R\_OVO\_SRVLOG\_BASE
- R\_OVO\_CONFIG\_BASE



Records are only added to these tables if the OVO/HPOM server has received new records for those datasets.

Use Table Manager to verify by navigating to the OVO\_Reporting Category and locating the tables listed above.

The oldest and most recent time stamps can be determined for the import tables by running the following SQL statement in SQLplus, ISQL, or SQL Advantage:

```
select 'R_OVO_MSG_BASE', min(ta_period), max(ta_period) from
R_OVO_MSG_BASE

select 'R_OVO_ACT_BASE', min(ta_period), max(ta_period) from
R_OVO_ACT_BASE

select 'R_OVO_SRVLOG_BASE', min(ta_period), max(ta_period) from
R_OVO_SRVLOG_BASE

select 'R_OVO_CONFIG_BASE', min(ta_period), max(ta_period) from
R_OVO_CONFIG_BASE
```

This should return valid date/times in the second and third column if data was imported.

The OVO/HPOM export files are archived to the following location by the PI data import process:

```
{DPIPE_HOME}/data/ImportData/OVO_Reporting/Archive
```

If the OVO/HPOM export files are in the “OVO\_Reporting” directory but not in the “Archive” directory, the OVO/HPOM export ran successfully but the import process was not successful. You can find errors relating to the import process in this file:

```
{DPIPE_HOME}/log/trend.log
```

## Hourly Data Tables are Populated

After several hours of data have been imported into OVO Report Pack base tables in the PI database, the hourly rollup process can be initiated as follows:

- 1 Change directory to {DPIPE\_HOME}/scripts
- 2 Run the following commands:
  - a `trend_proc -f Daily_OVO_ACT_Rollup.pro`
  - b `trend_proc -f Daily_OVO_MSG_Rollup.pro`
  - c `trend_proc -f Daily_OVO_SRVLOG_Rollup.pro`
  - d `trend_proc -f Daily_OVO_CFG_Rollup.pro`
- 3 Use Table Manager to verify that the hourly data tables have been populated, or run the following SQL statements:

```
select 'SH_OVO_MSG', min(ta_period), max(ta_period) from SH_OVO_MSG
```

```
select 'SH_OVO_ACT', min(ta_period), max(ta_period) from SH_OVO_ACT
```

If data was rolled up to the hourly level, these statements should return valid date/times in the second and third column.



The individual steps of any `trend_proc` file can be executed at the command line as long as the environment variables are defined correctly and slashes are in the correct direction (/).

## Daily Tables Are Populated

After a complete day of data was imported into the OVO Report Pack's Base tables within the PI database, the daily rollup process can be initiated again using the same command as specified above:

- 1 Change directory to {DPIPE\_HOME}/scripts
- 2 Run the following commands:
  - a `trend_proc -f Daily_OVO_ACT_Rollup.pro`
  - b `trend_proc -f Daily_OVO_MSG_Rollup.pro`
  - c `trend_proc -f Daily_OVO_SRVLOG_Rollup.pro`
  - d `trend_proc -f Daily_OVO_CFG_Rollup.pro`
- 3 Use Table Manager to verify that the daily data tables were populated, or run the following SQL statements:
  - a `select 'SD_OVO_MSG', min(ta_period), max(ta_period) from SD_OVO_MSG`
  - b `select 'SD_OVO_ACT', min(ta_period), max(ta_period) from SD_OVO_ACT`
  - c `select 'SD_OVO_SRVLOG', min(ta_period), max(ta_period) from SD_OVO_SRVLOG`

If data rolled up to the daily level, these statements should return valid date/times in the second and third column.

The daily rollup processes also force the summarization to the weekly, monthly, and baseline level, if enough time has passed and enough data was collected to summarize to those levels. Data can only roll up to the next time interval when the time period is complete. For example, monthly data for current month is not generated until the current month ends.

Verify those tables using the following SQL statements:

```
select 'SW_OVO_MSG', min(ta_period), max(ta_period) from SW_OVO_MSG
select 'SM_OVO_MSG', min(ta_period), max(ta_period) from SM_OVO_MSG
select 'SW_OVO_ACT', min(ta_period), max(ta_period) from SW_OVO_ACT
select 'SM_OVO_ACT', min(ta_period), max(ta_period) from SM_OVO_ACT
select 'SW_OVO_SRVLOG', min(ta_period), max(ta_period) from SW_OVO_SRVLOG
select 'SM_OVO_SRVLOG', min(ta_period), max(ta_period) from SM_OVO_SRVLOG
```

# Uninstalling the OVO Report Pack

Perform the following steps to uninstall the OVO Report Pack.

- 1 Log on to the system. On UNIX systems, log on as root.
- 2 Stop the PI Timer and wait for processes to terminate.  
*Windows:* Select **Settings** → **Control Panel** → **Administrative Tools** → **Services**.  
*UNIX:* As root, do one of the following:  
    HP-UX: `sh /sbin/init.d/ovpi_timer stop`  
    Solaris and Linux: `sh /etc/init.d/ovpi_timer stop`
- 3 Start Package Manager. The Package Manager welcome window opens.
- 4 Click **Next**. The Package Location window opens.
- 5 Click **Uninstall**.
- 6 Click **Next**. The Report Undeployment window opens.
- 7 If reports were deployed from this server, accept the defaults for Undeploy Reports, Application Server Name, and Port. If reports were **not** deployed from this server, clear the check box and skip to step 9.
- 8 Type the username and password for the PI Application Server.
- 9 Click **Next**. The Package Selection window opens.
- 10 Click the check boxes next to the following packages, if they appear in the list:
  - *OVO Reporting 1.41*
  - *OVO Datapipe 1.41*
- 11 Click **Next**. The Selection Summary window opens.
- 12 Click **Uninstall**. The Progress window opens and the removal process begins. When the uninstall process is complete, a package removal complete message appears.
- 13 Click **Done** to return to the Management Console.
- 14 Restart the PI Timer.

*Windows:* Select **Settings** → **Control Panel** → **Administrative Tools** → **Services**.

*UNIX:* As root, do one of the following:

HP-UX: `sh /sbin/init.d/ovpi_timer start`

Solaris and Linux: `sh /etc/init.d/ovpi_timer start`

## 4 Setting Up a Distributed System

### Overview of the Steps

- 1 Decide whether you want local reporting on the satellite servers or central reporting only.
- 2 Install the right set of packages on each server (a central server that is not polling does not need datapipes. The satellite servers need datapipes).
- 3 Verify that the system clocks in your environment are synchronized.
- 4 Register your satellite servers.
- 5 If you are not copying rate data to the central server, enable LIR on the central server.
- 6 If you enable LIR, add LIR mapping with the time type set to *rate*.
- 7 Verify that you have all the copy policies you need.
- 8 Configure the central server (manual edits to `trendtimer.sched` and `.pro` files).
- 9 Configure each satellite server (manual edits to `trendtimer.sched` and `.pro` files).

If you want local reporting, you must deploy reports when you install the report pack on each satellite server, and you must also allow summarizations to run on each satellite server. If you do not want local reporting, you do not need to deploy reports when you install a report pack on a satellite server, and you can disable the scripts that run summarizations on each satellite server.

Before Location Independent Reporting (LIR) was available, the recommendation for setting up a distributed system was to deploy reports on satellite servers, keep rate data on satellite servers, copy hourly data to the central server, and disable summarizations above the hourly level on satellite servers. This approach had two benefits. It kept a lot of rate data off the network, and it decreased the processing load on the central server. The problem with this approach is that the central server could not display a Near Real Time (NRT) report. The only NRT report was a local NRT report, on a satellite server.

LIR fixes this problem. If you enable LIR, you can open an NRT report on the central server and drill-down on table selections. Your selections cause the central server to query a satellite server for locally aggregated data. If you would rather copy rate data to the central server, you can, and then enabling LIR is not necessary.

OVO Report Pack now comes with a copy policy import file. When you install OVO Report Pack, PI uses this file to generate copy policies. Creating these policies yourself, using the Management Console, is no longer necessary. Your only task is to verify that you have copy policies for the following tables:

- SD\_OVO\_SRVLOG
- SH\_OVO\_MSG
- R\_OVO\_CONFIG\_BASE
- SH\_OVO\_ACT

Because you are likely to have multiple satellite servers, the hourly process files were designed to be satellite-server friendly. This means that most of the time, most of the defaults are correct. But some defaults will be incorrect, or less than optimal, and to improve performance, you should change them. These manual edits, as well as the other steps listed above, are spelled out in detail in this chapter.

## Verifying Correct Package Installation

Verify that you have the right packages installed on each server.

### Packages on the Central Server

- OVO Report Pack, with reports deployed
- Common Property Tables, with forms deployed

### Packages on Each Satellite Server

- OVO Report Pack
- Common Property Tables
- OVO Datapipe

Typically, the central server does not poll. If you want the central server in your system to poll, install a datapipe on the central server. If you want to view reports on satellite servers (local reporting) accept the Deploy Reports option when you install report packs at each satellite server. If central server reporting is the only reporting you want, you do not need to deploy reports and forms when you install report packs at satellite servers.



# Configuring the Central Server

To configure the central server, perform the following tasks:

## Task 1: Register the satellite server by setting the database role

Perform the following steps to register a satellite server:

- 1 Start the Management Console (log on with Administrator privileges).
- 2 Click the **Systems** icon in the navigation pane.
- 3 Navigate to the PI Databases folder and select the server you want as the satellite server. Typically the servers are under “standalone servers”.
- 4 Click **Database Properties**.
- 5 From the Database Role list, select the Satellite Server role.
- 6 Enter any information necessary to configure the Satellite Server role.



To add a new database reference, use the Add Database Reference Wizard in the System and Network Administration application.

## Task 2: Enable LIR

- 1 Start the Management Console (log on with Administrator privileges).
- 2 Click the **Systems** icon in the navigation pane.
- 3 Navigate to the PI Databases folder and select the central server.
- 4 Click **LIR Configuration**.
- 5 Select the **LIR enabled** check box.

## Task 3: Add LIR mappings

- 1 Start the Management Console (log on with Administrator privileges).
- 2 Click the **Systems** icon in the navigation pane.
- 3 Navigate to the PI Databases folder and select the central server.
- 4 Click **LIR Configuration**.
- 5 Click **Add Mapping**.
- 6 From the Select Satellite Server list, select a satellite server to which to add a mapping.
- 7 Select the **Category** data table option.
- 8 Select **OVO** from the drop down list.
- 9 Select the **rate** data type.
- 10 Click **Add to List**.
- 11 Click **OK**.
- 12 Click **Apply**.

A copy policy is automatically generated for the hourly data and for each LIR mapping that you add. The data type you select determines the type of data copied. The type of data copied (defined in the generated copy policy) is one summarization level greater than the data type selected in the LIR mapping. For example, if you select an hourly data type, you can generate a daily data copy policy.

#### Task 4: Verify the automatically generated copy policies

Verify that a copy policy was generated for the following tables and that the copy type is set correctly (to Property and Data):

- 1 Start the Management Console (log on with Administrator privileges).
- 2 Click the **Copy Policy** icon in the navigation pane to start the Copy Policy Manager.
- 3 The following tables should appear in the copy policy list:
  - SD\_OVO\_SRVLOG
  - SH\_OVO\_MSG
  - R\_OVO\_CONFIG\_BASE
  - SH\_OVO\_ACT

For each table, verify that copy type is set to Property and Data.

- 4 If a copy policy was not generated for any of the tables listed above, click the **New Copy Policy** icon or select **File** → **New Copy Policy** from the Copy Policy Manager. The Copy Policy Wizard opens.
- 5 Click **Next**. The Satellite Server and Copy Policy Selection Page opens.
- 6 Select a satellite server from the pull down list. This is the satellite server from which data is copied to the central server.
- 7 Select **Single Table** and select the table from the pull down list.
- 8 Click **Next**. The Copy Type Selection Page opens.
- 9 Select **Property and Data**.
- 10 Click **Next**. The Summary page opens.
- 11 Verify the information in the summary window. If the information is not correct, modify it by clicking **Back**.
- 12 Click **Finish**.
- 13 Repeat [step 4](#) - [step 12](#) for all missing tables.

If only the copy type is not set to Property and Data, do the following:

- 1 Double-click the copy policy.
- 2 Select the **Property and Data** copy type.
- 3 Click **OK**.

#### Task 5: Edit trendtimer.sched and multiple process files.

- 1 Change the `trendtimer.sched` file located in `{DPIPE_HOME}/lib` for the central server from this:

```
## 24:00+8:00 - - {DPIPE_HOME}/bin/trend_proc -f {DPIPE_HOME}/scripts/  
Daily_OVO_Rollup.pro
```

to this:

```
## 24:00+9:00 - - {DPIPE_HOME}/bin/trend_proc -f {DPIPE_HOME}/scripts/
Daily_OVO_Rollup.pro
```

- 2 Edit the `Daily_OVO_MSG_Rollup.pro` file:
  - Comment out block 1,
- 3 Edit the `Daily_OVO_ACT_Rollup.pro` file:
  - Comment block 1,
- 4 Edit the `Daily_OVO_SRVLOG_Rollup.pro` file:
  - Comment out block 1,
- 5 Edit the `Daily_OVO_CONFIG_Rollup.pro` file:
  - Comment out block2,

For more information about LIR and copy policies, see the *HP Performance Insight Administration Guide*.

## Configuring Satellite Servers

Configure each satellite server by enabling copy commands that are disabled by default. Once the copy commands are enabled, the central server handles the summarizations. The copy commands appear in hourly process files in the Scripts directory.



Configuring satellite servers is not required. However, commenting out unnecessary aggregation on satellite servers and central server enables the system to run faster.

Make the following changes to four process files:

- 1 Open the `Daily_OVO_MSG_Rollup.pro` file:
  - a Uncomment block 2
  - b Comment out block 3
  - c Change block 2 to
 

```
begin: block2 wait
{DPIPE_HOME}/bin/trendcopy -t SH_OVO_MSG
{DPIPE_HOME}/bin/trendcopy -t R_OVO_MSG_LOOKUP_D
{DPIPE_HOME}/bin/trendcopy -t R_OVO_MSG_LOOKUP_S
{DPIPE_HOME}/bin/trendcopy -t R_OVO_MSG_LOOKUP_A
{DPIPE_HOME}/bin/trendcopy -t R_OVO_MSG_BASE
{DPIPE_HOME}/bin/trendcopy -t SD_OVO_MSG
end: block2
```
- 2 Open the `Daily_OVO_ACT_Rollup.pro` file:
  - a Uncomment block 2
  - b Comment out block 3
  - c Change block 2 to:
 

```
begin: block2 wait
{DPIPE_HOME}/bin/trendcopy -t SH_OVO_ACT
{DPIPE_HOME}/bin/trendcopy -t R_OVO_ACT_BASE
end: block2
```

- 3 Open the `Daily_OVO_SRVLOG_Rollup.pro` file:
  - a Uncomment block 2
  - b Comment out block 3
- 4 Open the `Daily_OVO_CONFIG_Rollup.pro` file:
  - Uncomment block 2

## System Clocks

Make sure the system clock on each satellite server is synchronized with the system clock on the central server.

## 5 Active Message Reports

The following reports contain information about current unacknowledged messages.

### [OVO/HPOM Server Summary \(see sample page 41\)](#)

Total number of messages and severity details for each management server. For a selected management server, provides statistics for severity, age, and duplicates daily, weekly and monthly.

### [Message Severity Trend by All Messages \(see sample page 43\)](#)

Summary of all messages across all management servers by severity. Includes statistics for message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### [Message Severity Trend by Application](#)

A list of 15 applications with the most associated messages. Includes the following details for the selected application: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### [Message Severity Trend by Message Group](#)

A list of 15 message groups with the most associated messages. Includes the following details for a selected message group: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### [Message Severity Trend by Node and Service](#)

A list of 15 nodes, and corresponding services running on those nodes, with the most associated messages. Includes the following details for a selected node and service pair: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### [Message Severity Trend by Server](#)

A list of 15 management servers that have the most associated messages, with the following details for a selected Operations management server: message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### [Message Severity by Server and Application](#)

A list of 15 management servers, and corresponding applications being managed by those servers, that have the most associated messages. Include the following details for a selected management server and application pair: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Server and Message

A list of 15 management servers, and corresponding message groups being monitored by those servers, that have the most associated messages. Includes the following details for a selected management server and message group pair: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Server and Node

A list of the 15 management servers, and corresponding nodes being managed by those servers, that have the most associated messages. Includes the following details for a selected management server and node pair: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Server and Service

A list of 15 management servers, and corresponding services being managed by those servers, that have the most associated messages. Includes the following details for a selected management server and service pair: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Server, Node and Application

A list of 15 management servers, and corresponding nodes and applications on those nodes, that have the most associated messages. Includes the following details for a selected management server, node and application: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Server, Node, and Message Group

A list of 15 management servers, and corresponding nodes and message groups from those nodes, that have the most associated message. Includes the following details for a selected management server, node and message count threesome: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Server, Node, and Service

A list of 15 management servers, and corresponding nodes and services on those nodes, that have the most associated messages. Includes the following details for a selected management server, node and service threesome: Message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

### Message Severity by Service

A list of 15 services that have the most associated messages. For a selected service, includes statistics for message age, severity, volume, duplicates, and special flag counts hourly, daily, weekly and monthly.

# OV Operations

## Active Message Trends OVO Server Summary



### Daily Message Severity by Server

Mon, Jul 9, 2007

Server	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
ovpihpt5	7	1	0	0	5	1	0	0

Daily

[Weekly](#)

[Monthly](#)

### Daily Message Severity

ovpihpt5

Mon, Jul 9, 2007

- (8.5%) Critical
- (3.11%) Major
- (5.13%) Minor
- (74.6%) Warning
- (8.64%) Normal
- (0.0%) Unknown



Daily

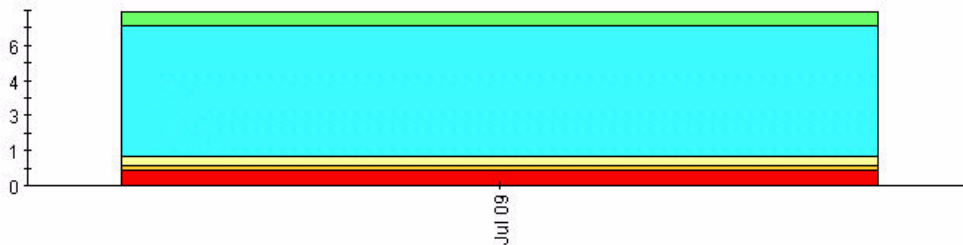
[Weekly](#)

[Monthly](#)

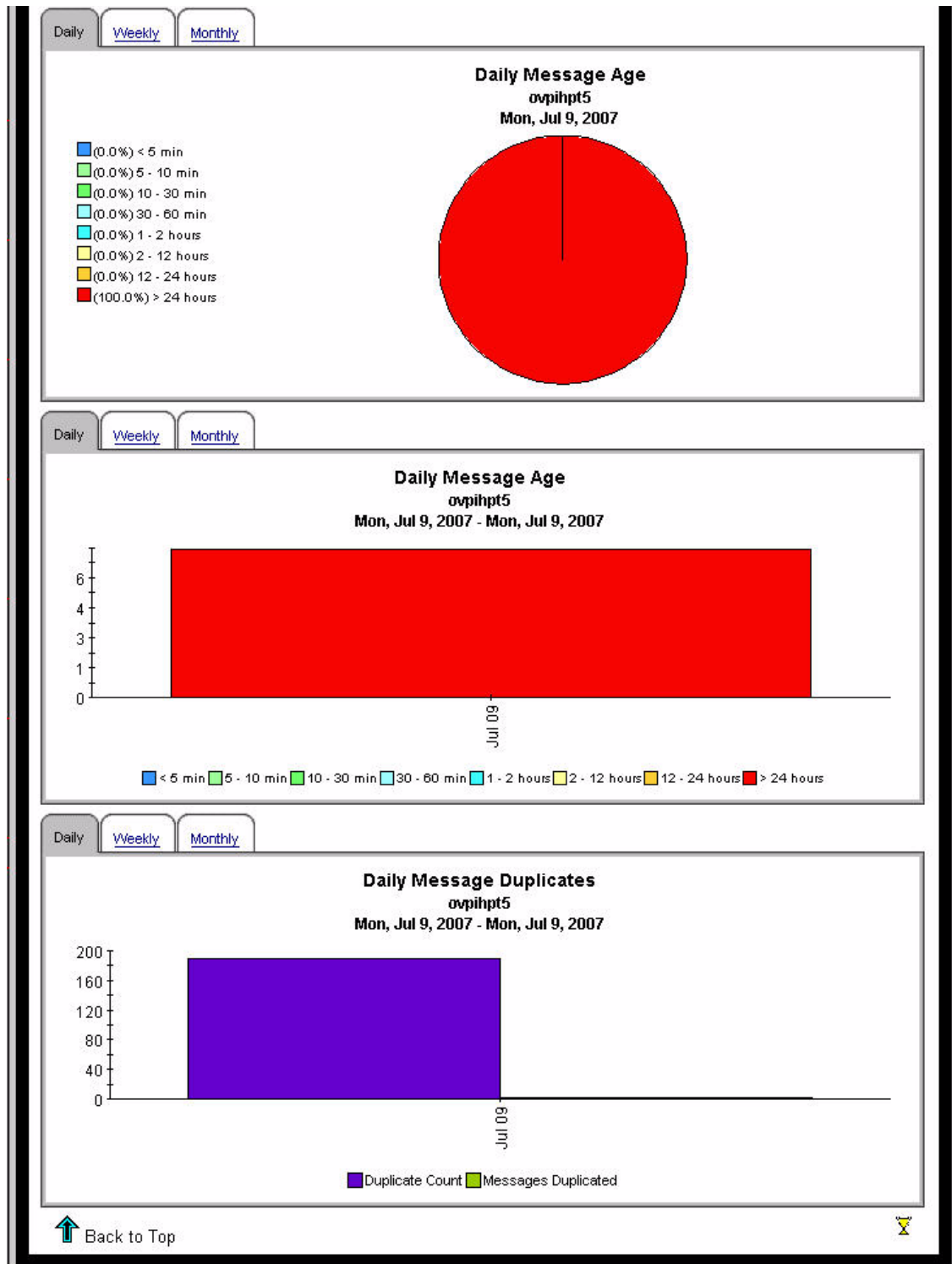
### Daily Message Severity

ovpihpt5

Mon, Jul 9, 2007 - Mon, Jul 9, 2007



Critical Major Minor Warning Normal Unknown





# OV Operations

## Active Message Trend by All Messages



### Daily Message Severity by All Messages

Mon, Jul 9, 2007

Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
7	1	0	0	5	1	0	0

Hourly

[Daily](#)

[Weekly](#)

[Monthly](#)

### Hourly Message Age

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM



Hourly

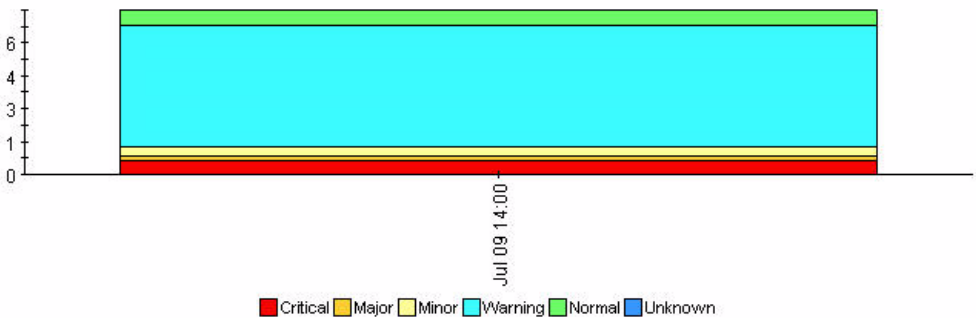
[Daily](#)

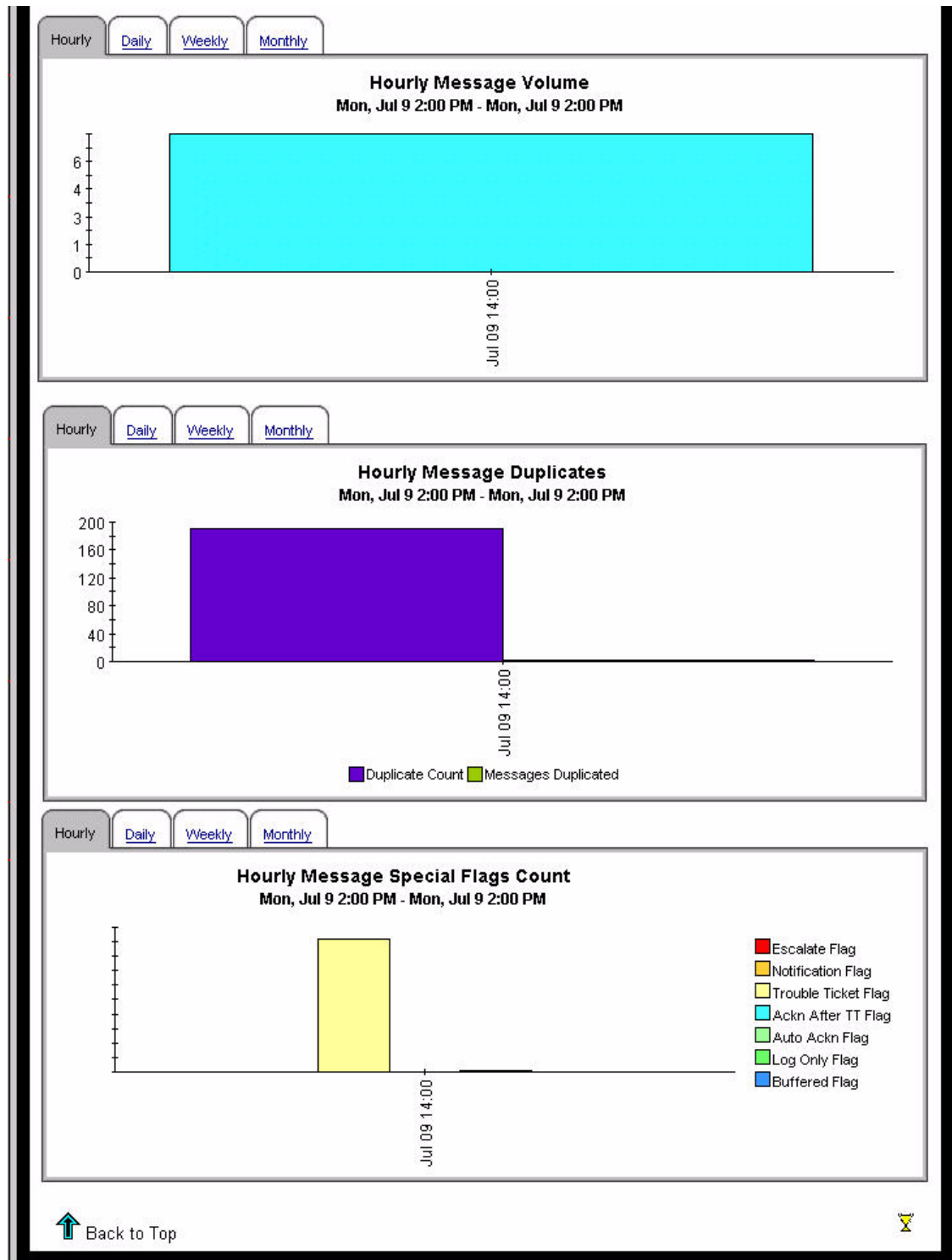
[Weekly](#)

[Monthly](#)

### Hourly Message Severity

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM





# OV Operations

## Active Message Trend by All Messages



### Daily Message Severity by All Messages

Mon, Jul 9, 2007

Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
7	1	0	0	5	1	0	0

Hourly

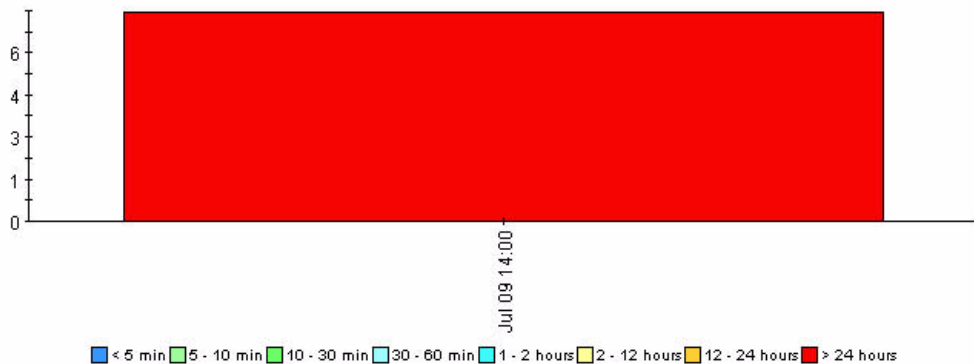
[Daily](#)

[Weekly](#)

[Monthly](#)

### Hourly Message Age

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM



Hourly

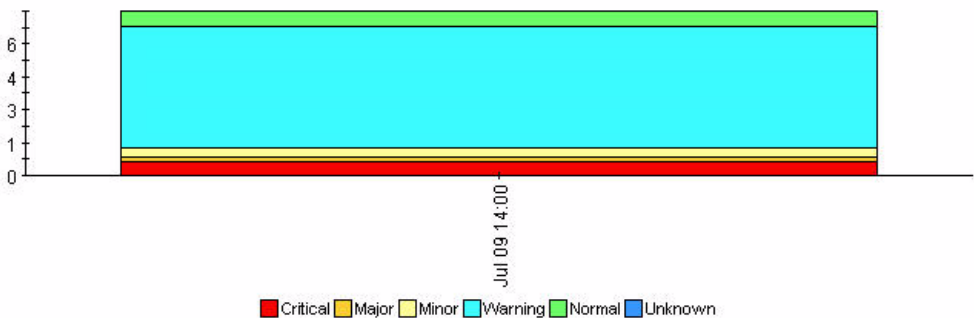
[Daily](#)

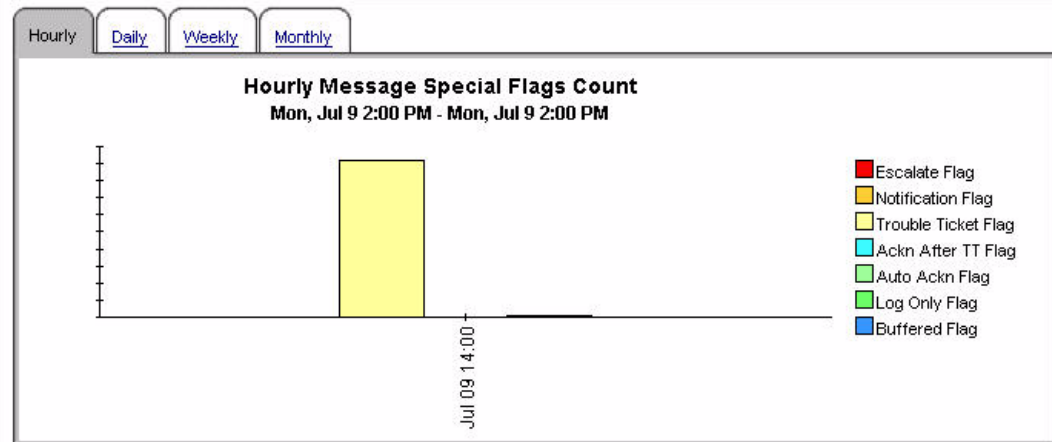
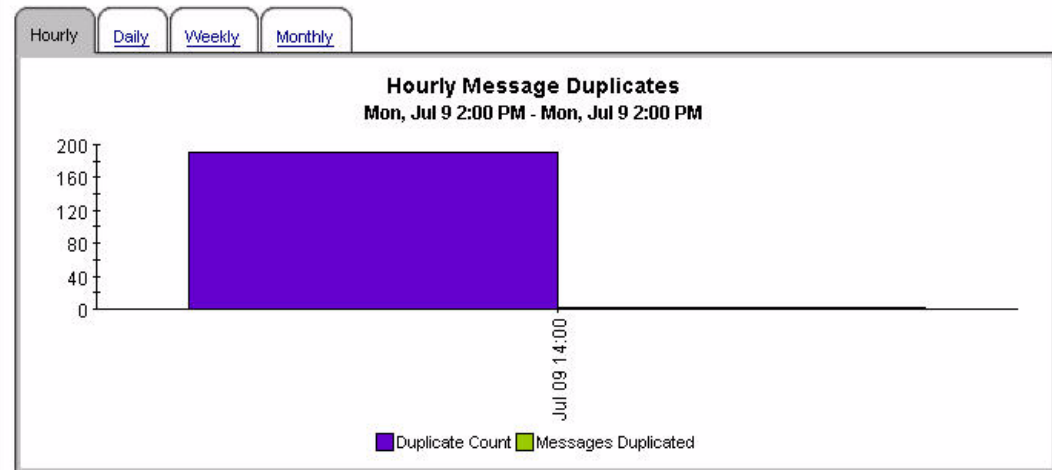
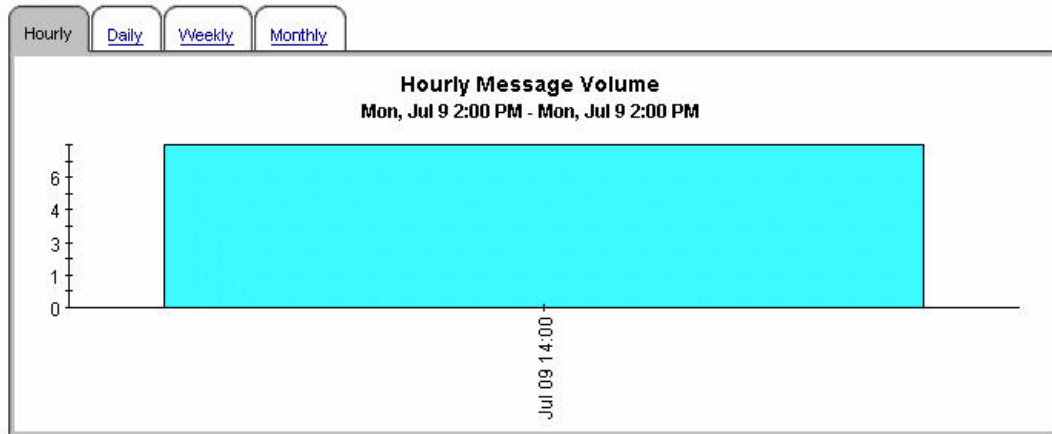
[Weekly](#)

[Monthly](#)

### Hourly Message Severity

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM





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# OV Operations

## Active Message Trend by All Messages



### Daily Message Severity by All Messages

Mon, Jul 9, 2007

Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
7	1	0	0	5	1	0	0

Hourly

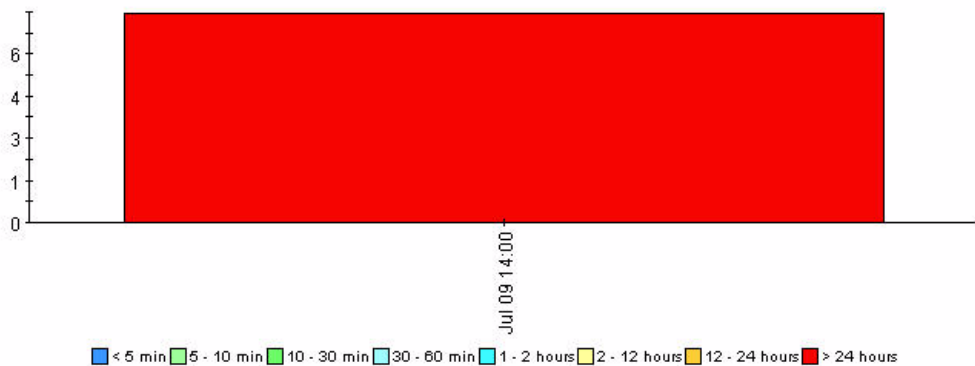
[Daily](#)

[Weekly](#)

[Monthly](#)

### Hourly Message Age

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM



Hourly

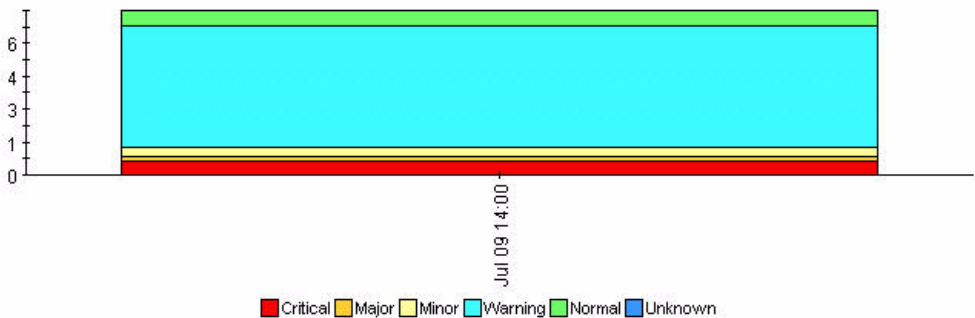
[Daily](#)

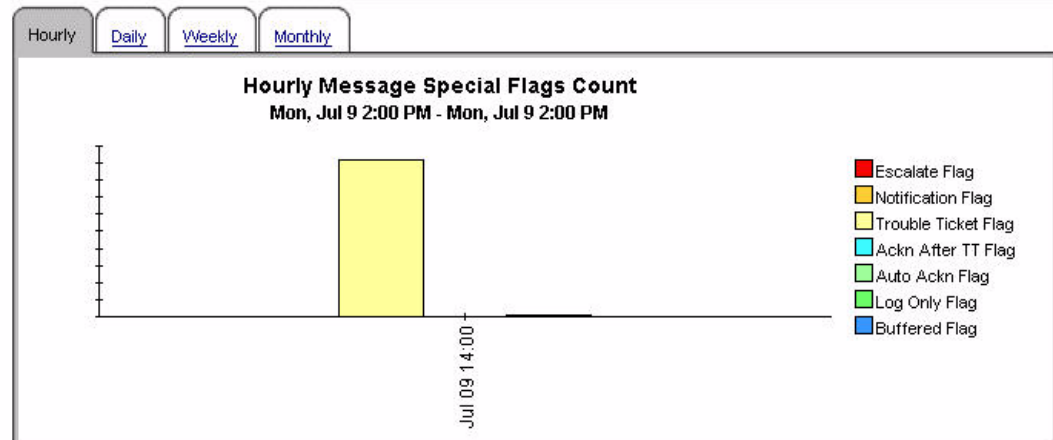
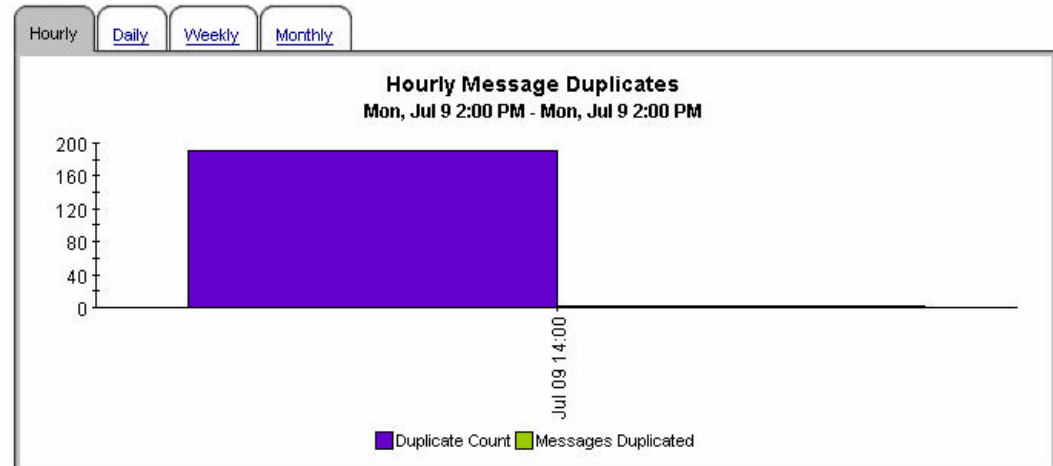
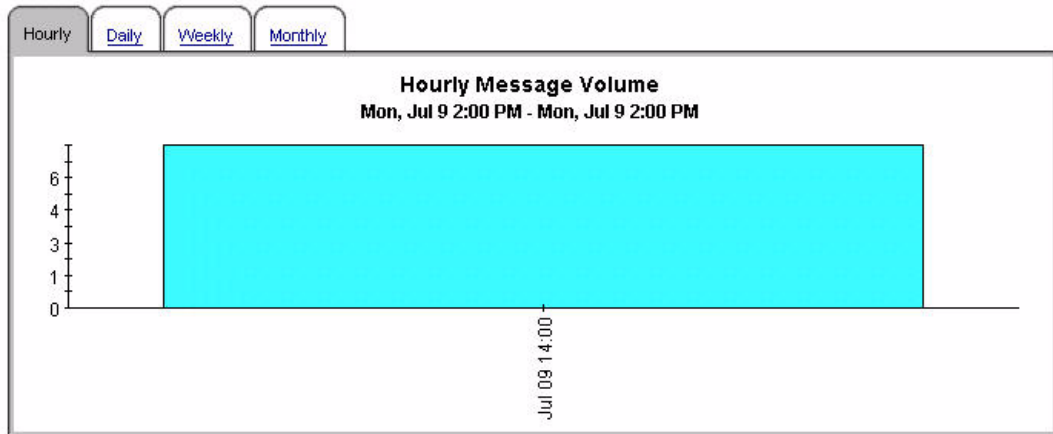
[Weekly](#)

[Monthly](#)

### Hourly Message Severity

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM





[↑](#) Back to Top



# OV Operations

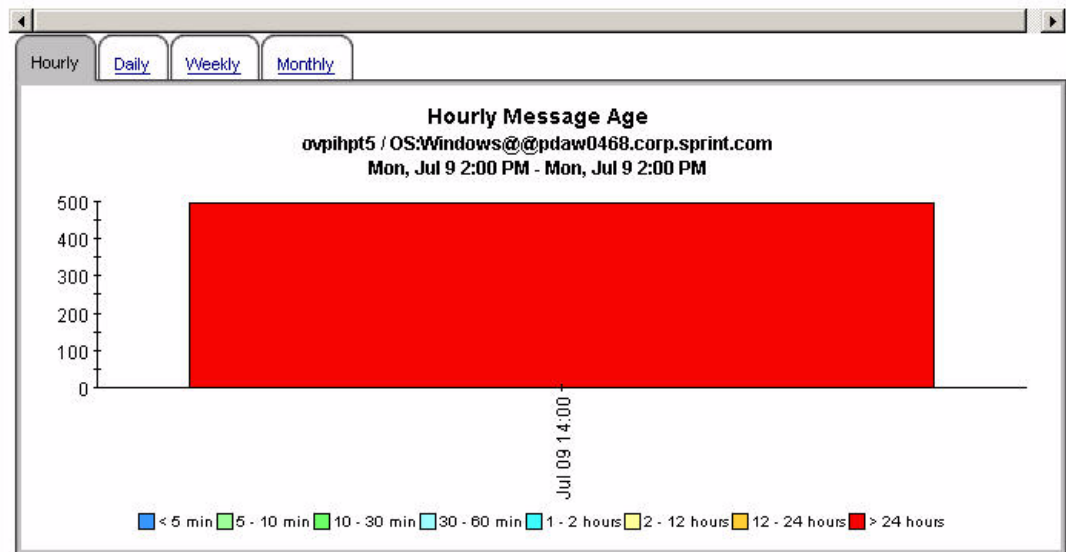
## Active Message Trend Top 15 by Server and Service

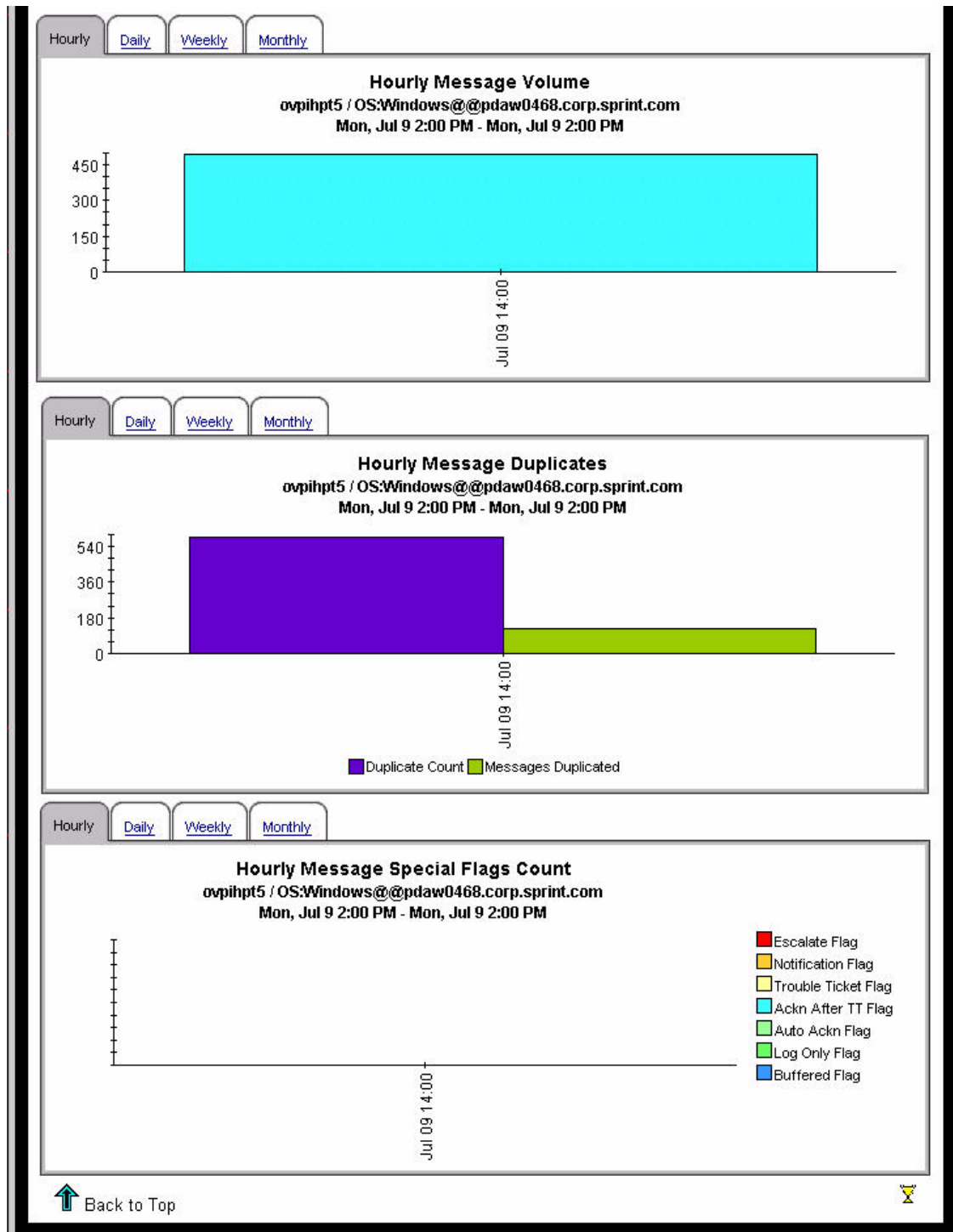


### Daily Message Severity Top 15 by Server and Service

Mon, Jul 9, 2007

Server	Service	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalat
ovpihpt5	OS:Windows@@pdaw0468.corp.sprint.com	496	0	0	0	496	0	0	0
ovpihpt5	OS:Windows@@plsw0472.corp.sprint.com	242	0	0	0	242	0	0	0
ovpihpt5	OS:Windows@@plsw0470.corp.sprint.com	232	0	0	0	232	0	0	0
ovpihpt5	OS:Windows@@prew0478.corp.sprint.com	177	0	0	0	177	0	0	0
ovpihpt5	OS:Windows@@pksw0466.corp.sprint.com	163	0	0	0	163	0	0	0
ovpihpt5	OS:Windows@@plsw0464.corp.sprint.com	126	0	0	0	126	0	0	0
ovpihpt5	SNMPTraps:SNMP@@plsw0470.corp.sprint.com	53	2	0	0	51	0	0	0
ovpihpt5	SNMPTraps:SNMP@@pdaw0468.corp.sprint.com	48	1	1	0	46	0	0	0
ovpihpt5	SNMPTraps:SNMP@@plsw0472.corp.sprint.com	43	1	0	0	42	0	0	0
ovpihpt5	SNMPTraps:<\$2>@@plse0138.corp.sprint.com	32	16	0	0	0	16	0	0
ovpihpt5	SNMPTraps:SNMP@@prew0478.corp.sprint.com	14	2	1	0	11	0	0	0
ovpihpt5	OS:AIX@@ddaa0640.dev.sprint.com	12	0	12	0	0	0	0	0
ovpihpt5	APP:2DS@@plsw0485.corp.sprint.com	10	0	5	0	0	5	0	0
ovpihpt5	SNMPTraps:clear@@geosprpclgra	9	0	0	0	0	9	0	0
ovpihpt5	Batch-Prod	9	0	0	9	0	0	0	0







# OV Operations

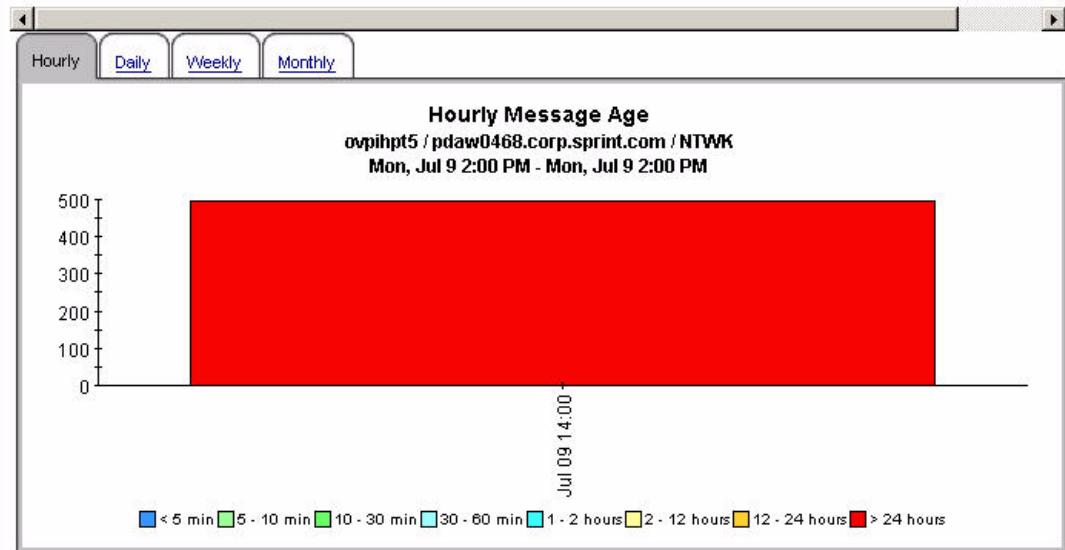


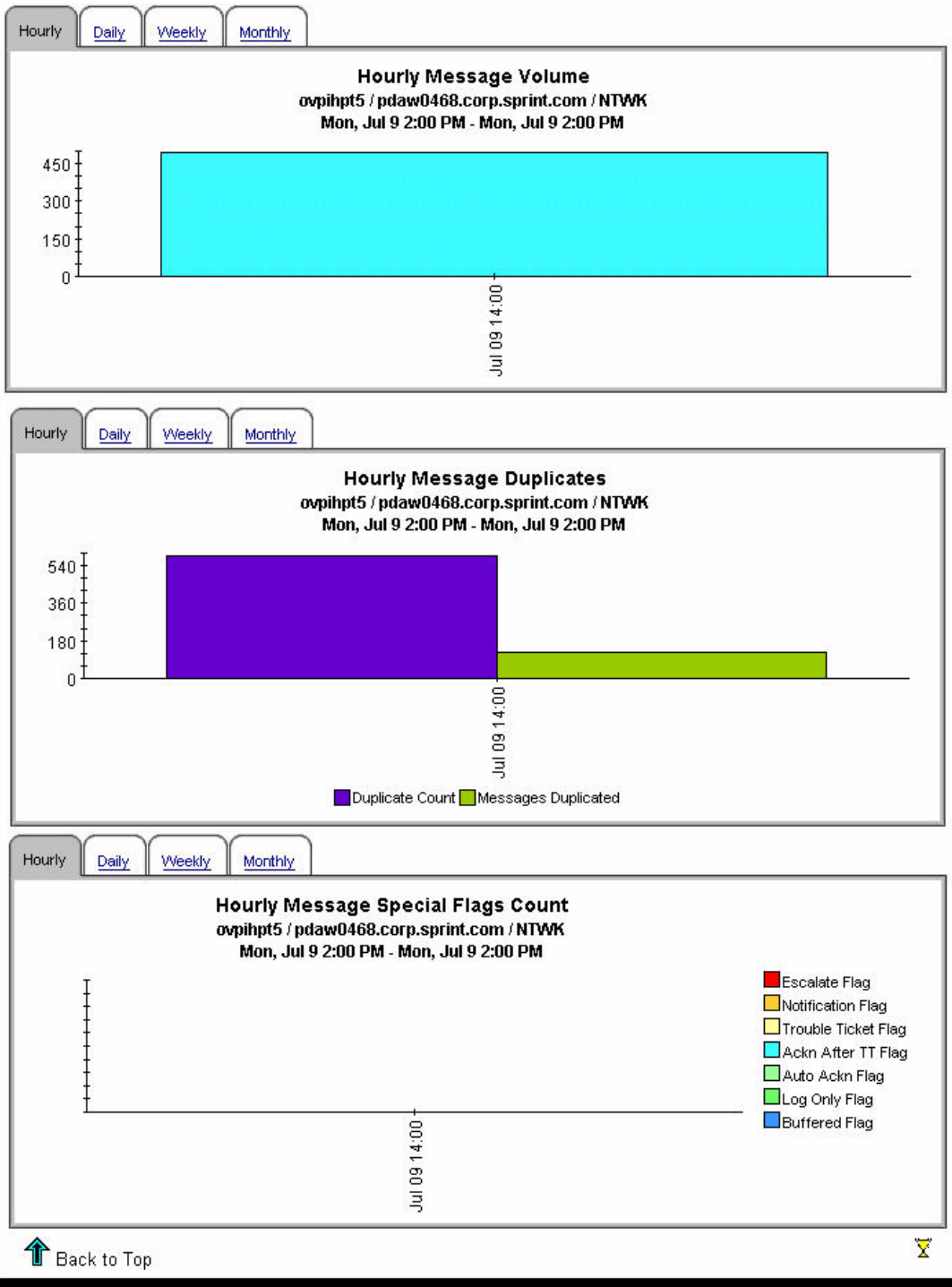
## Active Message Trend Top 15 by Server, Node and Application

### Daily Message Severity Top 15 by Server, Node and Application

Mon, Jul 9, 2007

Server	Node	Application	Message Count	Critical	Major	Minor	Warning	Normal	Unknown
ovpihpt5	pdaw0468.corp.sprint.com	NTWK	496	0	0	0	496	0	0
ovpihpt5	plsw0472.corp.sprint.com	NTWK	242	0	0	0	242	0	0
ovpihpt5	plsw0470.corp.sprint.com	NTWK	232	0	0	0	232	0	0
ovpihpt5	prew0478.corp.sprint.com	NTWK	177	0	0	0	177	0	0
ovpihpt5	pksw0466.corp.sprint.com	NTWK	163	0	0	0	163	0	0
ovpihpt5	plsw0464.corp.sprint.com	NTWK	126	0	0	0	126	0	0
ovpihpt5	plsw0470.corp.sprint.com	SNMPTraps	53	2	0	0	51	0	0
ovpihpt5	pdaw0468.corp.sprint.com	SNMPTraps	48	1	1	0	46	0	0
ovpihpt5	dlsa0631.dev.sprint.com	HP OpenView Operations	46	20	0	0	25	1	0
ovpihpt5	tdaa0641.test.sprint.com	HP OpenView Operations	44	20	0	0	23	1	0
ovpihpt5	pkda0452.corp.sprint.com	HP OpenView Operations	43	0	0	0	43	0	0
ovpihpt5	plsw0472.corp.sprint.com	SNMPTraps	43	1	0	0	42	0	0
ovpihpt5	dlsa0630.dev.sprint.com	HP OpenView Operations	42	15	0	0	25	2	0
ovpihpt5	ksophea1ccms01.corp.sprint.com	SNMPTraps	38	0	0	0	0	38	0
ovpihpt5	s0zn0314.it.sprintspectrum.com	HP OpenView Operations	34	0	0	0	34	0	0





# OV Operations

## Active Message Trend Top 15 by Server, Node and Message Group



### Daily Message Severity Top 15 by Server, Node and Message Group

Mon, Jul 9, 2007

Server	Node	Message Group	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
ovpihpt5	pdaw0468.corp.sprint.com	NNM_ENV	544	1	1	0	542	0	0	0
ovpihpt5	plsw0470.corp.sprint.com	NNM_ENV	285	2	0	0	283	0	0	0
ovpihpt5	plsw0472.corp.sprint.com	NNM_ENV	285	1	0	0	284	0	0	0
ovpihpt5	prew0478.corp.sprint.com	NNM_ENV	191	2	1	0	188	0	0	0
ovpihpt5	pksw0466.corp.sprint.com	NNM_ENV	170	0	1	0	169	0	0	0
ovpihpt5	plsw0464.corp.sprint.com	NNM_ENV	130	2	1	0	127	0	0	0
ovpihpt5	dlsa0631.dev.sprint.com	OpC	46	20	0	0	25	1	0	0
ovpihpt5	tdaa0641.test.sprint.com	OpC	44	20	0	0	23	1	0	0
ovpihpt5	pkda0452.corp.sprint.com	OpC	43	0	0	0	43	0	0	0
ovpihpt5	dlsa0630.dev.sprint.com	OpC	42	15	0	0	25	2	0	0
ovpihpt5	ksophea1ccms01.corp.sprint.com	VOIP	38	0	0	0	0	38	0	0
ovpihpt5	s0zn0314.it.sprintspectrum.com	OpC	34	0	0	0	34	0	0	0
ovpihpt5	plse0138.corp.sprint.com	MUX	32	16	0	0	0	16	0	0
ovpihpt5	jes21.corp.sprint.com	Control-M	29	0	0	29	0	0	0	0
ovpihpt5	ohctid01.corp.sprint.com	OpC	25	0	0	0	24	1	0	0

Hourly

Daily

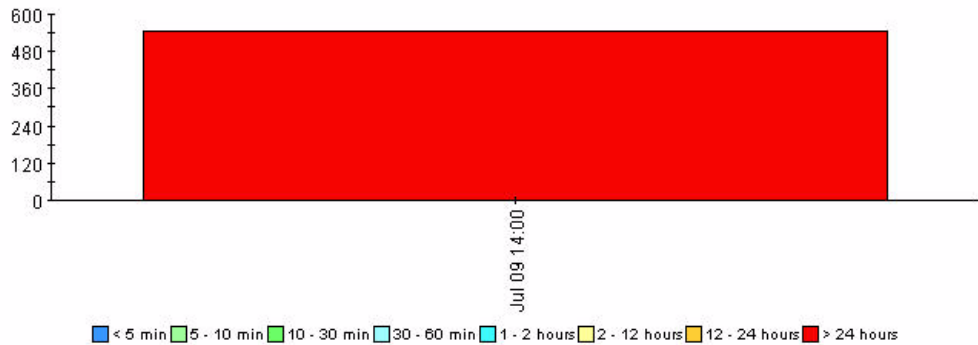
Weekly

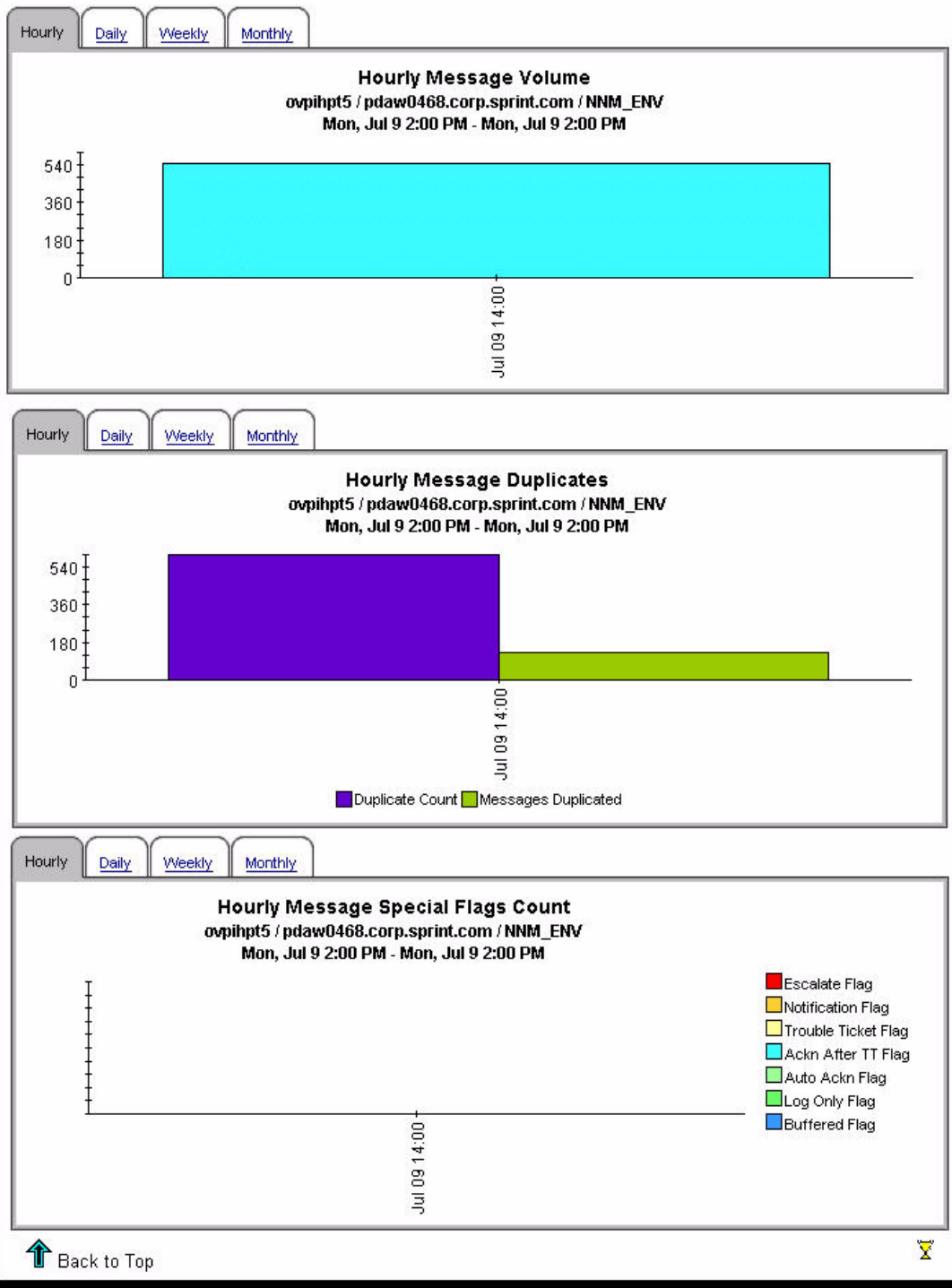
Monthly

### Hourly Message Age

ovpihpt5 / pdaw0468.corp.sprint.com / NNM\_ENV

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM





# OV Operations

## Active Message Trend Top 15 by Service



### Daily Message Severity Top 15 by Service

Mon, Jul 9, 2007

Service	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
OS:Windows@@pdaw0468.corp.sprint.com	496	0	0	0	496	0	0	0
OS:Windows@@plsw0472.corp.sprint.com	242	0	0	0	242	0	0	0
OS:Windows@@plsw0470.corp.sprint.com	232	0	0	0	232	0	0	0
OS:Windows@@prew0478.corp.sprint.com	177	0	0	0	177	0	0	0
OS:Windows@@pksw0466.corp.sprint.com	163	0	0	0	163	0	0	0
OS:Windows@@plsw0464.corp.sprint.com	126	0	0	0	126	0	0	0
SNMPTraps:SNMP@@plsw0470.corp.sprint.com	53	2	0	0	51	0	0	0
SNMPTraps:SNMP@@pdaw0468.corp.sprint.com	48	1	1	0	46	0	0	0
SNMPTraps:SNMP@@plsw0472.corp.sprint.com	43	1	0	0	42	0	0	0
SNMPTraps:SNMP@@plse0138.corp.sprint.com	32	16	0	0	0	16	0	0
SNMPTraps:SNMP@@prew0478.corp.sprint.com	14	2	1	0	11	0	0	0
OS:AIX@@ddaa0640.dev.sprint.com	12	0	12	0	0	0	0	0
APP:2DS@@plsw0485.corp.sprint.com	10	0	5	0	0	5	0	0
SNMPTraps:clear@@geosprpclgra	9	0	0	0	0	9	0	0
Batch-Prod	9	0	0	9	0	0	0	0

Hourly

[Daily](#)

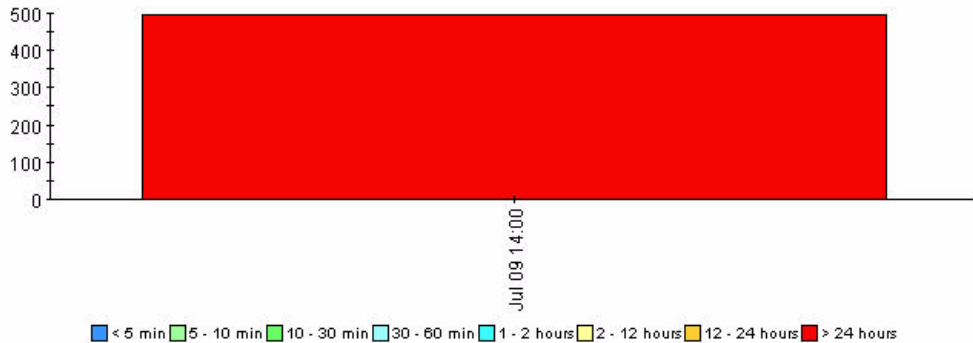
[Weekly](#)

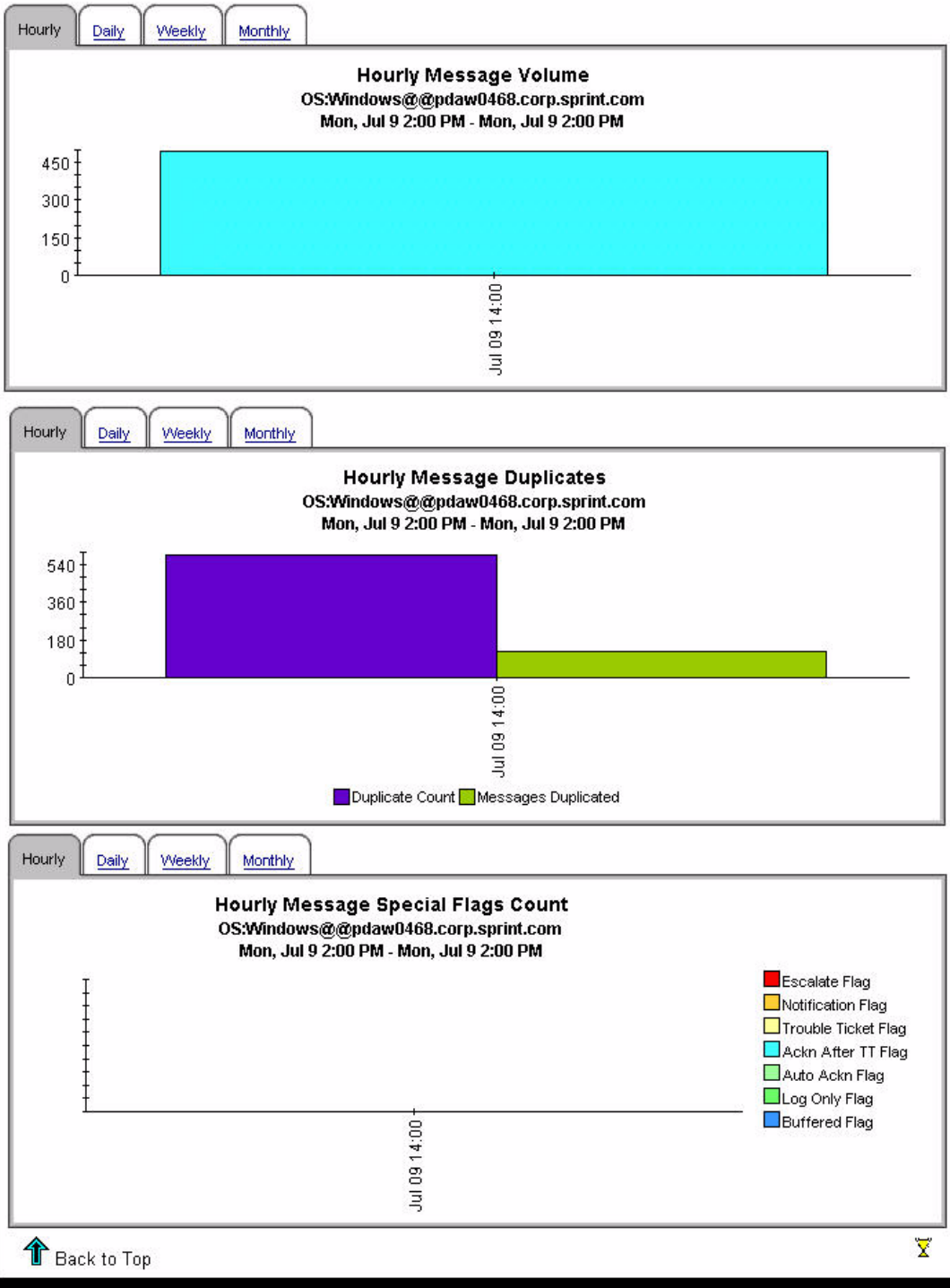
[Monthly](#)

### Hourly Message Age

OS:Windows@@pdaw0468.corp.sprint.com

Mon, Jul 9 2:00 PM - Mon, Jul 9 2:00 PM





## 6 History Message Reports

This chapter contains brief descriptions of the reports about history messages. A history message can be unacknowledged or acknowledged.

### History Dashboard by Server and Node

A list of the top 30 management server and nodes with the most severe messages and the most special flags.

### History Dashboard by Server Node and Template

A list of the top 30 management servers, nodes and templates with the most severe messages and the most special flags.

### Message Age Severity Trend by Server and User

Management servers and users that have the daily messages with the longest age (where age refers to the amount of time that it took a user to acknowledge/clear the alarm) and details hourly, daily, weekly and monthly message age, severity, volume, duplicates, special flags, and delay in seconds for the selected management server and user pair.

### Message OVO/OM Server Summary

Displays message severity for each Operations management server and for the selected server, details message severity, age and duplicates daily, weekly and monthly.

### Message Severity Trend by All Message

Provides a summary of all messages across all management servers by severity and details message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Application

A list of 15 applications that have the most associated messages and details for a selected application the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Message Group

A list of 15 message groups that have the most associated messages and details for a selected message group the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Node

A list of 15 nodes that have the most associated messages and details for a selected node the message age, severity, volume, duplicates, special flag counts, and delay in seconds hourly, daily, weekly and monthly.



### Message Severity by Node and Application

A list of 15 nodes and corresponding applications on those nodes that have the most associated messages and details for a node and application pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Node and Message Group

A list of 15 nodes and corresponding message groups on those nodes that have the most associated messages and details for a node and message group pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Node and Template

A list of 15 nodes and corresponding templates managing those nodes that have the most associated messages and details for a selected node and template pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Node and Service

A list of 15 nodes and corresponding services running on those nodes that have the most associated messages and details for a selected node and service pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Server

A list of 15 Operations management servers that have the most associated messages and details for a selected Operations management server the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Server and Message Group

A list of 15 Operations management servers and corresponding message groups being monitored by those servers that have the most associated messages and details for a selected management server and message group pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server and Node

A list of 15 Operations management servers and corresponding nodes being managed by those servers that have the most associated messages and details for a selected management server and node pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server and Service

A list of 15 Operations management servers and corresponding services being managed by those servers that have the most associated messages and details for a selected management server and service pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server

A list of 15 Operations management servers and corresponding templates monitored by those servers that have the most associated messages and details for a selected management server and template pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.



### Message Severity by Server and Application

A list of 15 Operations management servers and corresponding applications being managed by those servers that have the most associated messages and details for a selected management server and application pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server, Node and Application

A list of 15 Operations management servers and corresponding nodes and applications on those nodes that have the most associated messages and details for a selected management server, node and application threesome the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server, Node and Message Group

A list of 15 Operations management servers and corresponding nodes and message groups from those nodes that have the most associated messages and details for a selected management server, node and message count threesome the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server, Node and Service

A list of 15 Operations management servers and corresponding nodes and services on those nodes that have the most associated messages and details for a selected management server, node and service threesome the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Server, Template and Condition

A list of 15 Operations management servers and corresponding monitored templates and occurred conditions on those servers that have the most associated messages and details for a selected management server, template and condition threesome the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Server and User

A list of 15 Operations management servers and corresponding users on those servers that have the most associated messages and details for a selected management server and user pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity Trend by Service

A list of 15 services that have the most associated messages and details for a selected service the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Template

A list of 15 templates that have the most associated messages and details for a selected template the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by Template and Condition

A list of 15 templates and corresponding occurred conditions that have the most associated messages and details for a selected template and condition pair the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Message Severity by User

A list of 15 users that have the most associated messages and details for a selected user the message age, severity, volume, duplicates, special flag counts and delay in seconds hourly, daily, weekly and monthly.

### Monthly Server Breakdown with Special Flag

A list of the top 20 Operations management servers with the most messages with notify and trouble ticket details and a graph of hourly, daily, weekly and monthly special flag counts.

### Template Breakdown with Special Flags

A list of the top 20 templates with the most messages with notify and trouble ticket details and a graph of hourly, daily, weekly, and monthly special flag counts.

# OV Operations

## Historical Message Trends OVO Server



### Daily Message Severity by Server

Mon, Jul 9, 2007

Server	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
ovpihpt5	630	48	22	62	429	69	0	0

Daily

[Weekly](#)

[Monthly](#)

### Daily Message Severity

ovpihpt5

Mon, Jul 9, 2007

- (7.61%) Critical
- (3.49%) Major
- (9.84%) Minor
- (68.09%) Warning
- (10.95%) Normal
- (0.0%) Unknown



Daily

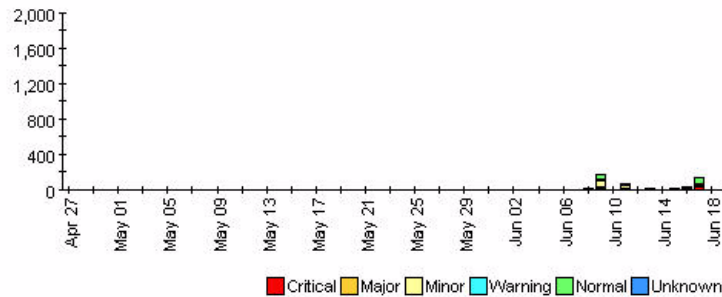
[Weekly](#)

[Monthly](#)

### Daily Message Severity

ovpihpt5

Fri, Apr 27, 2007 - Mon, Jul 9, 2007



[Daily](#)
[Weekly](#)
[Monthly](#)

### Weekly Message Age

ovpihpt5

Sun, Jul 1, 2007

- (86.36%) < 5 min
- (1.51%) 5 - 10 min
- (12.12%) 10 - 30 min
- (0.0%) 30 - 60 min
- (0.0%) 1 - 2 hours
- (0.0%) 2 - 12 hours
- (0.0%) 12 - 24 hours
- (0.0%) > 24 hours

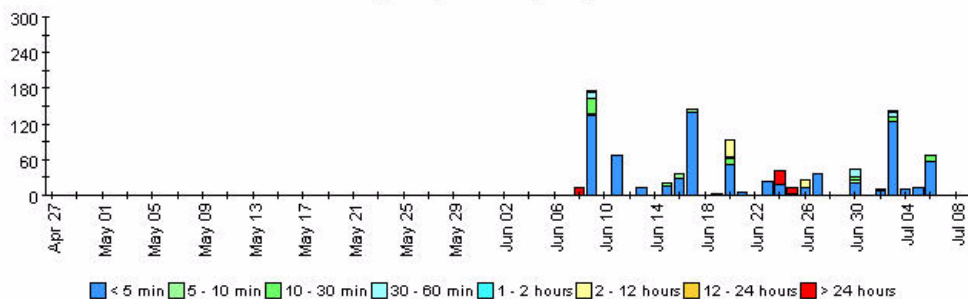


[Daily](#)
[Weekly](#)
[Monthly](#)

### Daily Message Age

ovpihpt5

Fri, Apr 27, 2007 - Mon, Jul 9, 2007

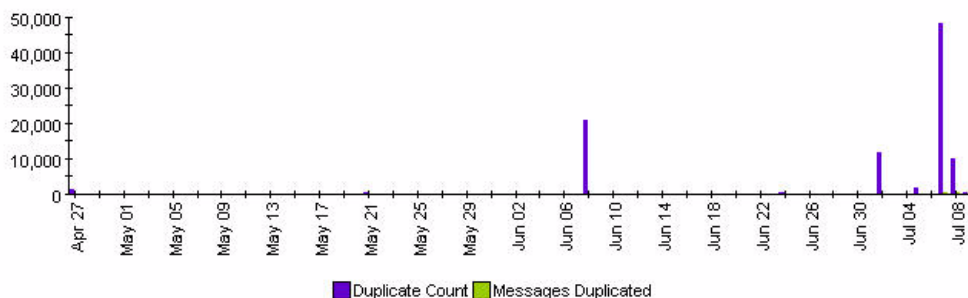


[Daily](#)
[Weekly](#)
[Monthly](#)

### Daily Message Duplicates

ovpihpt5

Fri, Apr 27, 2007 - Mon, Jul 9, 2007



[Back to Top](#)



# OV Operations

## Consolidated Message Trend Top 15 by Application



### Daily Message Severity Top 15 by Application

Mon, Jul 9, 2007

Application	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
NTWK	350	7	2	12	328	1	0	0
SNMPTraps	109	14	3	0	42	50	0	0
HP OpenView Operations	70	15	0	0	46	9	0	0
INF	32	0	0	32	0	0	0	0
OS	16	10	0	0	5	1	0	0
OVOW	14	0	10	4	0	0	0	0
WLSSPI	8	0	3	4	1	0	0	0
APP	6	0	0	0	0	6	0	0
Edify	5	0	3	0	0	2	0	0
OpC	4	0	0	2	2	0	0	0
7gp	3	0	0	0	3	0	0	0
MIDDLEWARE	2	0	0	2	0	0	0	0
rhs	2	1	0	1	0	0	0	0
db2s_dbmon.pl	2	0	0	2	0	0	0	0

Hourly

Daily

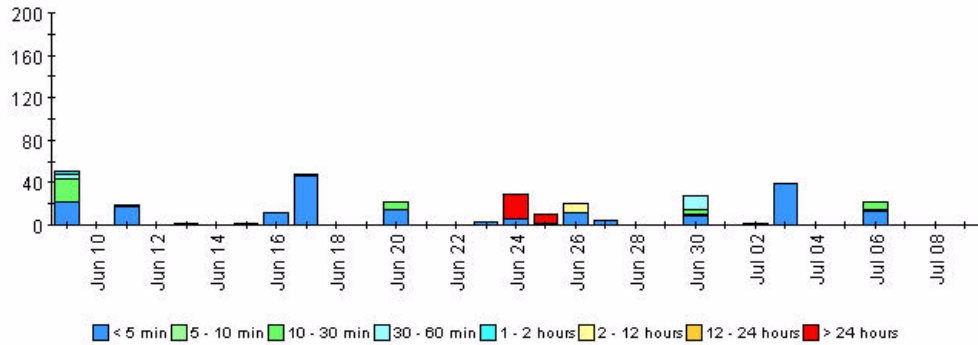
Weekly

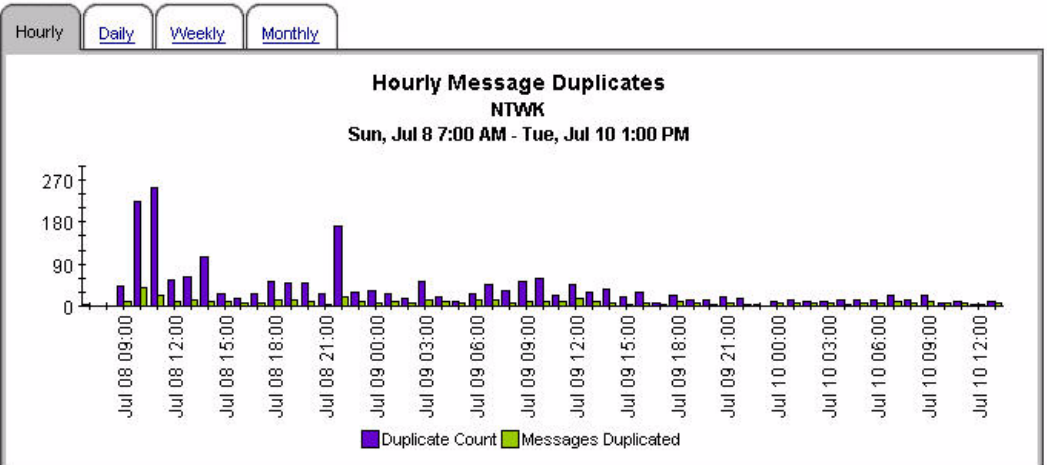
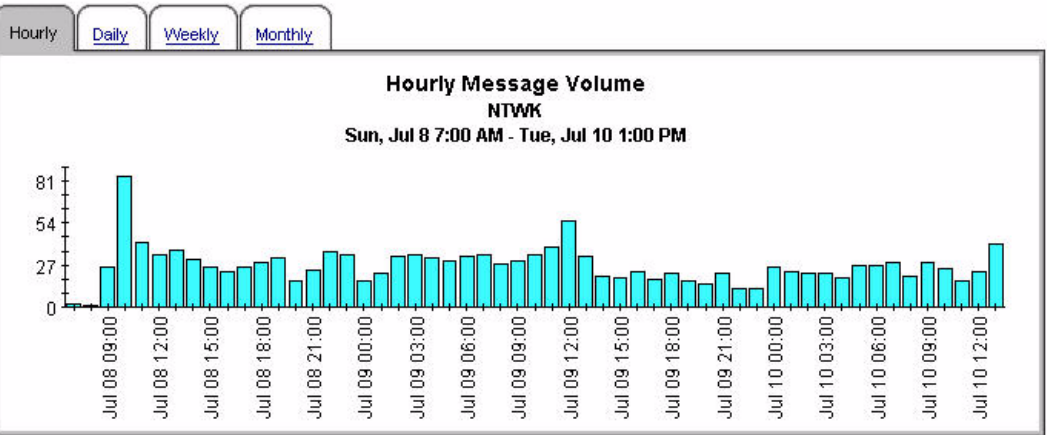
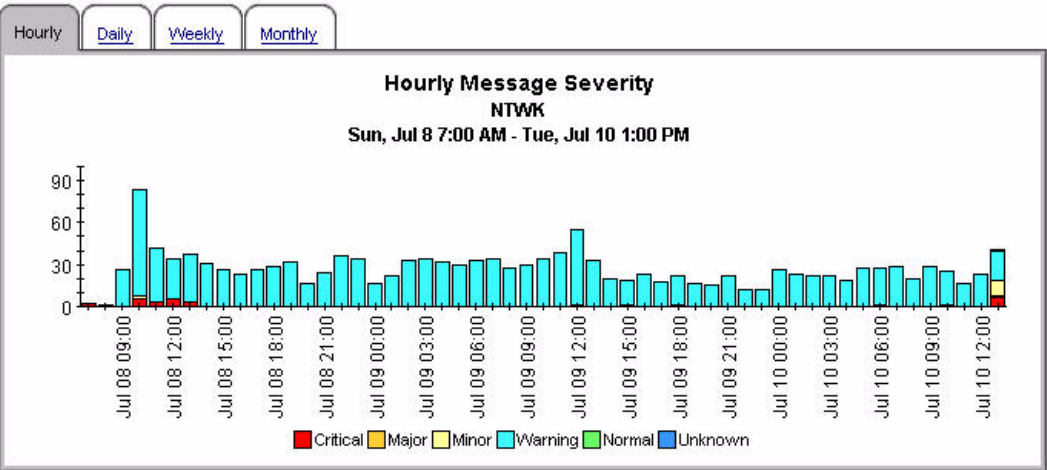
Monthly

### Daily Message Age

NTWK

Sat, Jun 9, 2007 - Mon, Jul 9, 2007







# OV Operations

## Consolidated Message Trend Top 15 by Node



### Daily Message Severity Top 15 by Node

Mon, Jul 9, 2007

Node	Message Count	Critical	Major	Minor	Warning	Normal	Unknown
pdaw0468.corp.sprint.com	133	0	0	0	133	0	0
plsw0472.corp.sprint.com	74	0	0	0	74	0	0
plsw0470.corp.sprint.com	62	0	0	0	62	0	0
pksw0466.corp.sprint.com	40	0	0	0	40	0	0
plsw0464.corp.sprint.com	34	0	0	0	34	0	0
prew0478.corp.sprint.com	26	0	1	0	25	0	0
jes24.corp.sprint.com	15	0	0	15	0	0	0
jes21.corp.sprint.com	12	0	0	12	0	0	0
pvmk0027.corp.sprint.com	12	3	0	0	9	0	0
geosprpclgra	11	0	2	0	0	9	0
plsa0636.corp.sprint.com	8	0	8	0	0	0	0
pree0136.corp.sprint.com	8	4	0	0	0	4	0
plss1986.corp.sprint.com	7	0	0	0	6	1	0
dadotp03.corp.sprint.com	6	0	0	0	0	6	0
pkda0452.corp.sprint.com	6	0	0	0	6	0	0

Hourly

Daily

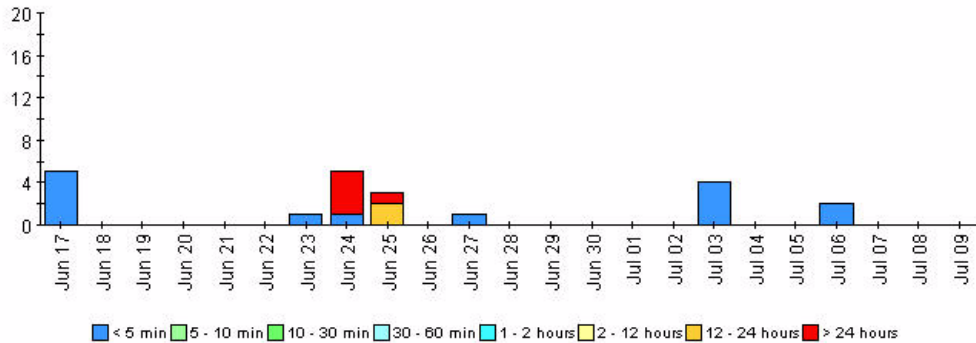
Weekly

Monthly

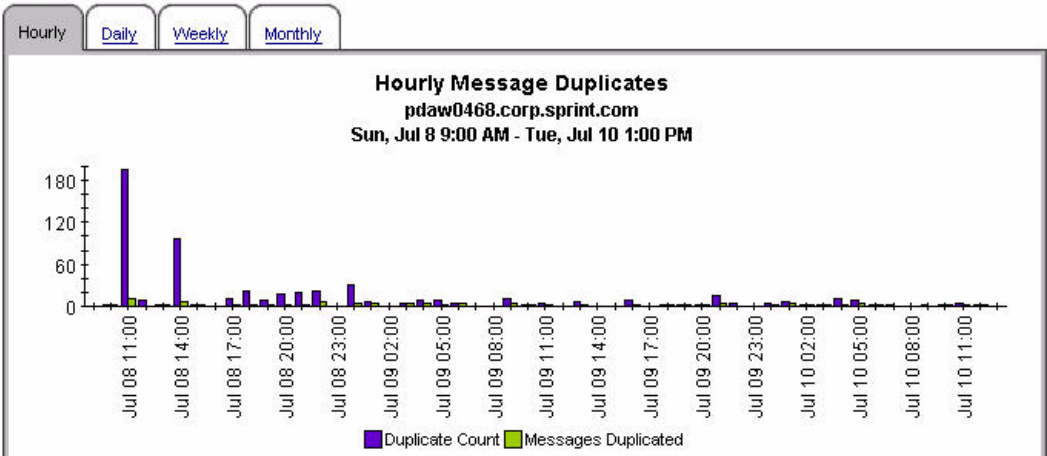
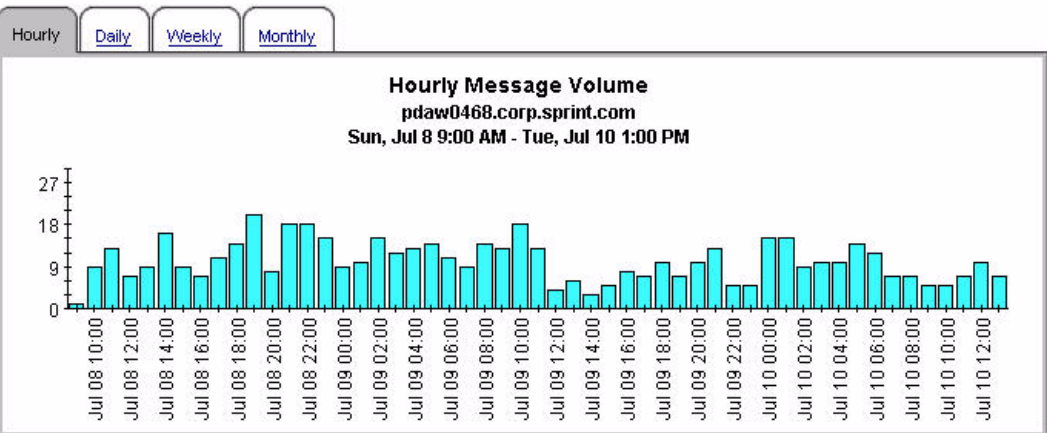
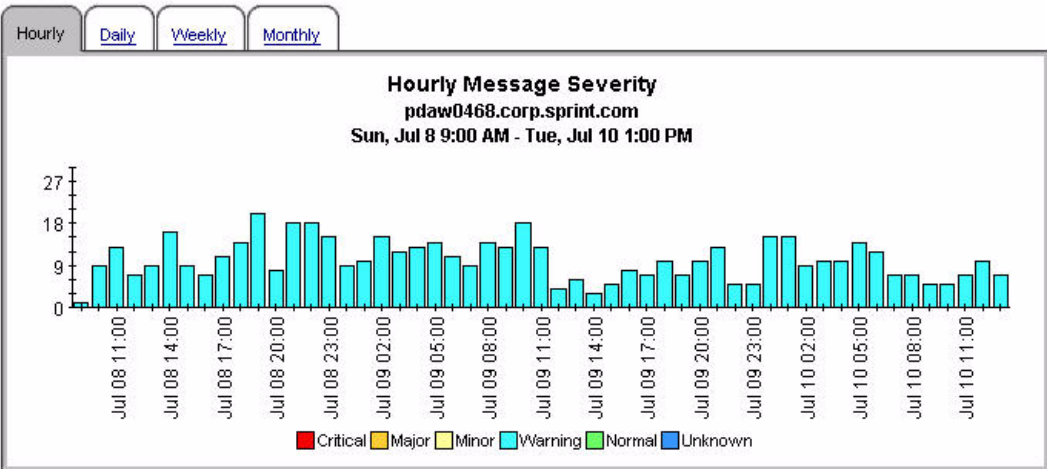
### Daily Message Age

pdaw0468.corp.sprint.com

Sun, Jun 17, 2007 - Mon, Jul 9, 2007









# OV Operations

Consolidated Message Trend by Top 15 by Node and Message Group



## Daily Message Severity Top 15 by Node and Message Group

Mon, Jul 9, 2007

Node	Msg Group	Critical	Message Count	Major	Minor	Warning	Normal	Unknown
pdaw0468.corp.sprint.com	NNM_ENV	0	133	0	0	133	0	0
plsw0472.corp.sprint.com	NNM_ENV	0	74	0	0	74	0	0
plsw0470.corp.sprint.com	NNM_ENV	0	62	0	0	62	0	0
pksw0466.corp.sprint.com	NNM_ENV	0	40	0	0	40	0	0
plsw0464.corp.sprint.com	NNM_ENV	0	34	0	0	34	0	0
prew0478.corp.sprint.com	NNM_ENV	0	26	1	0	25	0	0
jes24.corp.sprint.com	Control-M	0	15	0	15	0	0	0
jes21.corp.sprint.com	Control-M	0	12	0	12	0	0	0
pvmk0027.corp.sprint.com	OpC	3	12	0	0	9	0	0
geosprpclgra	ICM	0	11	2	0	0	9	0
plsa0636.corp.sprint.com	AIX	0	8	8	0	0	0	0
pree0136.corp.sprint.com	MUX	4	8	0	0	0	4	0
dadtp03.corp.sprint.com	WLSSPI	0	6	0	0	0	6	0
plsh0875.corp.sprint.com	OpC	3	6	0	0	3	0	0
plsh0697.it.sprintspectrum.com	Control-M	0	6	0	6	0	0	0

[Hourly](#)

[Daily](#)

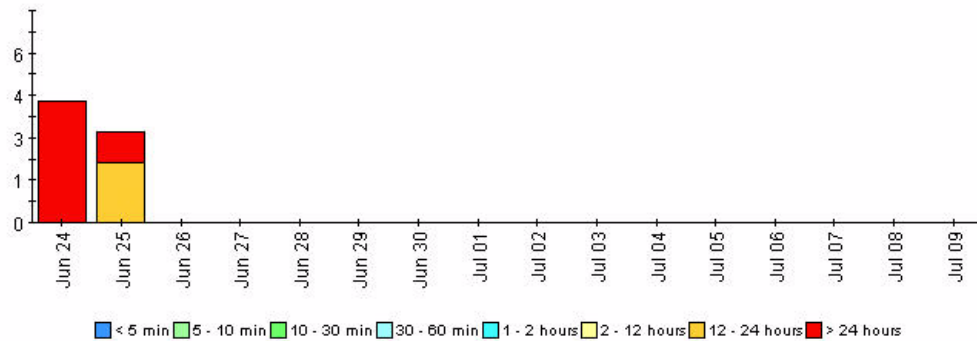
[Weekly](#)

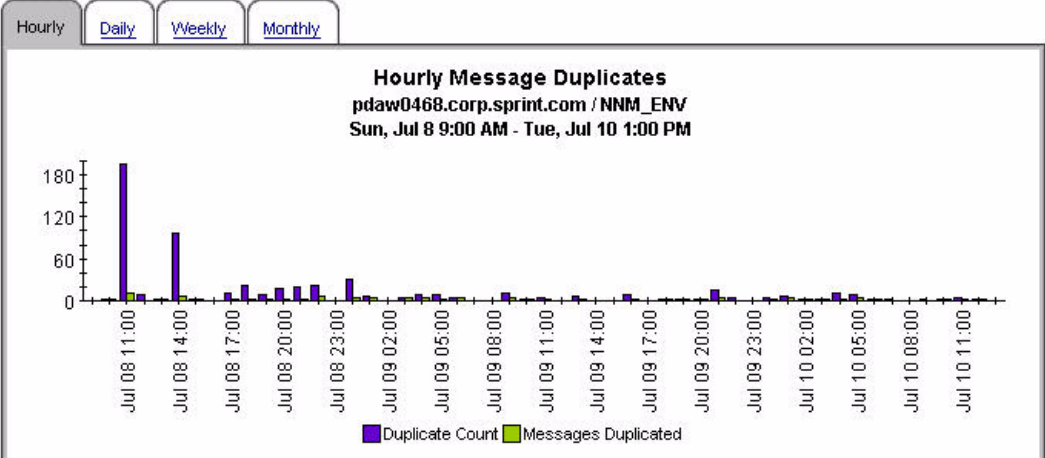
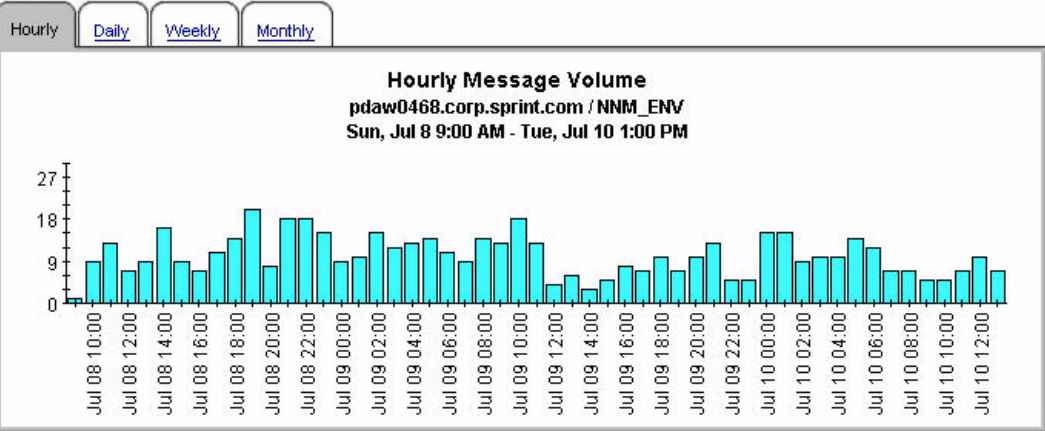
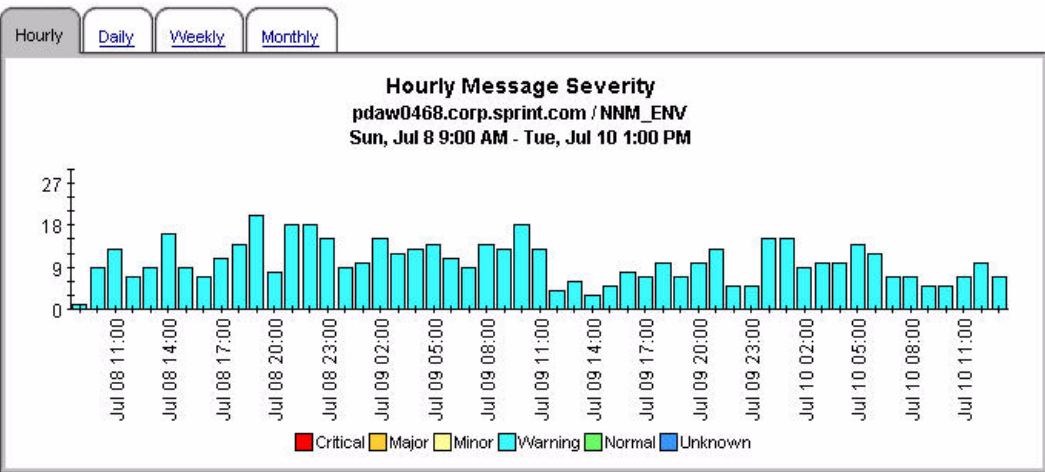
[Monthly](#)

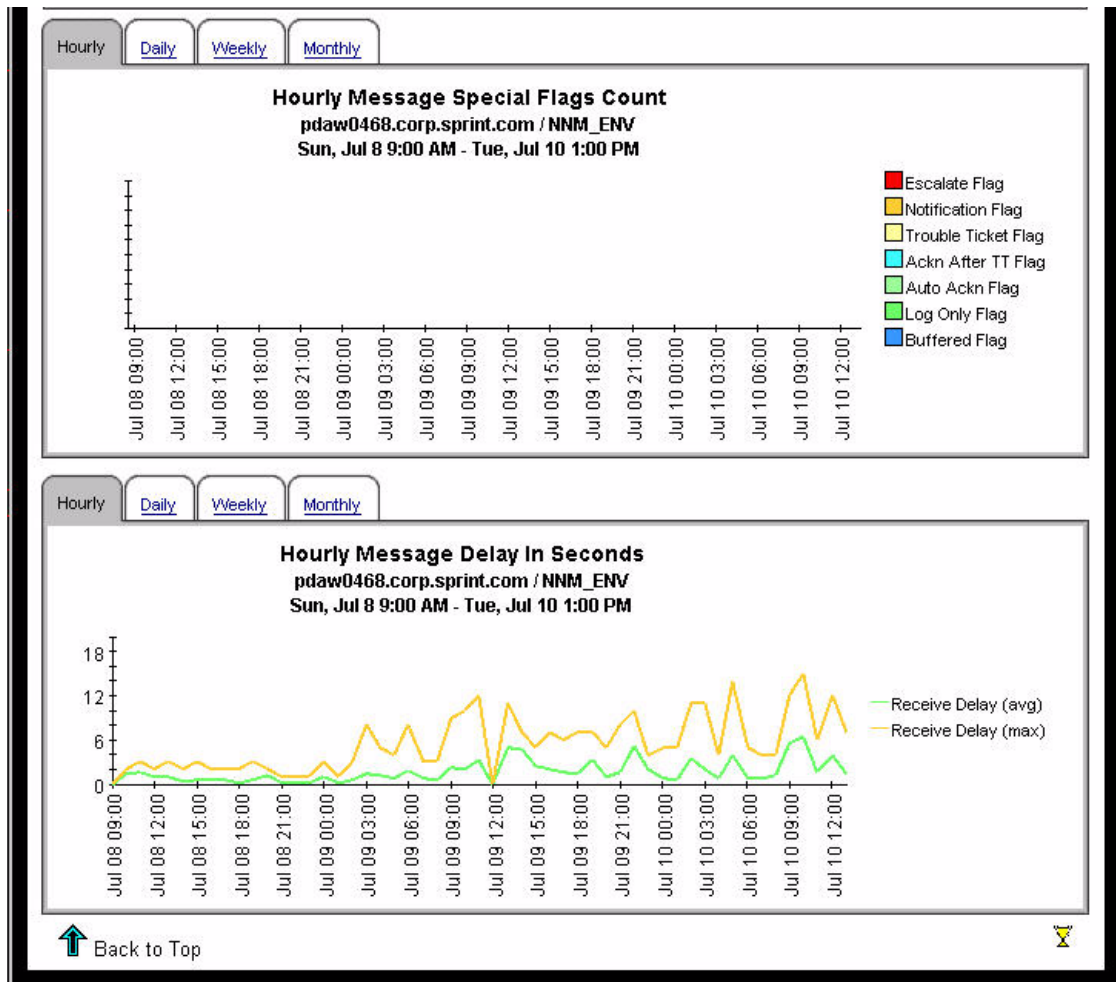
## Daily Message Age

pdaw0468.corp.sprint.com / NNM\_ENV

Sun, Jun 24, 2007 - Mon, Jul 9, 2007







# OV Operations

## Consolidated Message Trend Top 15 by Node and Service



### Daily Message Severity Top 15 by Node and Service

Mon, Jul 9, 2007

Node	Service	Message Count	Critical	Major	Minor	Warning	Normal	Unknown
pdaw0468.corp.sprint.com	OS:Windows@@pdaw0468.corp.sprint.com	120	0	0	0	120	0	0
plsw0472.corp.sprint.com	OS:Windows@@plsw0472.corp.sprint.com	64	0	0	0	64	0	0
plsw0470.corp.sprint.com	OS:Windows@@plsw0470.corp.sprint.com	49	0	0	0	49	0	0
pksw0466.corp.sprint.com	OS:Windows@@pksw0466.corp.sprint.com	38	0	0	0	38	0	0
plsw0464.corp.sprint.com	OS:Windows@@plsw0464.corp.sprint.com	34	0	0	0	34	0	0
prew0478.corp.sprint.com	OS:Windows@@prew0478.corp.sprint.com	23	0	0	0	23	0	0
jes24.corp.sprint.com	Batch-Prod	15	0	0	15	0	0	0
pdaw0468.corp.sprint.com	SNMPTraps:SNMP@@pdaw0468.corp.sprint.com	13	0	0	0	13	0	0
plsw0470.corp.sprint.com	SNMPTraps:SNMP@@plsw0470.corp.sprint.com	13	0	0	0	13	0	0
jes21.corp.sprint.com	Batch-Prod	12	0	0	12	0	0	0
pvmk0027.corp.sprint.com	OpC	12	3	0	0	9	0	0
plsw0472.corp.sprint.com	SNMPTraps:SNMP@@plsw0472.corp.sprint.com	10	0	0	0	10	0	0
geosprpclgra	SNMPTraps:clear@@geosprpclgra	9	0	0	0	0	0	9
plsa0636.corp.sprint.com	OS:AIX@@plsa0636.corp.sprint.com	8	0	8	0	0	0	0
plss1986.corp.sprint.com	OpC	7	0	0	0	6	1	0

Hourly

Daily

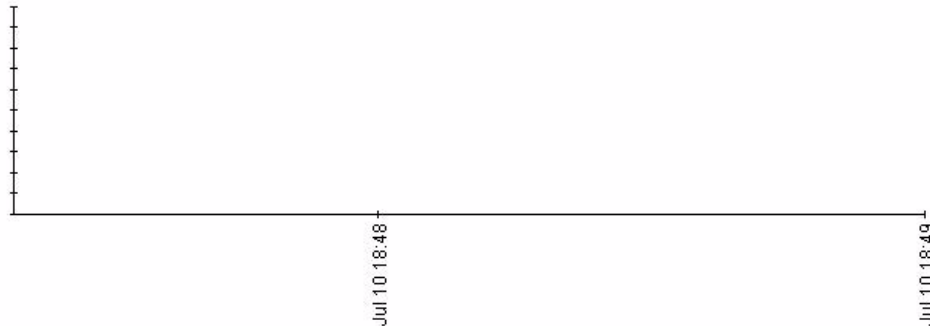
Weekly

Monthly

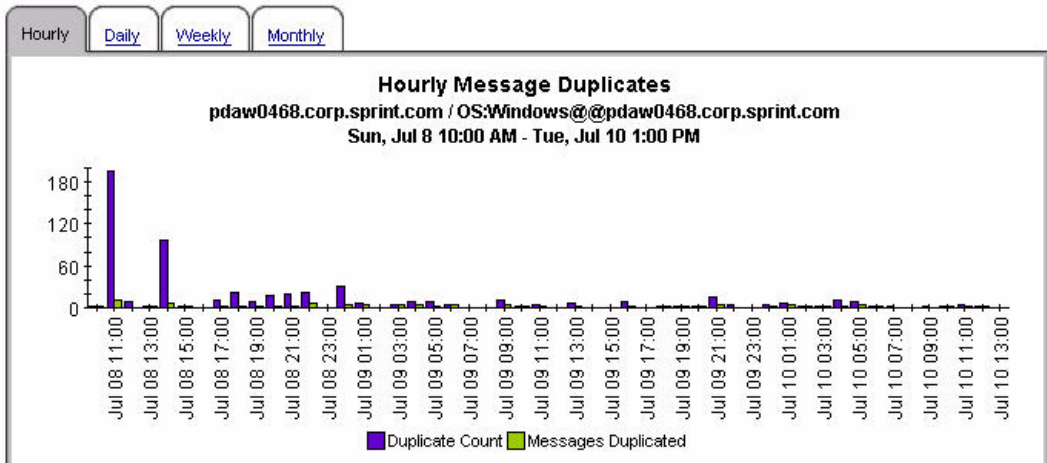
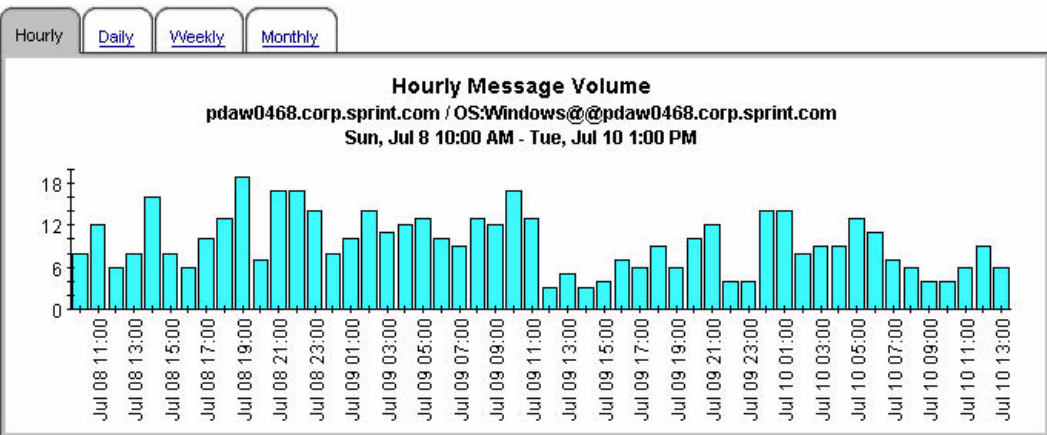
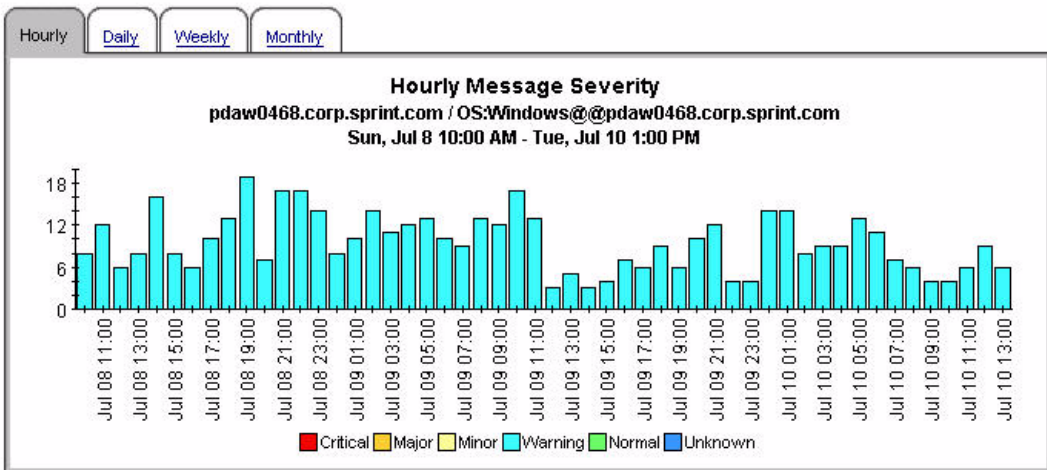
### Hourly Message Age

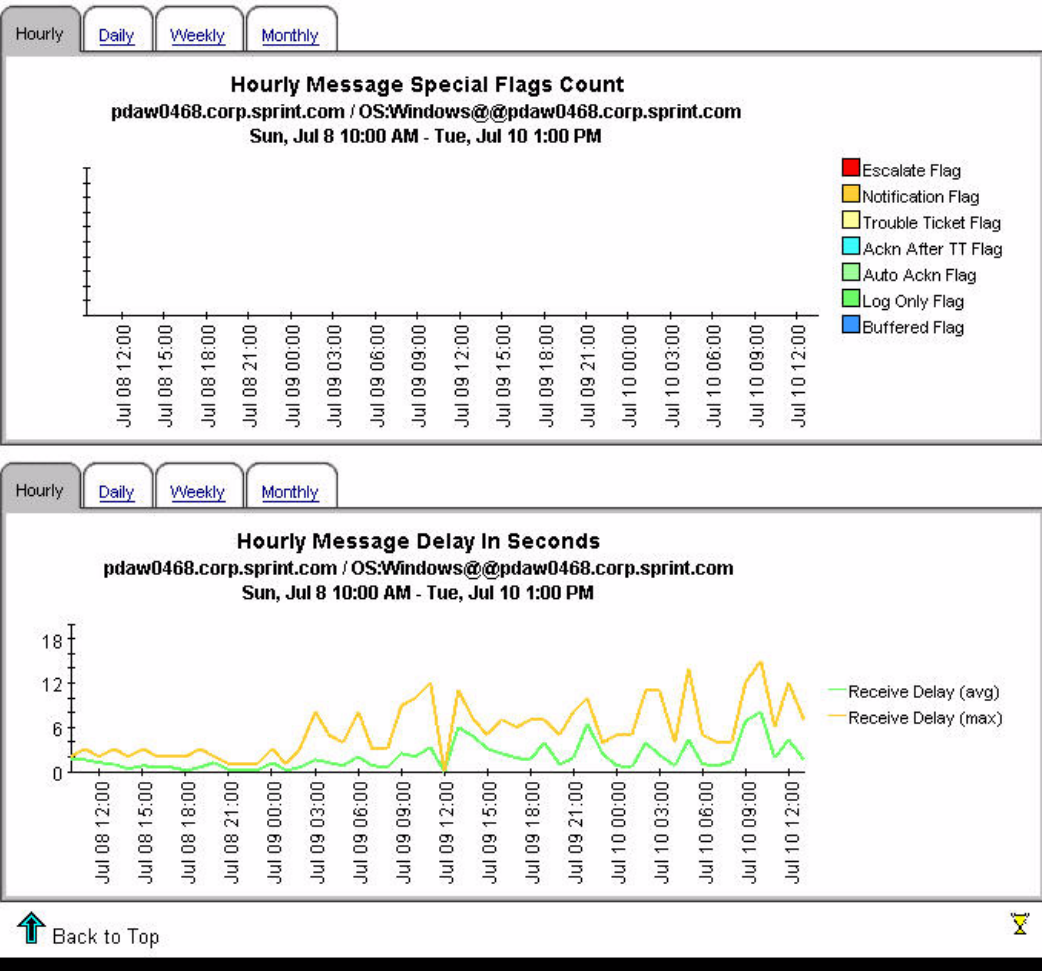
pdaw0468.corp.sprint.com / OS:Windows@@pdaw0468.corp.sprint.com

Sun, Jul 8 10:00 AM - Tue, Jul 10 1:00 PM











# OV Operations

Consolidated Message Trend by Top 15 by Server and Message Group



## Daily Message Severity Top 15 by Server and Message Group

Mon, Jul 9, 2007

Server	Message Group	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalate
ovpihpt5	NNM_ENV	370	0	1	0	369	0	0	0
ovpihpt5	OpC	70	15	0	0	46	9	0	0
ovpihpt5	Server	43	9	0	0	0	34	0	0
ovpihpt5	Control-M	38	0	0	38	0	0	0	0
ovpihpt5	DATA	22	7	2	12	0	1	0	0
ovpihpt5	WLSSPI	22	10	0	0	5	7	0	0
ovpihpt5	AIX	11	0	10	1	0	0	0	0
ovpihpt5	ICM	11	0	2	0	0	9	0	0
ovpihpt5	MUX	10	5	0	0	0	5	0	0
ovpihpt5	SNMP	7	0	0	4	3	0	0	0
ovpihpt5	OS	5	1	1	0	3	0	0	0
ovpihpt5	SUN	3	0	0	3	0	0	0	0
ovpihpt5	Windows	3	0	3	0	0	0	0	0
ovpihpt5	DB2SPI	3	0	0	1	2	0	0	0
ovpihpt5	OVIS	3	0	2	0	0	1	0	0

[Hourly](#)

**Daily**

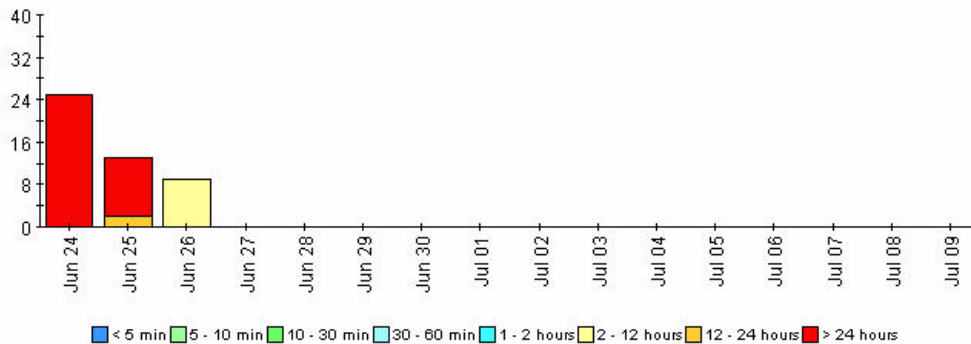
[Weekly](#)

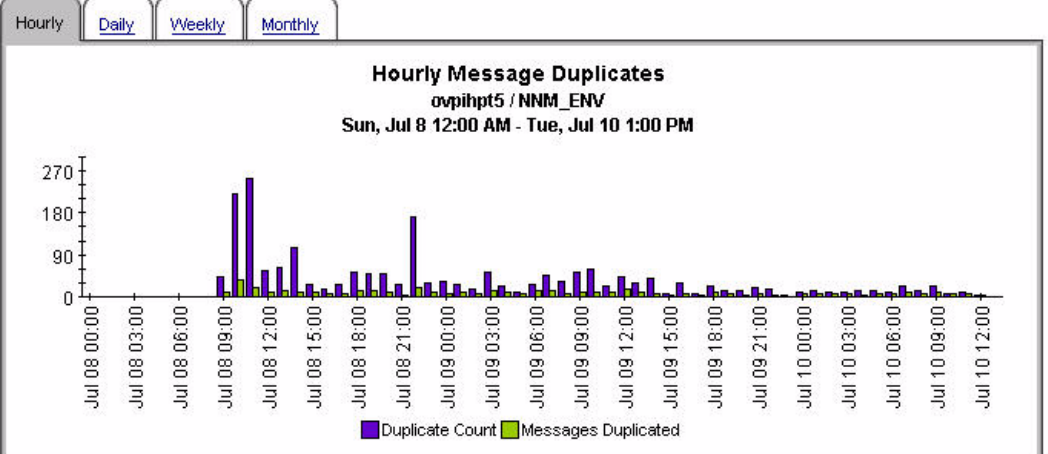
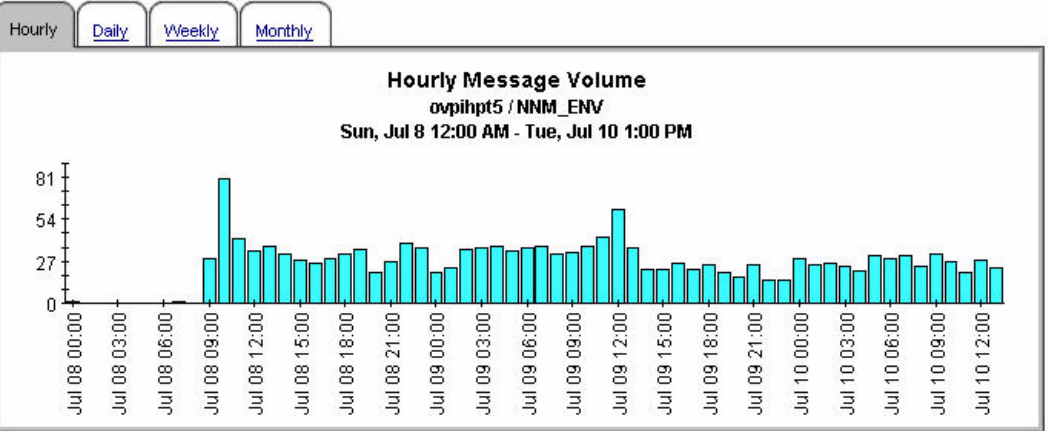
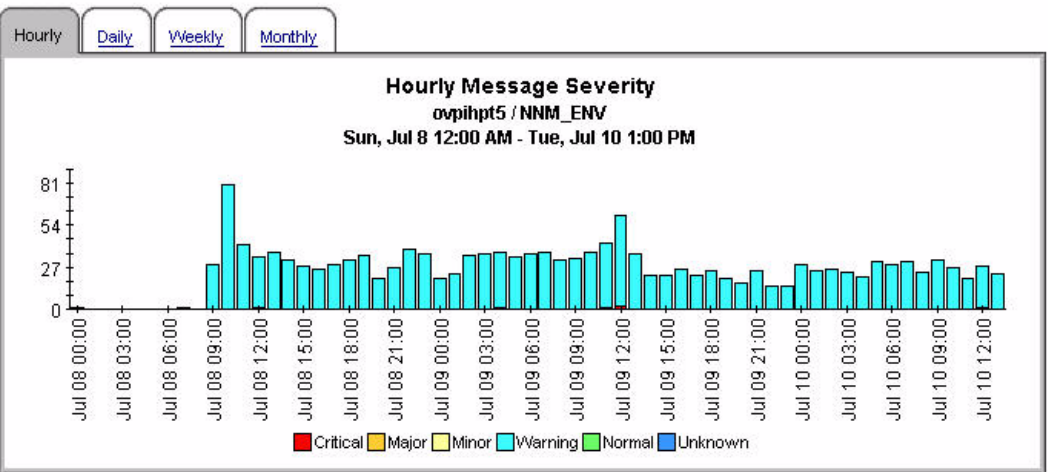
[Monthly](#)

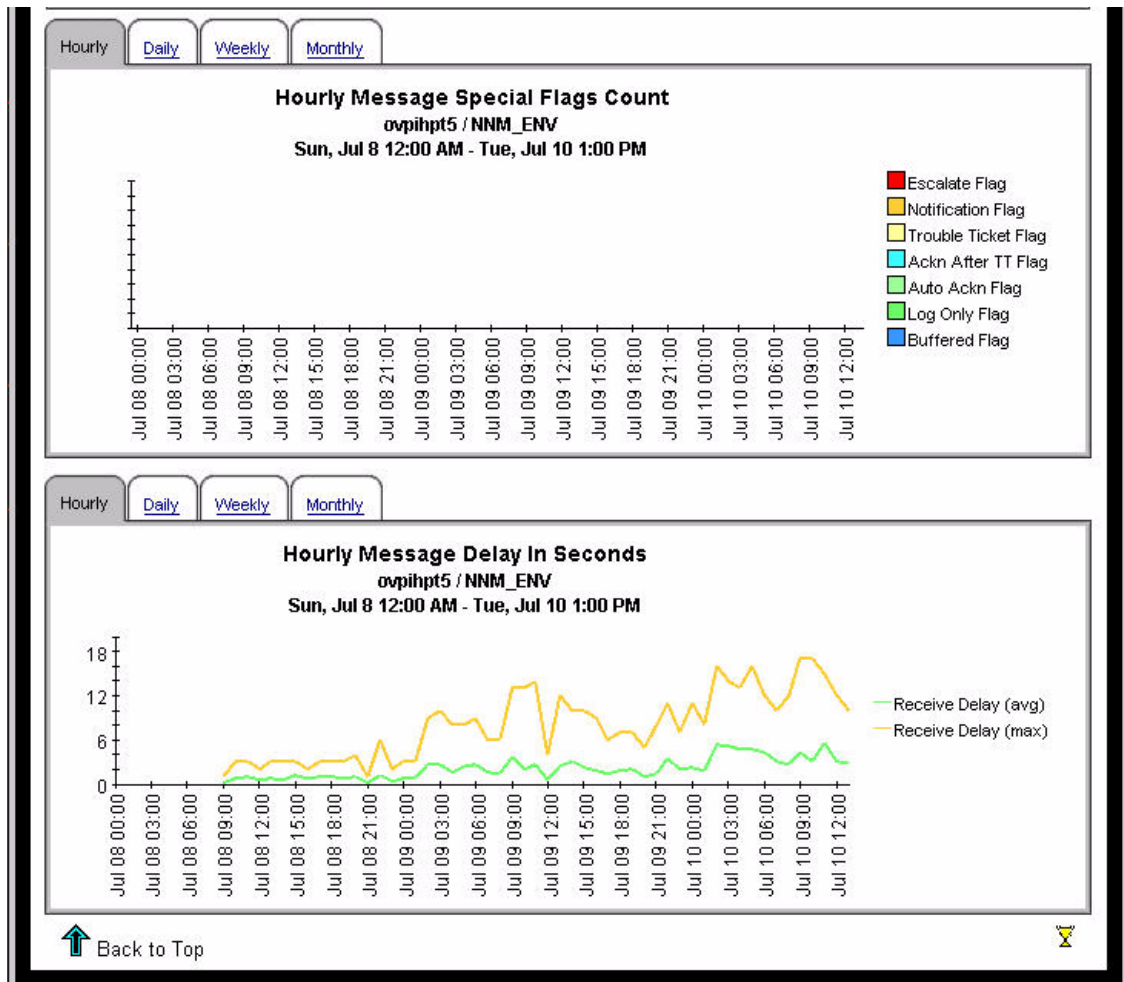
## Daily Message Age

ovpihpt5 / NNM\_ENV

Sun, Jun 24, 2007 - Mon, Jul 9, 2007







# OV Operations

## Consolidated Message Trend Top 15 by Server and Service

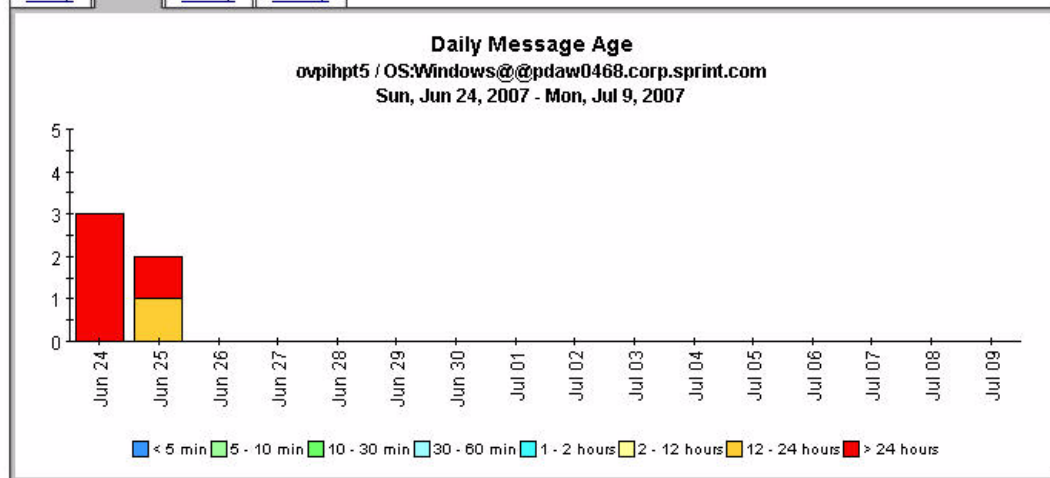


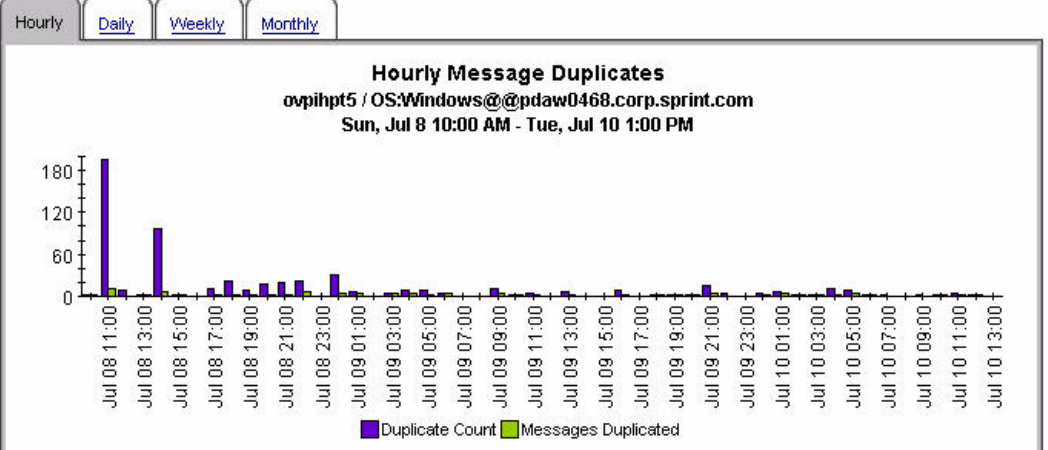
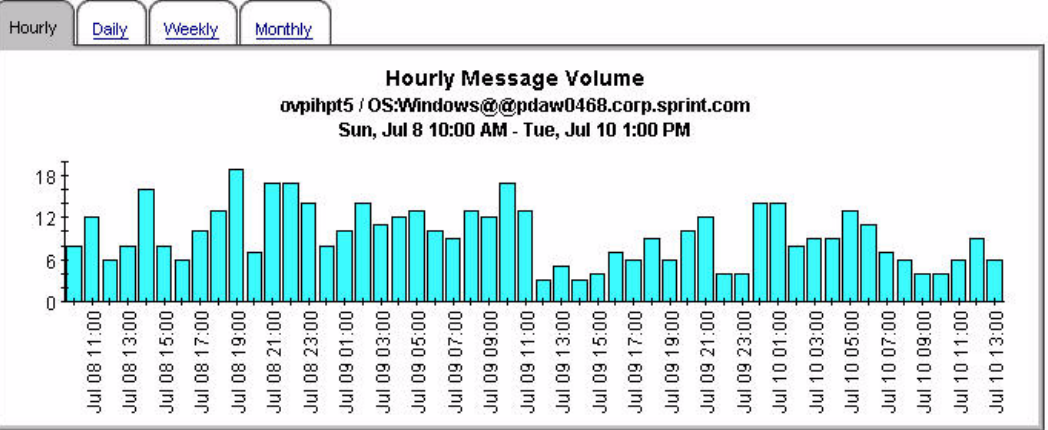
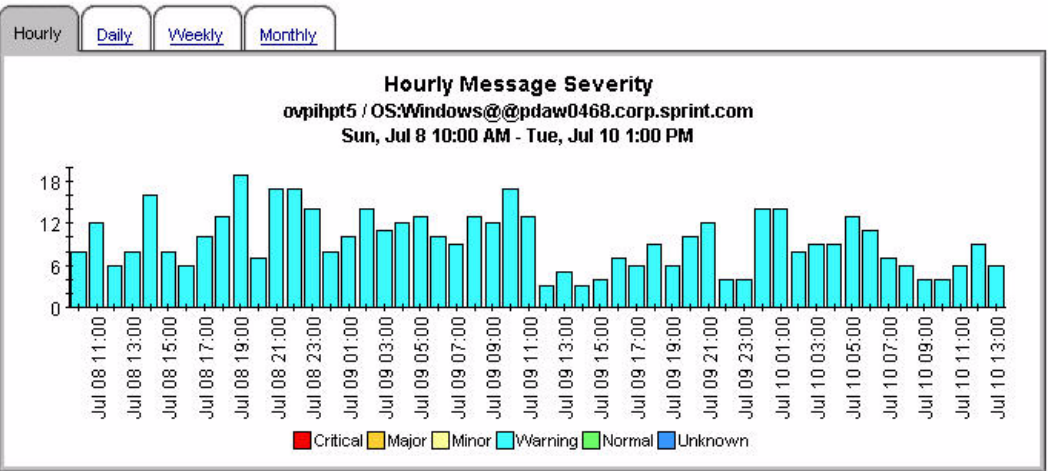
### Daily Message Severity Top 15 by Server and Service

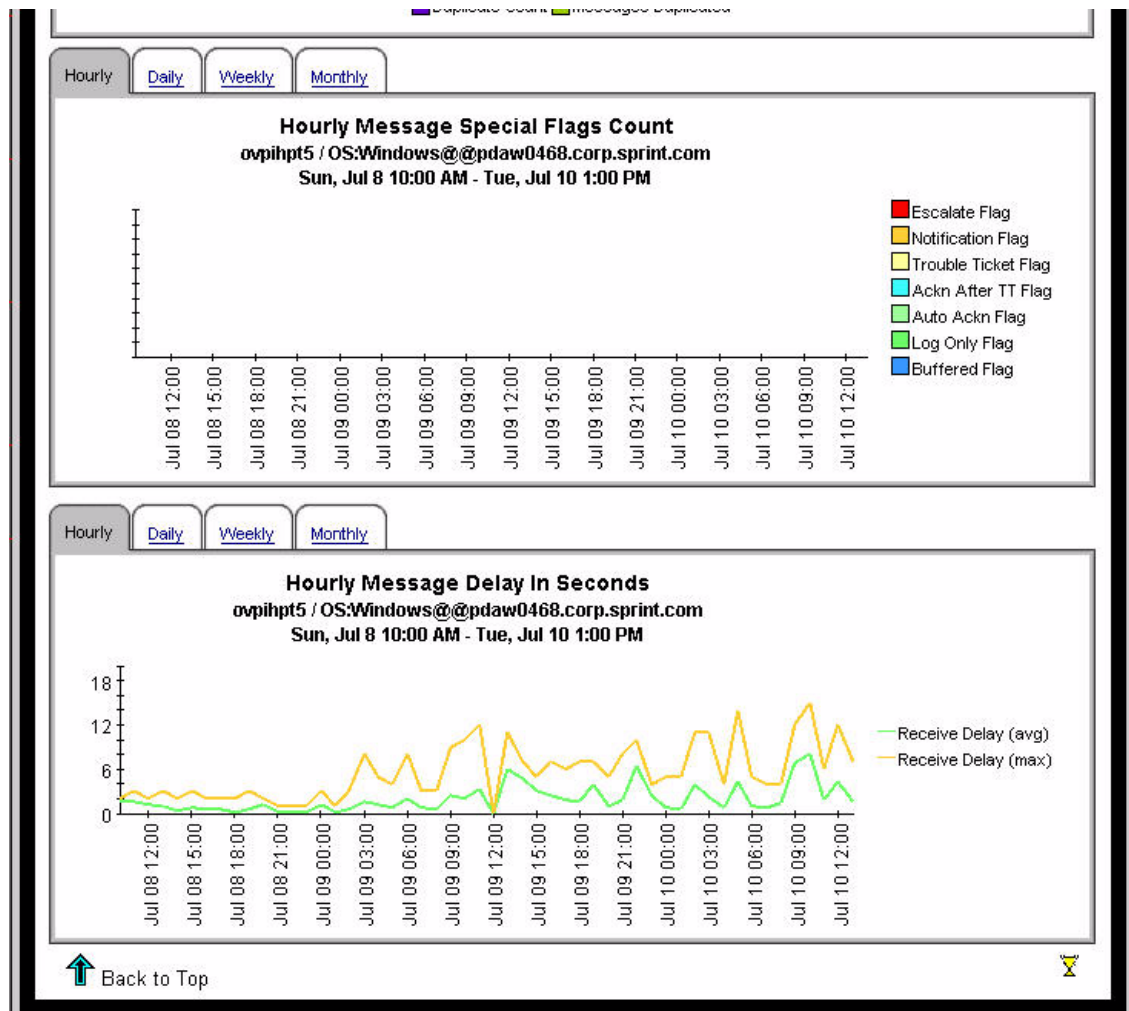
Mon, Jul 9, 2007

Server	Service	Message Count	Critical	Major	Minor	Warning	Normal	Unkn
ovpihpt5	OS:Windows@@pdaw0468.corp.sprint.com	120	0	0	0	120	0	
ovpihpt5	OpC	95	25	0	1	53	16	
ovpihpt5	OS:Windows@@plsw0472.corp.sprint.com	64	0	0	0	64	0	
ovpihpt5	OS:Windows@@plsw0470.corp.sprint.com	49	0	0	0	49	0	
ovpihpt5	Batch-Prod	38	0	0	38	0	0	
ovpihpt5	OS:Windows@@pksw0466.corp.sprint.com	38	0	0	0	38	0	
ovpihpt5	OS:Windows@@plsw0464.corp.sprint.com	34	0	0	0	34	0	
ovpihpt5	OS:Windows@@prew0478.corp.sprint.com	23	0	0	0	23	0	
ovpihpt5	SNMPTraps:SNMP@@plsw0470.corp.sprint.com	13	0	0	0	13	0	
ovpihpt5	SNMPTraps:SNMP@@pdaw0468.corp.sprint.com	13	0	0	0	13	0	
ovpihpt5	SNMPTraps:SNMP@@plsw0472.corp.sprint.com	10	0	0	0	10	0	
ovpihpt5	SNMPTraps:clear@@geosprpclgra	9	0	0	0	0	9	
ovpihpt5	OS:AIX@@plsa0636.corp.sprint.com	8	0	8	0	0	0	
ovpihpt5	SeaBiscuit.Intel	4	0	1	0	3	0	
ovpihpt5	SNMPTraps:ADTRAN MX2800 DS3@@pre0136.corp.sprint.com	4	2	0	0	0	2	

Hourly Daily Weekly Monthly









# OV Operations

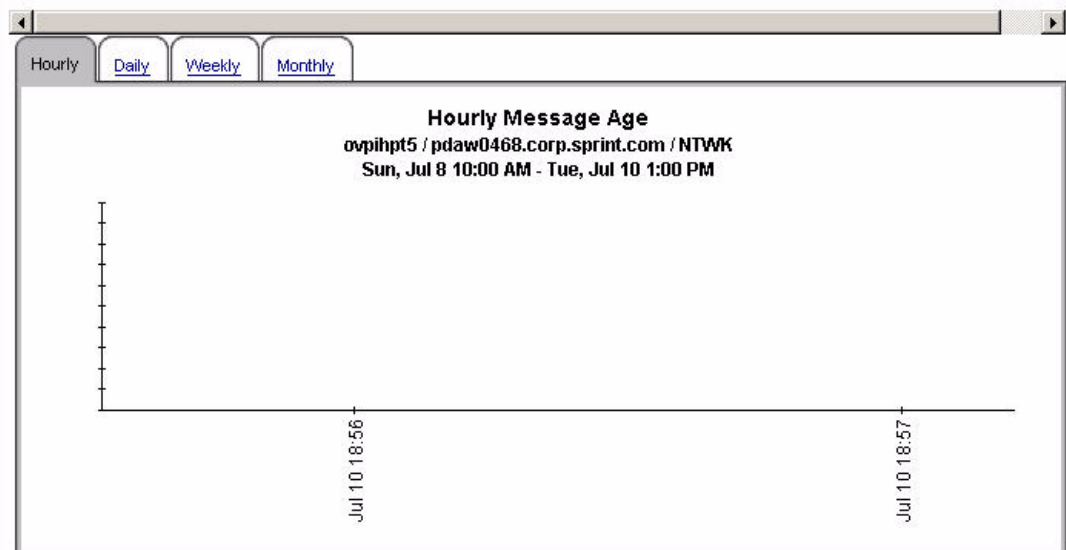
Consolidated Message Trend Top 15 by Server, Node and Application



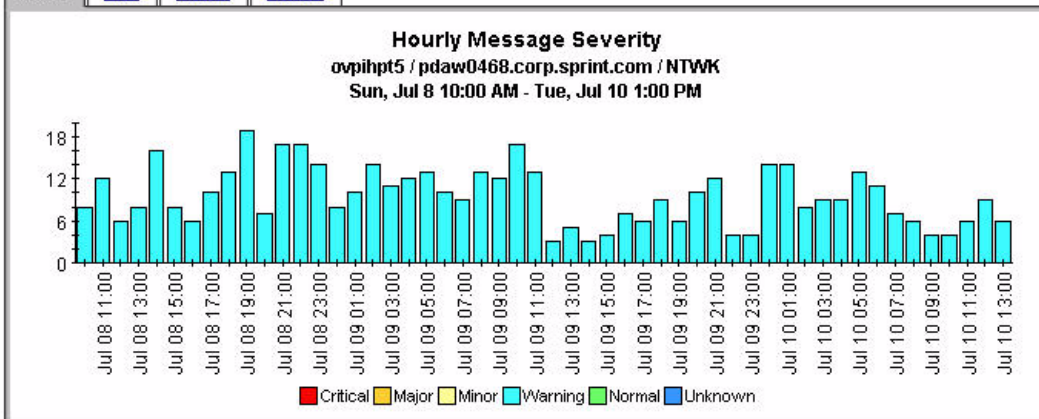
## Daily Message Severity Top 15 by Server, Node and Application

Mon, Jul 9, 2007

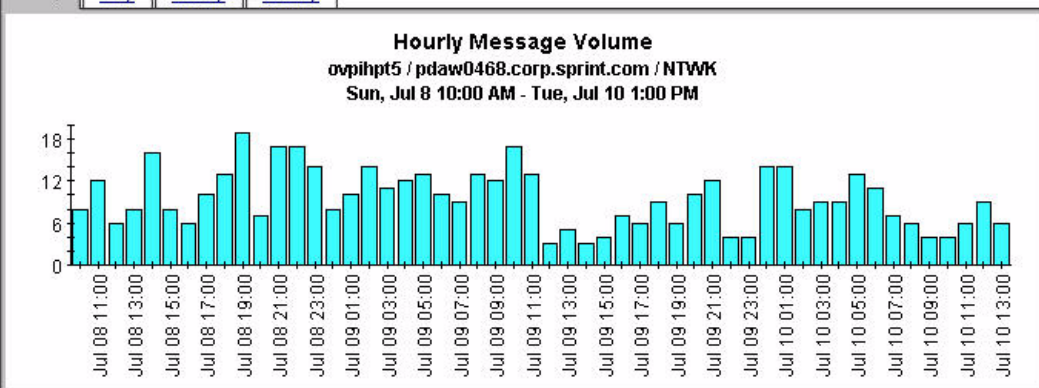
Server	Node	Application	Message Count	Critical	Major	Minor	Warning	Normal	Unknown	Escalated
ovpihpt5	pdaw0468.corp.sprint.com	NTWK	120	0	0	0	120	0	0	(
ovpihpt5	plsw0472.corp.sprint.com	NTWK	64	0	0	0	64	0	0	(
ovpihpt5	plsw0470.corp.sprint.com	NTWK	49	0	0	0	49	0	0	(
ovpihpt5	pksw0466.corp.sprint.com	NTWK	38	0	0	0	38	0	0	(
ovpihpt5	plsw0464.corp.sprint.com	NTWK	34	0	0	0	34	0	0	(
ovpihpt5	prew0478.corp.sprint.com	NTWK	23	0	0	0	23	0	0	(
ovpihpt5	jes24.corp.sprint.com		15	0	0	15	0	0	0	(
ovpihpt5	pdaw0468.corp.sprint.com	SNMPTraps	13	0	0	0	13	0	0	(
ovpihpt5	plsw0470.corp.sprint.com	SNMPTraps	13	0	0	0	13	0	0	(
ovpihpt5	jes21.corp.sprint.com		12	0	0	12	0	0	0	(
ovpihpt5	pvmk0027.corp.sprint.com	HP OpenView Operations	12	3	0	0	9	0	0	(
ovpihpt5	geosprpclgra	SNMPTraps	11	0	2	0	0	9	0	(
ovpihpt5	plsw0472.corp.sprint.com	SNMPTraps	10	0	0	0	10	0	0	(
ovpihpt5	plsa0636.corp.sprint.com	OS	8	0	8	0	0	0	0	(
ovpihpt5	pree0136.corp.sprint.com	SNMPTraps	8	4	0	0	0	4	0	(



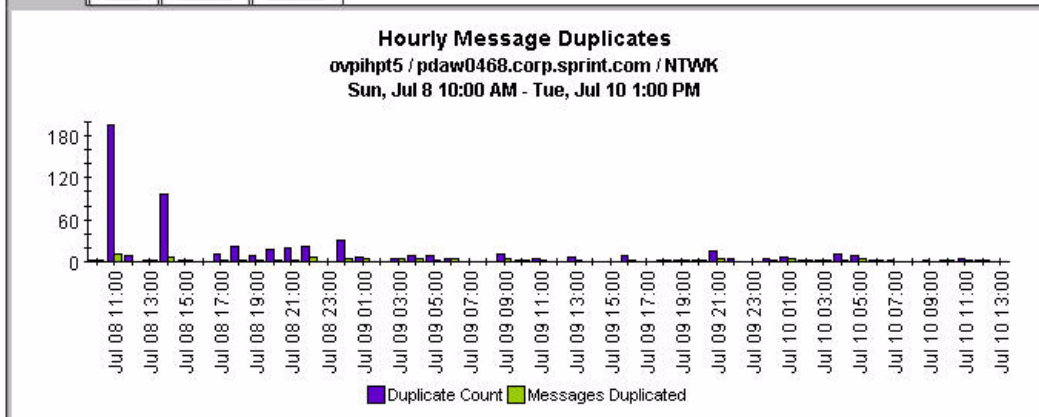
Hourly [Daily](#) [Weekly](#) [Monthly](#)



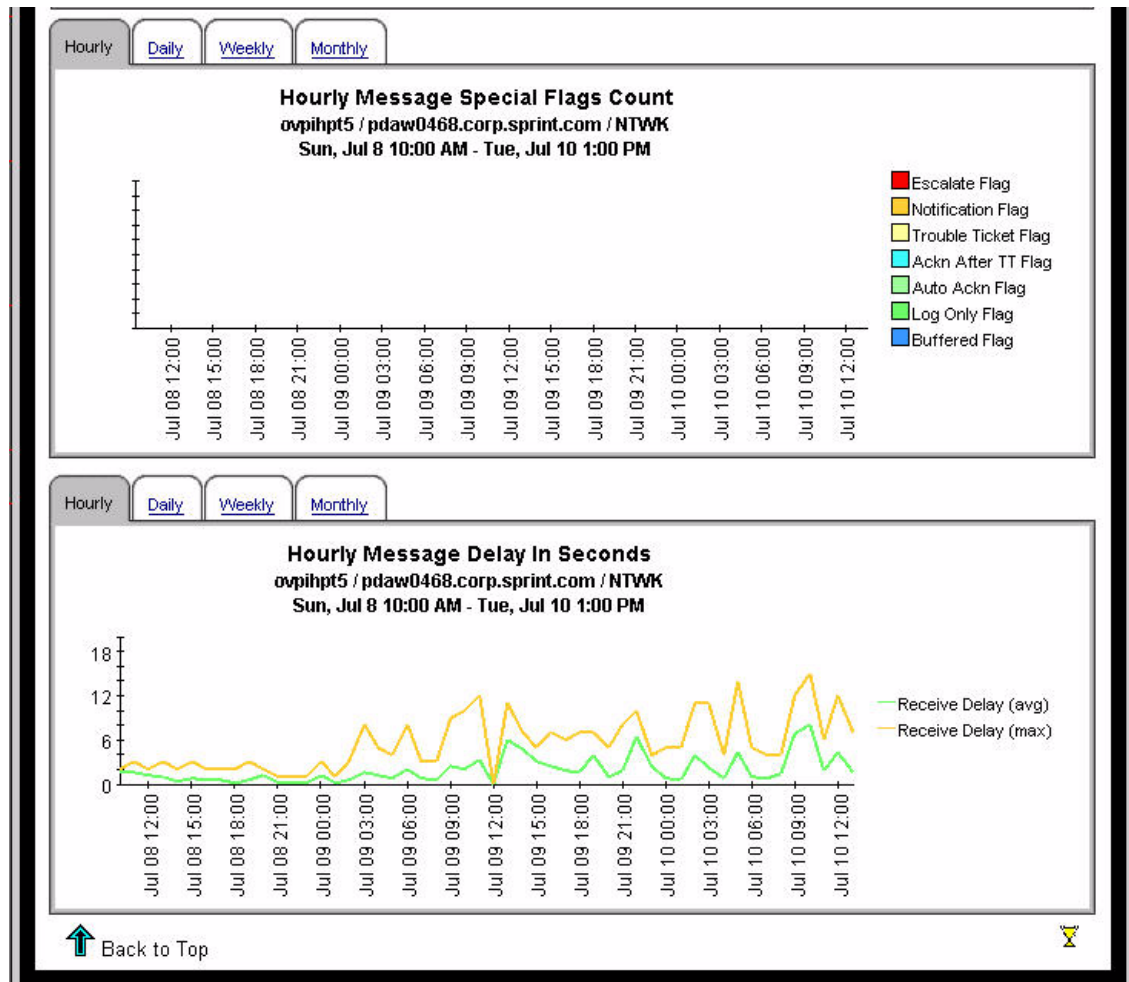
Hourly [Daily](#) [Weekly](#) [Monthly](#)



Hourly [Daily](#) [Weekly](#) [Monthly](#)







# OV Operations

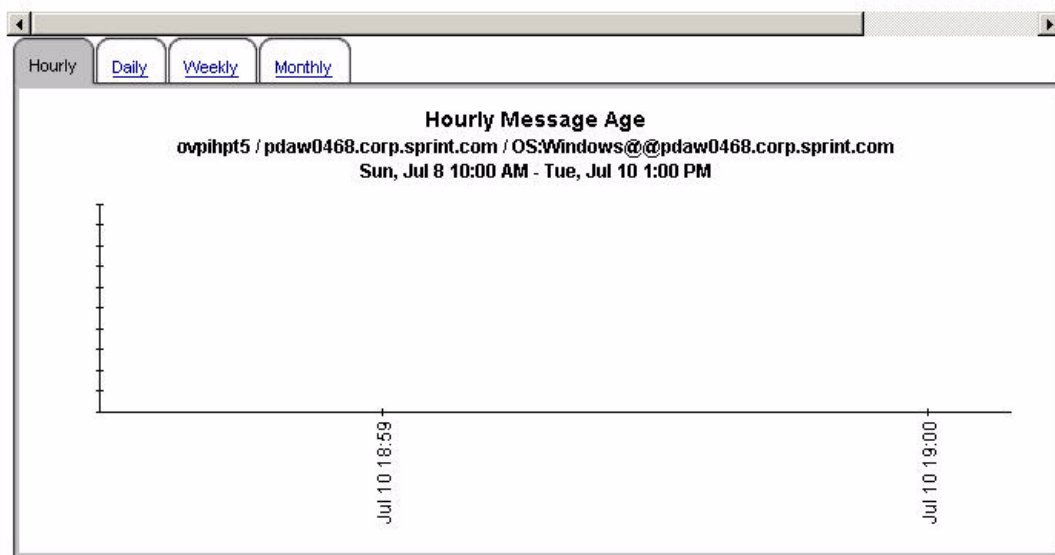
Consolidated Message Trend Top 15 by Server, Node and Service



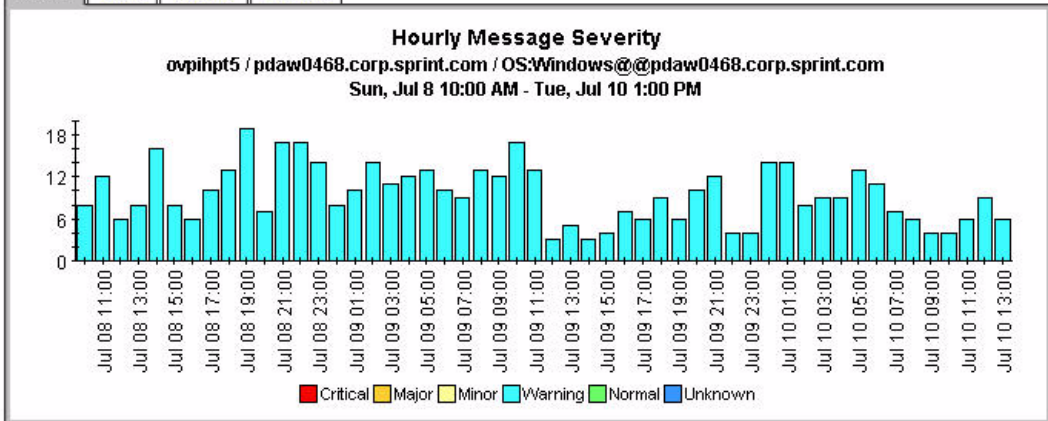
## Daily Message Severity Top 15 by Server, Node and Service

Mon, Jul 9, 2007

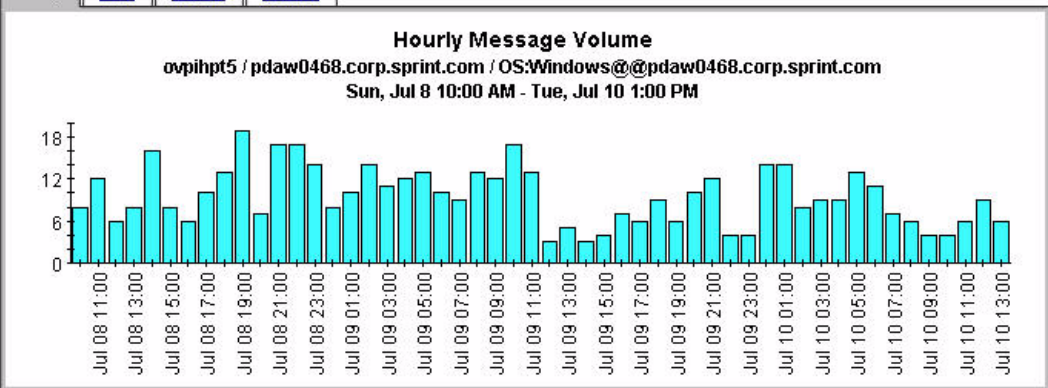
Server	Node	Service	Message Count	Critical	Major	Minor	Warning	N
ovpihpt5	pdaw0468.corp.sprint.com	OS:Windows@@pdaw0468.corp.sprint.com	120	0	0	0	0	120
ovpihpt5	plsw0472.corp.sprint.com	OS:Windows@@plsw0472.corp.sprint.com	64	0	0	0	0	64
ovpihpt5	plsw0470.corp.sprint.com	OS:Windows@@plsw0470.corp.sprint.com	49	0	0	0	0	49
ovpihpt5	pksw0466.corp.sprint.com	OS:Windows@@pksw0466.corp.sprint.com	38	0	0	0	0	38
ovpihpt5	plsw0464.corp.sprint.com	OS:Windows@@plsw0464.corp.sprint.com	34	0	0	0	0	34
ovpihpt5	prew0478.corp.sprint.com	OS:Windows@@prew0478.corp.sprint.com	23	0	0	0	0	23
ovpihpt5	jes24.corp.sprint.com	Batch-Prod	15	0	0	15	0	0
ovpihpt5	pdaw0468.corp.sprint.com	SNMPTraps:SNMP@@pdaw0468.corp.sprint.com	13	0	0	0	0	13
ovpihpt5	plsw0470.corp.sprint.com	SNMPTraps:SNMP@@plsw0470.corp.sprint.com	13	0	0	0	0	13
ovpihpt5	jes21.corp.sprint.com	Batch-Prod	12	0	0	12	0	0
ovpihpt5	pvmk0027.corp.sprint.com	OpC	12	3	0	0	0	9
ovpihpt5	plsw0472.corp.sprint.com	SNMPTraps:SNMP@@plsw0472.corp.sprint.com	10	0	0	0	0	10
ovpihpt5	geosprpclgra	SNMPTraps:clear@@geosprpclgra	9	0	0	0	0	0
ovpihpt5	plsa0636.corp.sprint.com	OS:AIX@@plsa0636.corp.sprint.com	8	0	8	0	0	0
ovpihpt5	plss1986.corp.sprint.com	OpC	7	0	0	0	0	6



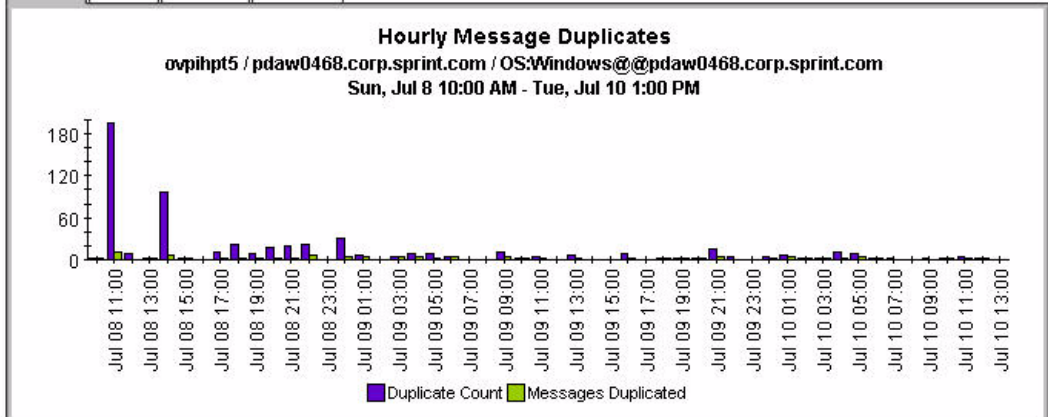
Hourly [Daily](#) [Weekly](#) [Monthly](#)

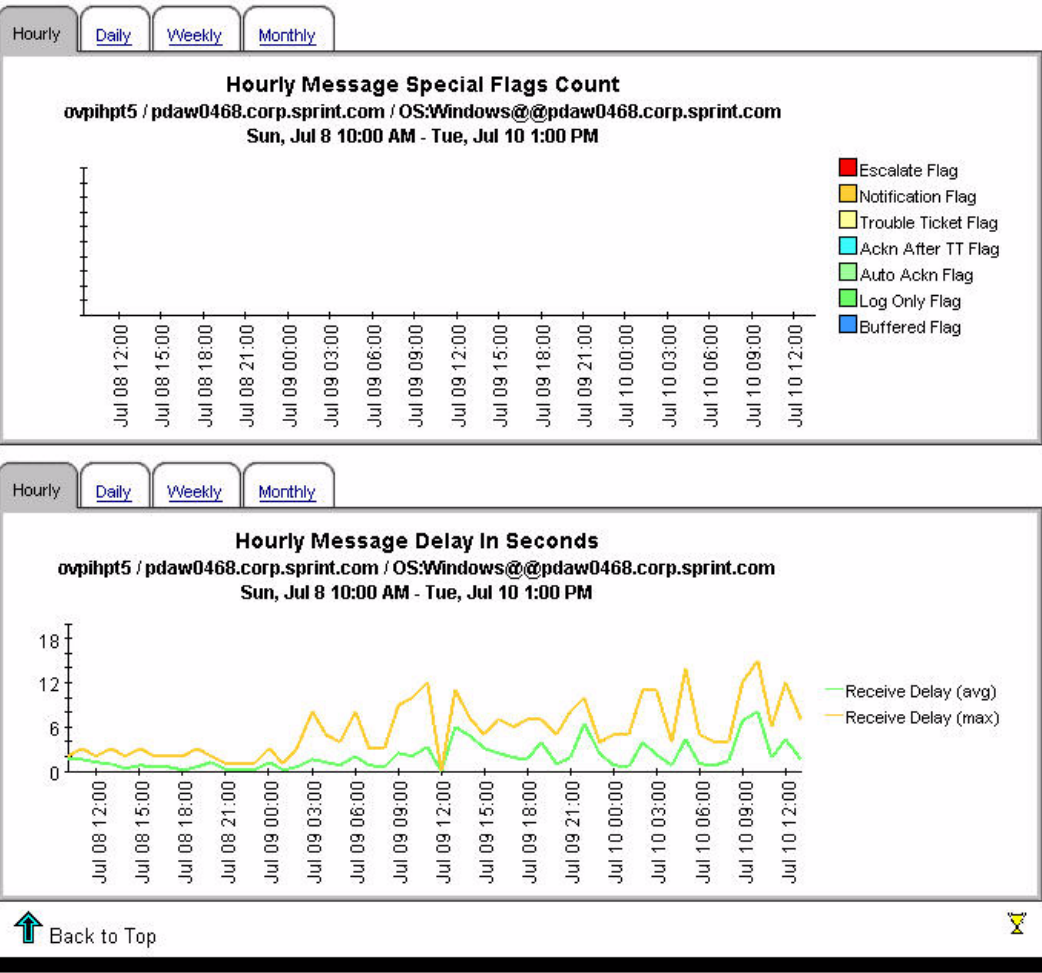


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Hourly [Daily](#) [Weekly](#) [Monthly](#)





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## 7 Configuration Reports

The OVO Report Pack includes two configuration reports:

### Notification Channels

Lists the program, service, day, starting time and ending time for each Operations management server notification channel for the current and previous day.

### Trouble Ticket Channels (see sample page 46)

Shows the program, on/off flag and time period for each Operations management server for the current and previous day.

# OV Operations

## Trouble Ticket Channel Configuration




### Current Day

OVO Server	Program	On/Off Flag	Time Period
ovpihpt5	/opt/OV/bin/OpC/extern_inttf/sd_event.sh	ON	Tue, Jul 10 12:00 AM

### Previous Day

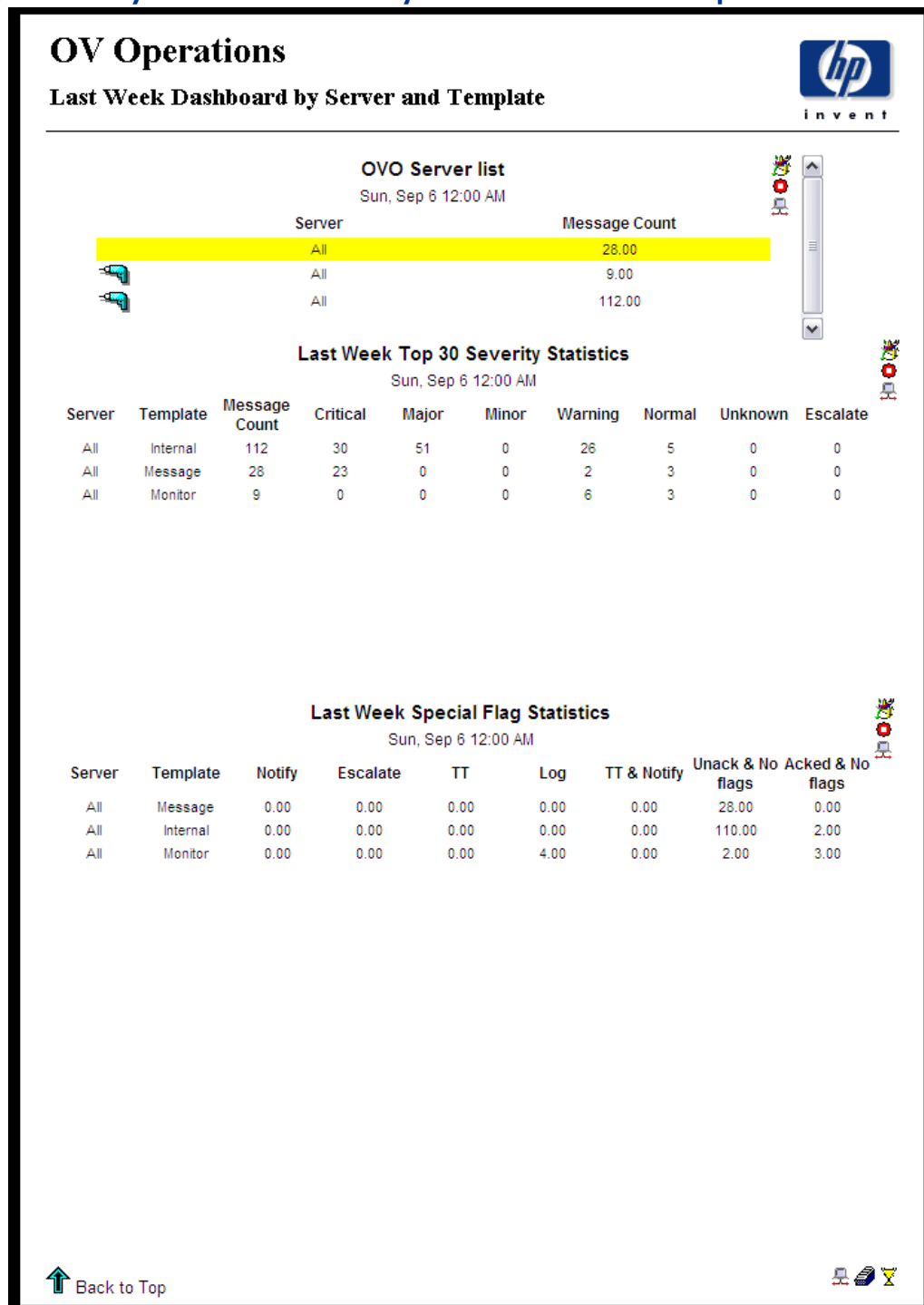
OVO Server	Program	On/Off Flag	Time Period
ovpihpt5	/opt/OV/bin/OpC/extern_inttf/sd_event.sh	ON	Mon, Jul 9 3:20 PM
ovpihpt5	/opt/OV/bin/OpC/extern_inttf/sd_event.sh	ON	Mon, Jul 9 3:21 PM

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## 8 Reports for HPOM 9.0 (OVO9)


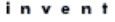
### Weekly History Dashboard by Server and Template



## Weekly History Dashboard by Template

### OV Operations


#### Weekly History Dashboard by Template



  


#### Last Week Top 30 Statistics

Sun, Sep 6 12:00 AM

Template	Message Count
Internal	112
Message	28
Monitor	9

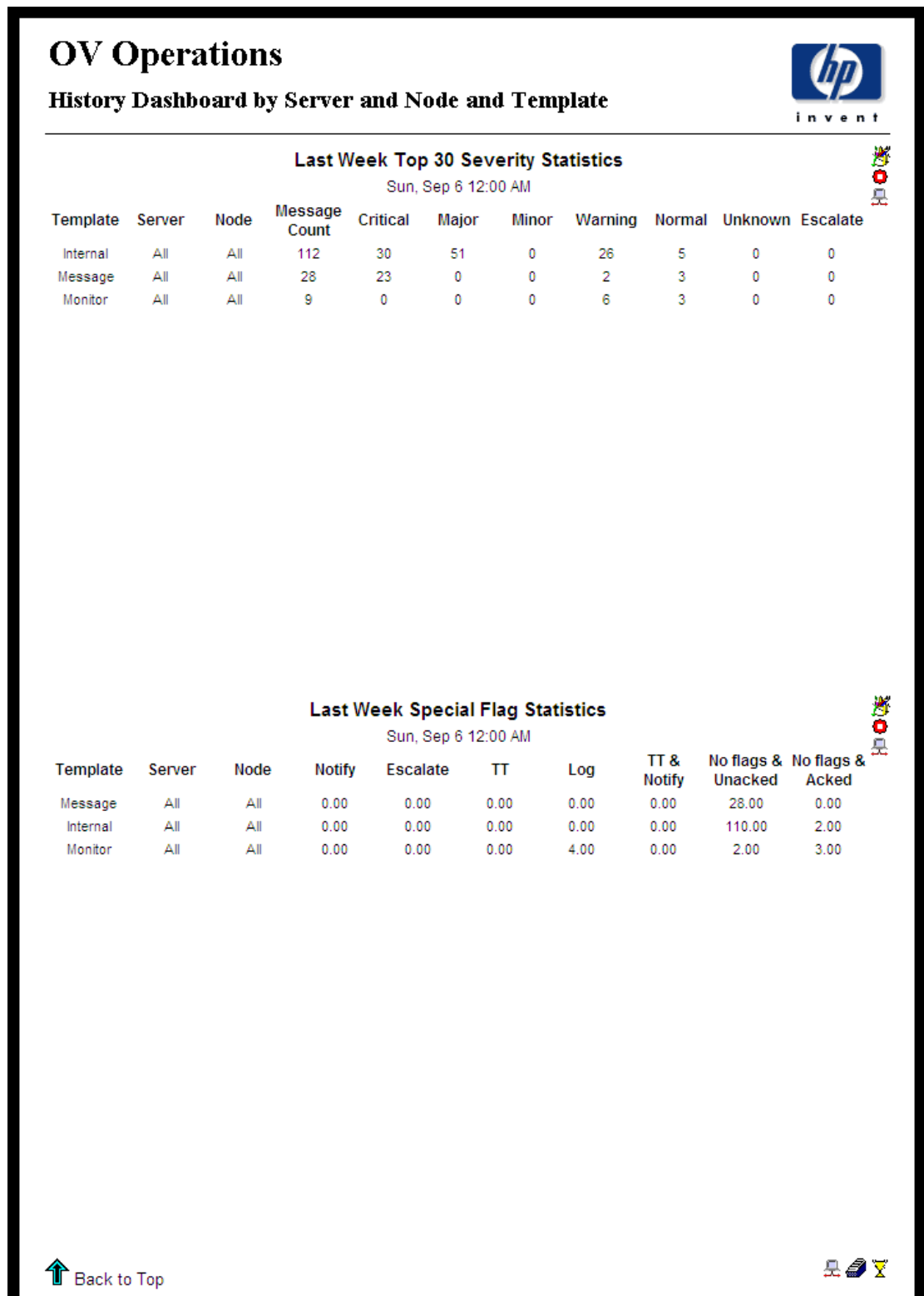


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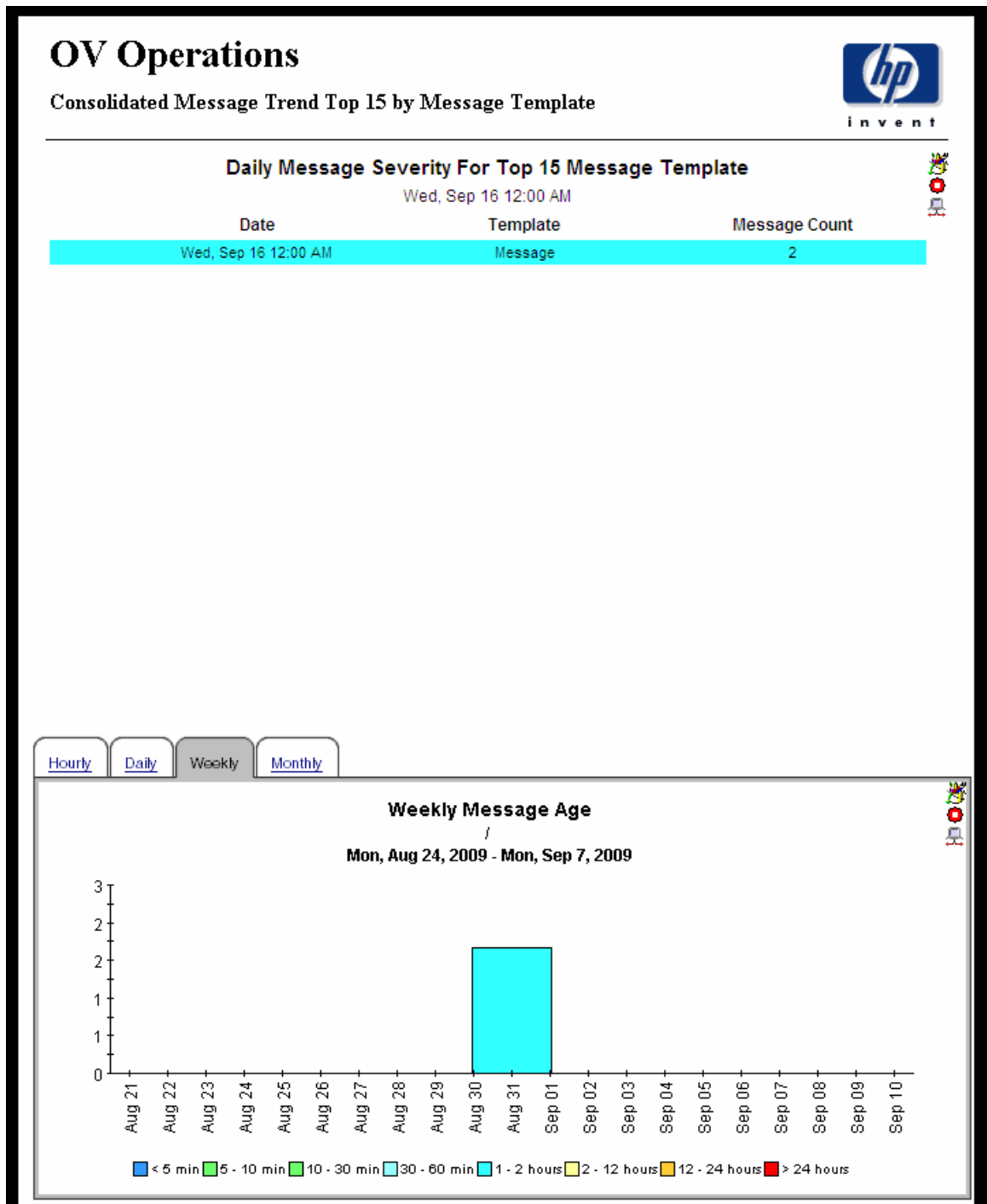


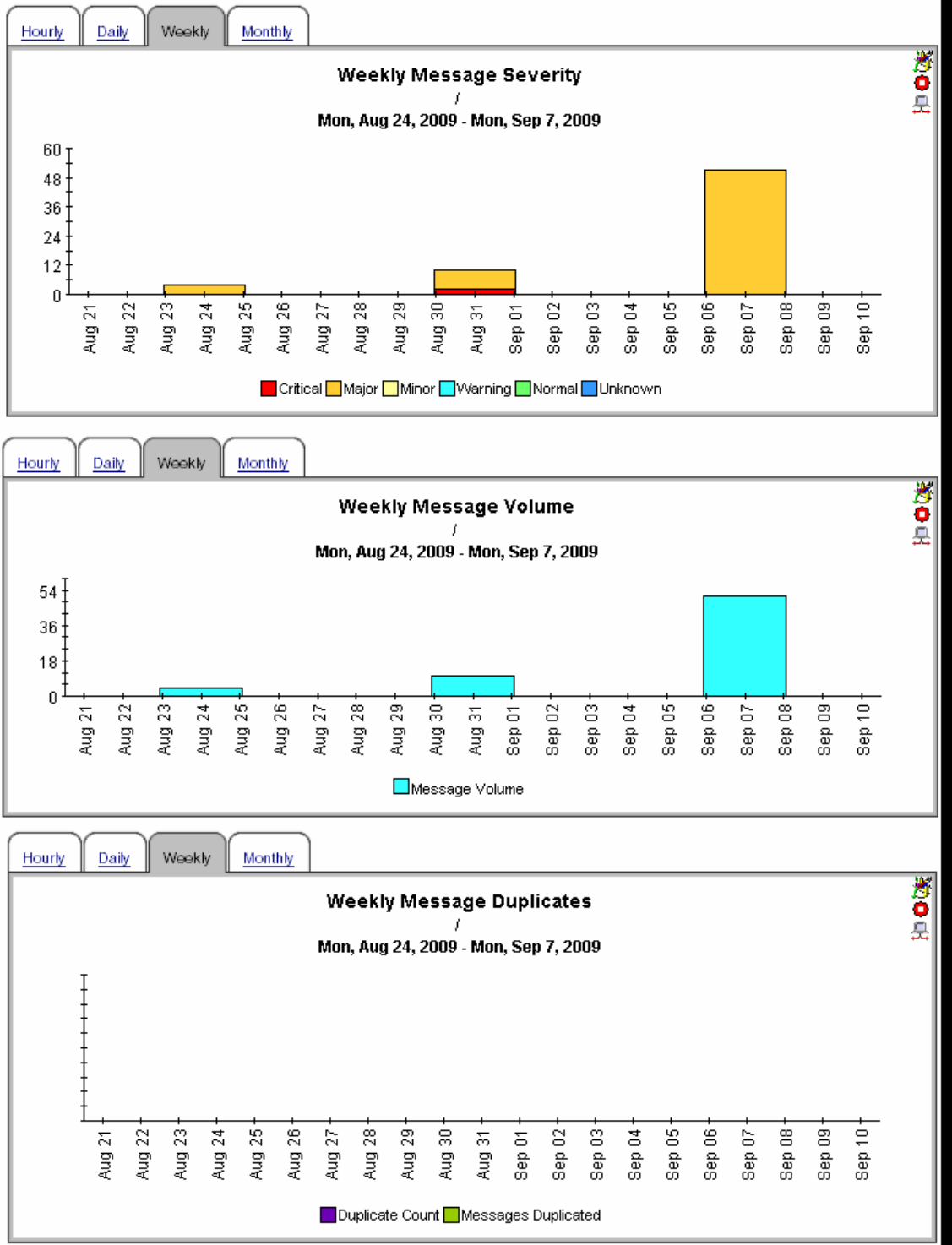
# Message Reports

## History Dashboard by Server Node and Template



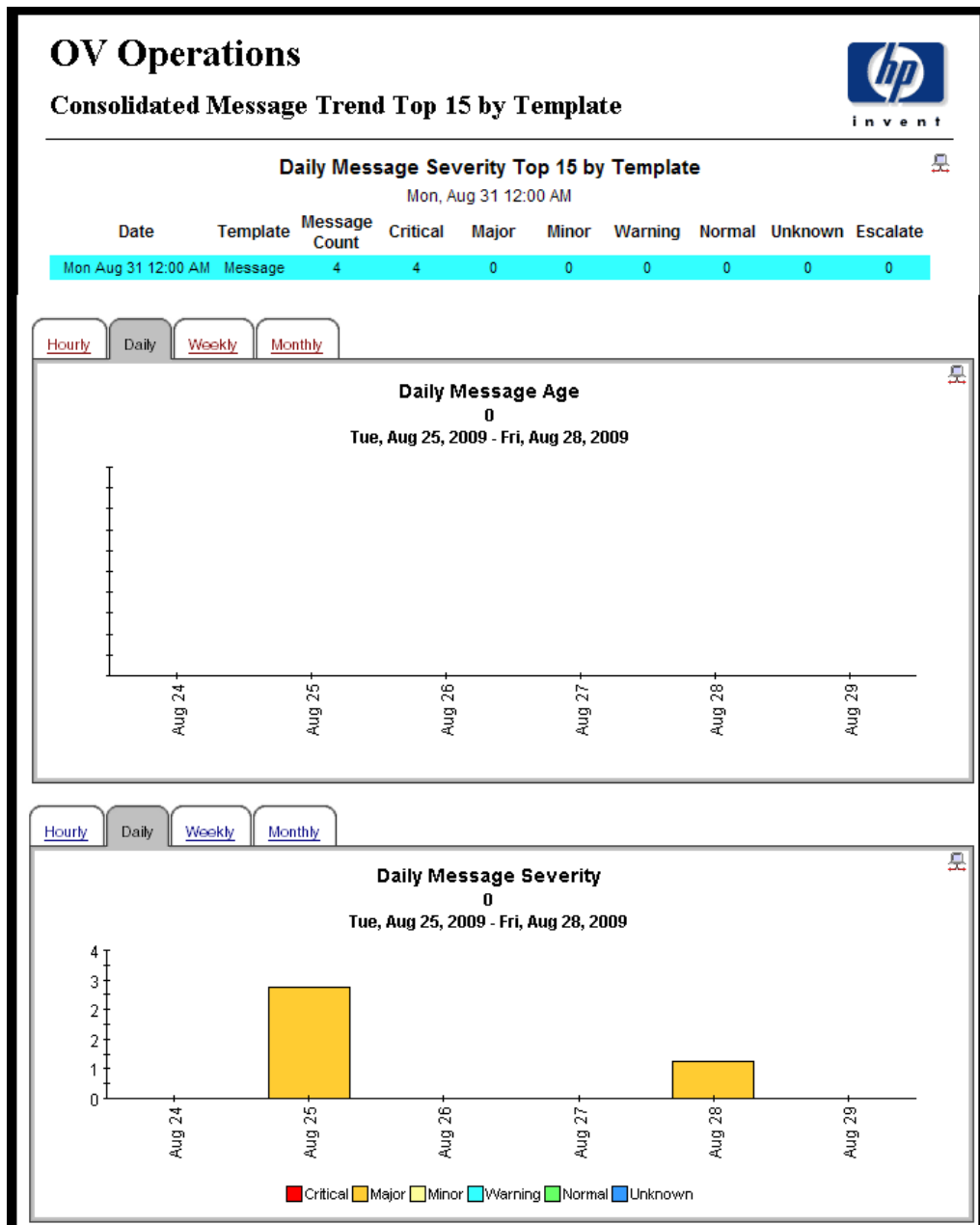
## Message Severity by Message Template

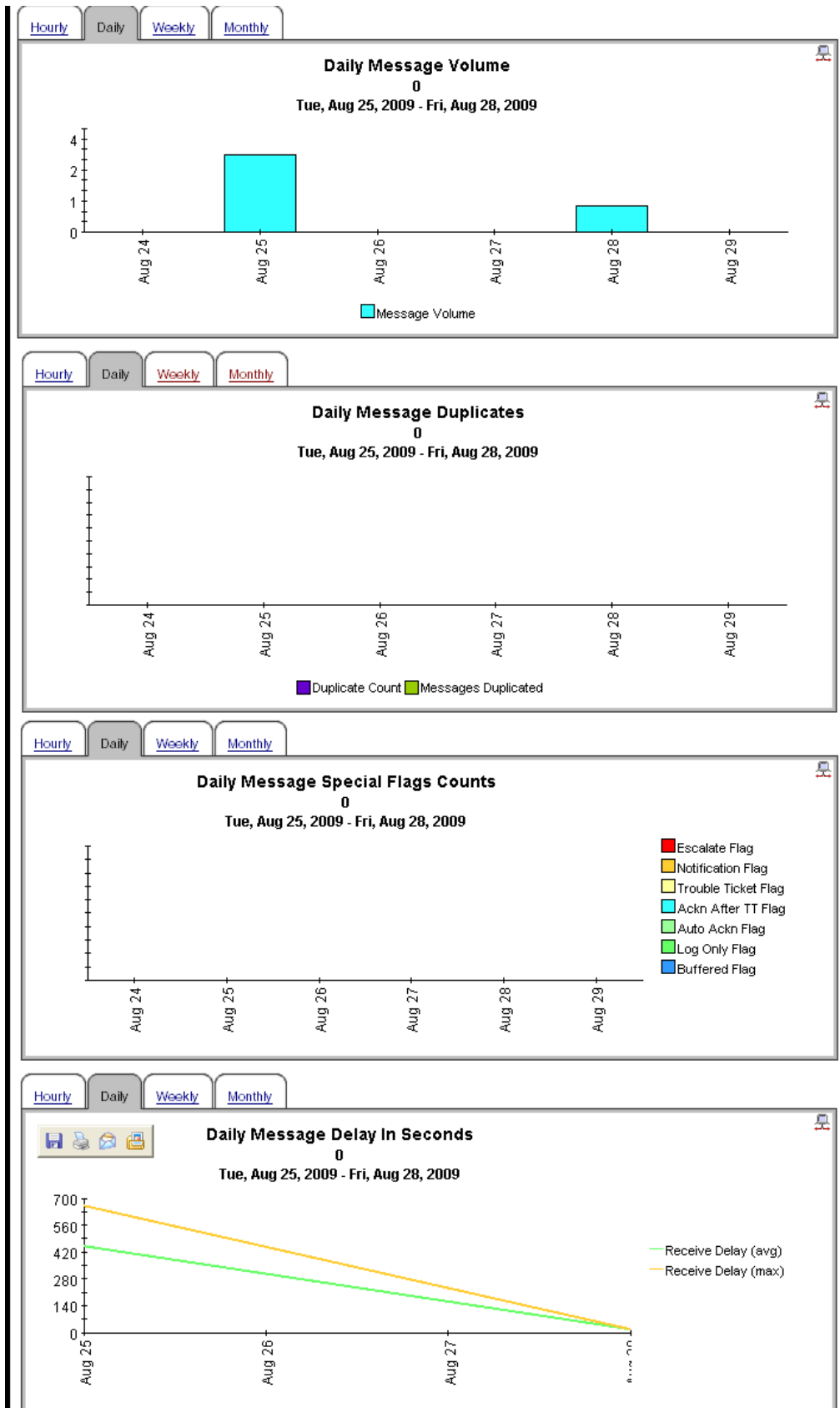




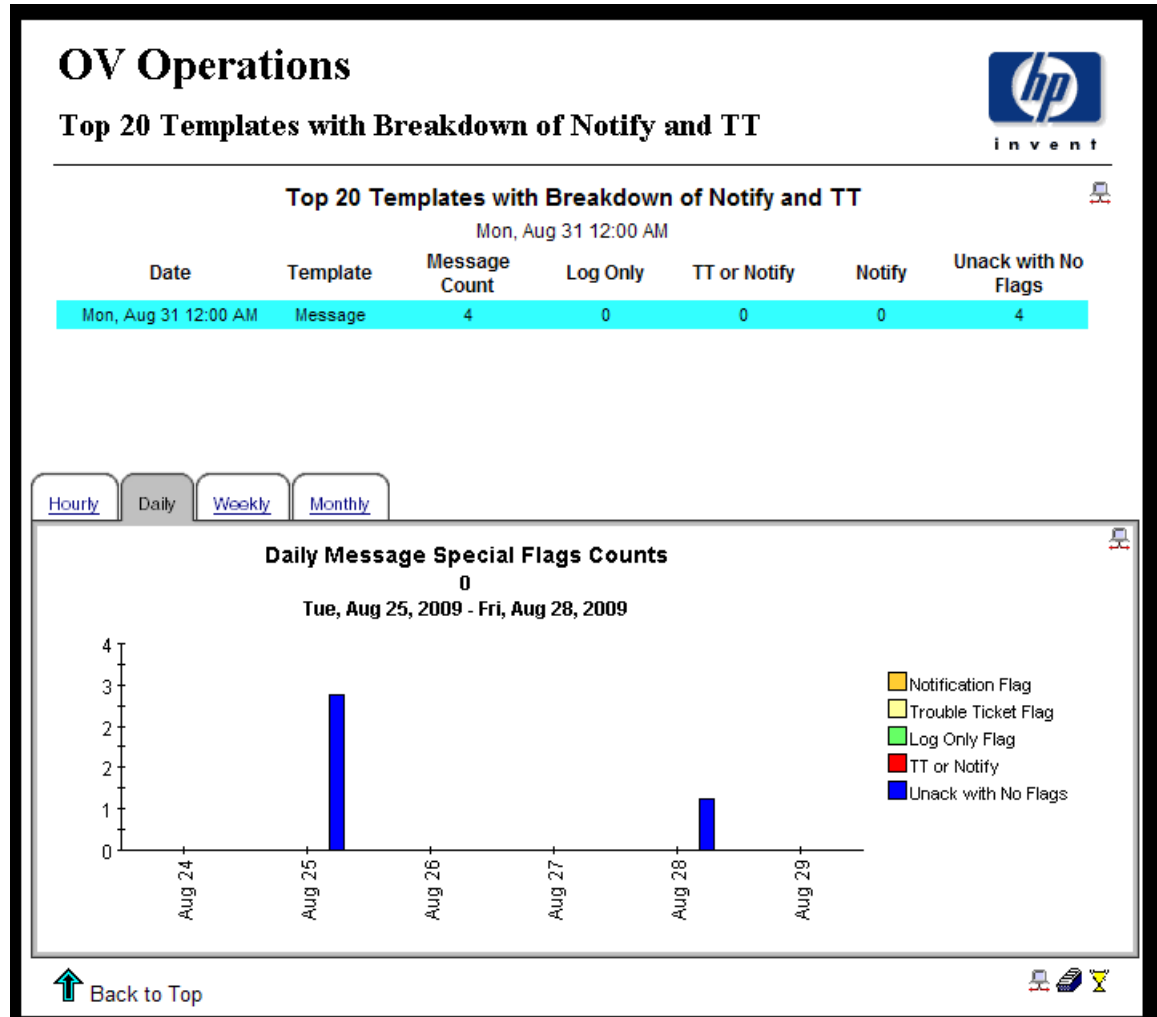


## Message Severity by Template Trend





## Template Breakdown with Special Flags







# A Import and Reporting Tables

This appendix contains the following tables:

- Import tables:
  - History message table
  - Active message statistics table
  - Service log entries table
  - Configuration entries table
- Reporting tables:
  - History message property table
  - History message data tables
  - Consolidated message metrics by time interval
  - Active message property table
  - Active message data tables
  - Active message metrics by time interval
  - Service log property table
  - Service log data tables
  - Service log metrics by time interval

## History Message Import Table



The following fields apply to OVO for UNIX/HPOM for UNIX only. They do not apply to OVO for Windows /HPOM for Windows:

- APPLICATION\_ID
- ESCALATE\_FLAG
- IP\_ADDRESS
- NOTIFY\_SERVICES
- status\_flag
- TEMPLATE\_DESCRIPTION

Each field listed above is **bold** in the table below.

☐ R\_OVO\_MSG\_BASE

☐ K\_OVO\_MSG\_BASE

PI Field	Type	OVO for UNIX/ HPOM for UNIX Table(s) HISTORY	OVO for UNIX/ HPOM for UNIX Table(s) ACTIVE	OVO for UNIX/ HPOM for UNIX Field
		OPC_MSG_ MESSAGES	OPC_ACT_MES SAGES	CMA_FLAG
ACKN_AFTER_T T_FLAG		OPC_MSG_ MESSAGES	OPC_ACT_MES SAGES	ACKN_AFTER_TT_ FLAG
ACKN_TIME		OPC_MSG_ MESSAGES	OPC_ACT_MES SAGES	ACKN_TIME
ACKN_USER	Vchar(20)	OPC_MSG_ MESSAGES	OPC_ACT_MES SAGES	ACKN_USER
APPLICATION	Vchar(254)	OPC_MSG_ MESSAGES	OPC_ACT_MES SAGES	APPLICATION
APPLICATION_ ID	Vchar(254)	Opc_msg_ Messages	Opc_act_ messages	APPLICATION_ID
AUTO_ACKN_ FLAG		OPC_MSG_ME SSAGES	OPC_ACT_ MESSAGES	AUTO_ACKN_ FLAG
AUTO_ANNO_ FLAG		OPC_MSG_ME SSAGES	OPC_ACT_ MESSAGES	AUTO_ANNO_ FLAG
AUTO_CALL		OPC_MSG_ME SSAGES	OPC_ACT_ MESSAGES	AUTO_CALL
AUTO_NODE_ ID		OPC_MSG_ME SSAGES	OPC_ACT_ MESSAGES	AUTO_NODE_ID
AUTO_STATUS		OPC_MSG_ME SSAGES	OPC_ACT_ MESSAGES	AUTO_STATUS

<b>PI Field</b>	<b>Type</b>	<b>OVO for UNIX/ HPOM for UNIX Table(s) HISTORY</b>	<b>OVO for UNIX/ HPOM for UNIX Table(s) ACTIVE</b>	<b>OVO for UNIX/ HPOM for UNIX Field</b>
cma_name		opc_MSG_cust_ attrib	opc_act_cust_ attrib	cma_name
cma_value		opc_MSG_cust_ attrib	opc_act_cust_ attrib	cma_value
CONDITION_ ID	Vchar(36)	OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	CONDITION_ID
DESCRIPTION	Vchar(254)	OPC_COND, OPC_TRAP_ COND, OPC_MONITO R_COND	OPC_COND, OPC_TRAP_ COND, OPC_MONITOR _COND	DESCRIPTION
DUPL_COUNT		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	DUPL_COUNT
<b>ESCALATE_ FLAG</b>		OPC_MSG_ME SSAGES	OPC_ACT_MES SAGES	ESCALATE_FLAG
FORWARD		OPC_MSG_ME SSAGES	OPC_ACT_MES SAGES	FORWARD
<b>IP_ADDRESS</b>		OPC_NODE_ NAMES	OPC_NODE_ NAMES	IP_ADDRESS
LAST_TIME_ RECEIVED		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LAST_TIME_ RECEIVED
LOCAL_ACKN_ TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_ACKN_ TIME
LOCAL_AGT_ CREATION_ TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_AGT_ CREATION_TIME
LOCAL_CREATI ON_TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_CREATION _TIME
LOCAL_LAST_T IME_RECEIVED		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_LAST_ TIME_RECEIVED
LOCAL_RECEIV ING_TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_RECEIVIN G_TIME
LOCAL_RECEIV ING_TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_RECEIVIN G_TIME
LOCAL_UNBUF FER_TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOCAL_UNBUFFER _TIME
LOG_ONLY_ FLAG		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	LOG_ONLY_FLAG

<b>PI Field</b>	<b>Type</b>	<b>OVO for UNIX/ HPOM for UNIX Table(s) HISTORY</b>	<b>OVO for UNIX/ HPOM for UNIX Table(s) ACTIVE</b>	<b>OVO for UNIX/ HPOM for UNIX Field</b>
MESSAGE_ GROUP		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MESSAGE_ GROUP
MESSAGE_ NUMBER		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MESSAGE_ NUMBE R
MESSAGE_ TYPE		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MESSAGE_ TYPE
MSG_GEN_ NODE_ID		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MSG_GEN_ NODE_I D
MSG_KEY		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MSG_KEY
MSG_SOURCE_ NAME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MSG_SOURCE_ NAME
MSG_SOURCE_ TYPE		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	MSG_SOURCE_ TYP E
NODE_ID		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	NODE_ID
NODE_NAME	Vchar(64)	OPC_NODE_ NAMES	OPC_NODE_ NA MES	NODE_NAME
NOTIFICATION_ FLAG		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	NOTIFICATION_ FL AG
<b>NOTIFY_ SERVICES</b>		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	NOTIFY_ SERVICES
OBJECT		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	OBJECT
OP_INIT_ ACKN_ FLAG		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	OP_INIT_ ACKN_ FL AG
OP_INIT_ ANNO_ FLAG		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	OP_INIT_ ANNO_ FL AG
OP_INIT_ CALL		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	OP_INIT_ CALL
OP_INIT_ NODE_ID		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	OP_INIT_ NODE_ID
OP_INIT_ STATUS		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	OP_INIT_ STATUS
OVO_SERVER	Vchar(16)			
RECEIVING_ TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	RECEIVING_ TIME

<b>PI Field</b>	<b>Type</b>	<b>OVO for UNIX/ HPOM for UNIX Table(s) HISTORY</b>	<b>OVO for UNIX/ HPOM for UNIX Table(s) ACTIVE</b>	<b>OVO for UNIX/ HPOM for UNIX Field</b>
service_id		opc_notif_ schedule	opc_notif_ schedule	service_id
SERVICE_ NAME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	SERVICE_NAME
SEVERITY		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	SEVERITY
<b>status_flag</b>		opc_trouble_ ticket	opc_trouble_ ticket	status_flag
<b>TEMPLATE_ DESCRIPTION</b>	Vchar(254)	opc_templ_ options	opc_templ_ options	TEMPLATE_ DESCRIPTION
TEMPLATE_ID	Vchar(36)	opc_templ_ options	opc_templ_ options	TEMPLATE_ID
TEMPLATE_ NAME		opc_templ_ options	opc_templ_ options	TEMPLATE_NAME
TROUBLE_ TICK_FLAG		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	TROUBLE_TICK_FL AG
UNBUFFER_ TIME		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	UNBUFFER_TIME
UNMATCHED_ FLAG		OPC_MSG_ MESSAGES	OPC_ACT_ MESSAGES	UNMATCHED_FLA G

## Active Message Import Table

□ R\_OVO\_ACT\_BASE

□ K\_OVO\_ACT\_BASE

Column Name	Data Type	Description	Source Table	Comment
OVO_SERVER	varchar(128)	The server records were exported from		Created by export process
NODE_NAME (based on NODE_ID)	varchar(254) varchar2(1024)		OPC_NODE_NAMES	All records
NODE_ID (ID of node where event occurred)	varchar2(36)		OPC_ACT_MESSAGES	All records
APPLICATION	varchar2(254)	ONA records only	OPC_ACT_MESSAGES	ONA records only
SERVICE_NAME	varchar2(2048)	ONS records only	OPC_ACT_MESSAGES	ONS records only
MSG_GROUP	varchar2(32)	ONM records only	OPC_ACT_MESSAGES	ONM records only
OVO_GMT_OFFSET	number(12)			All records
CNT_MESSAGES	gauge/float	Count of current ACTIVE messages	OPC_ACT_MESSAGES	All records
CNT_UNKNOWN	gauge/float	With severity = 1 = unknown	OPC_ACT_MESSAGES	All records
CNT_NORMAL	gauge/float	With severity = 2 = normal	OPC_ACT_MESSAGES	All records
CNT_WARNING	gauge/float	With severity = 4 = warning	OPC_ACT_MESSAGES	All records
CNT_CRITICAL	gauge/float	With severity = 8 = critical	OPC_ACT_MESSAGES	All records
CNT_MINOR	gauge/float	With severity = 16 = minor	OPC_ACT_MESSAGES	All records
CNT_MAJOR	gauge/float	With severity = 32 = major	OPC_ACT_MESSAGES	All records
MIN_AGE_MSG	gauge/float	Minimum age of current ACTIVE messages	OPC_ACT_MESSAGES	All records

<b>Column Name</b>	<b>Data Type</b>	<b>Description</b>	<b>Source Table</b>	<b>Comment</b>
MAX_AGE_MSG	gauge/float	Maximum age of current ACTIVE messages	OPC_ACT_MESSAGES	All records
AVG_AGE_MSG	gauge/float	Average age of current ACTIVE messages	OPC_ACT_MESSAGES	All records
TOT_AGE_MSG	gauge/float	Total age of current ACTIVE messages	OPC_ACT_MESSAGES	All records
CNT_AGE_5_MIN	gauge/float	Messages less than 5 minutes old	OPC_ACT_MESSAGES	All records
CNT_AGE_5_10_MIN	gauge/float	>= 5 minutes and < 10 minutes	OPC_ACT_MESSAGES	All records
CNT_AGE_10_30_MIN	gauge/float	>= 10 minutes and < 30 minutes	OPC_ACT_MESSAGES	All records
CNT_AGE_30_60_MIN	gauge/float	>= 30 minutes and < 60 minutes	OPC_ACT_MESSAGES	All records
CNT_AGE_60_120_MIN	gauge/float	>= 60 minutes and < 120 minutes	OPC_ACT_MESSAGES	All records
CNT_AGE_120_720_MIN	gauge/float	>= 120 minutes and < 720 minutes	OPC_ACT_MESSAGES	All records
CNT_AGE_720_1440_MIN	gauge/float	>= 720 minutes and < 1440 minutes	OPC_ACT_MESSAGES	All records
CNT_AGE_GT_1440_MIN	gauge/float	> 1440 minutes	OPC_ACT_MESSAGES	All records
CNT_CURR_BUFFERED	gauge/float	Count current buffered messages	OPC_ACT_MESSAGES	All records
CNT_PREV_BUFFERED	gauge/float	Count messages previously buffered	OPC_ACT_MESSAGES	All records
CNT_DUPL_COUNT	gauge/float	Total duplicates received	OPC_ACT_MESSAGES	All records

<b>Column Name</b>	<b>Data Type</b>	<b>Description</b>	<b>Source Table</b>	<b>Comment</b>
CNT_DUPL_MSG	gauge/float	Count of messages receiving duplicates	OPC_ACT_MESSAGES	All records
CNT_ESCALATE_FLAG	gauge/float	Count flagged as escalated	OPC_ACT_MESSAGES	All records
CNT_AUTO_ACKN_FLAG	gauge/float	Count flagged as auto acknowledge	OPC_ACT_MESSAGES	All records
CNT_LOG_ONLY_FLAG	gauge/float	Count flagged as log only	OPC_ACT_MESSAGES	All records
CNT_NOTIFICATION_FLAG	gauge/float	Count flagged to send notification	OPC_ACT_MESSAGES	All records
CNT_TROUBLE_TICKET_FLAG	gauge/float	Count flagged to generate trouble ticket	OPC_ACT_MESSAGES	All records
CNT_ACKN_AFTER_TT_FLAG	gauge/float	Count flagged to auto acknowledge after generating trouble ticket	OPC_ACT_MESSAGES	All records
APPLICATION_ID	Number	Unique ID for long application names	NA	ONA
NODE_IP_ADDR	Number	IP Address in long form	OPC_NODES	All records
SERVICE_NAME_ID	Number	Unique ID for long service names	NA	ONS



## Service Log Import Table

□ R\_OVO\_SRVLOG\_BASE

□ K\_OVO\_SRVLOG\_BASE

Column Name	Data Type	Column Sample Data	OVO/HPOM Source Table	Comment
SPLIT_FLAG	number			Created by export process
ORIG_TA_PERIOD	date	18/6/2007 10:03:43 PM		Created by export process
OVO_SERVER	varchar(128)			Created by export process
SERVICE_NAME	varchar2(2048)	SeM_SPI:Server@@nsprod01	OPC_SERVICE_LOG	
SEVERITY	number(3)	4	OPC_SERVICE_LOG	1. Unknown 2. Normal 4. Warning 8. Critical 16. Minor 32. Major
START_TIME	number(12)	1108624087	OPC_SERVICE_LOG	
LOCAL_START_TIME	date	4/5/2005 10:03:43 PM	OPC_SERVICE_LOG	TA_PERIOD
END_TIME	number(12)	1108624087	OPC_SERVICE_LOG	
LOCAL_END_TIME	date	4/5/2005 11:03:43 PM	OPC_SERVICE_LOG	
DURATION	number(12)	1108624087		Created by export process
OVO_GMT_OFFSET	number(12)			Created by export process
EXPORT_TIME	number(12)	1108594373		Created by export process

## Configuration Import Table



The metrics in the following table are available from OVO for UNIX/HPOM for UNIX only. They are not available from OVO for Windows/HPOM for Windows. The following reports are affected:

- Notif\_Channels.rep
- TT\_Channels.rep

❑ R\_OVO\_SRVLOG\_BASE [?]

❑ K\_OVO\_SRVLOG\_BASE [?]

Column Name	OVO for UNIX/ HPOM for UNIX Source Table	Comment
dsi_key_id_		Standard PI numeric element ID
ta_period		Standard PI time stamp
delta_time		Standard PI column not used in this case
ta_samples		Standard PI column. Always 1 in this case
OVO_SERVER		Created by export process
Type		Record type indicator TT or NOTIF
NOTIF_SVC_ID	Opc_notif_services	Service Identifier
NOTIF_SVC_NAME	Opc_notif_services	Notif Service Name
FLAG	opc_trouble_ticket	Active/Inactive
PROGRAM	Opc_notif_services	
opc_trouble_ticket	External program	
DAY	opc_notif_schedule	Day for Notif
STARTING	opc_notif_schedule	Start time for Notif channel
ENDING	opc_notif_schedule	End time for Notif channel

## History Message Property Table

All OVO/HPOM Consolidated Message summarized data tables are associated with the K\_OVO\_MSG property tableK\_OVO\_MSG.

Column Name	Data Type	Population Method
dsi_key_id		Maintained by PI
dsi_target_name		Record type indicator based on trend_sum by the following variables: O: OVO_SERVER ON: OVO_SERVER - NODE_NAME OA: OVO_SERVER - APPLICATION OS: OVO_SERVER - SERVICE_NAME OM: OVO_SERVER - MSG_GROUP OU: OVO_SERVER – ACKN_USER OT: OVO_SERVER – TEMPLATE OTD: OVO_SERVER – TEMPLATE - DESCRIPTION ONA: OVO_SERVER – NODE_NAME - APPLICATION ONS: OVO_SERVER – NODE_NAME - SERVICE_NAME ONM: OVO_SERVER – NODE_NAME - MSG_GROUP
dsi_target_name		All Msgs (executive summary across all messages) A: APPLICATION S: SERVICE_NAME M: MSG_GROUP U: ACKN_USER T: TEMPLATE TD: TEMPALTE – DESCRIPTION N: NODE NT: NODE – TEMPLATE NS: NODE – SERVICE NA: NODE – APPLICATION NM: NODE – MSG GROUP
dsi_table_key		Due to custom rollup, all by variables, except for GRP_LEVEL and the interval by variable, are concatenated and inserted into dsi_table_key
dsi_status	number(3,0)	Specifies the global status attribute for the managed object. The default value is 2.

<b>Column Name</b>	<b>Data Type</b>	<b>Population Method</b>
dsi_status_time	date	Contains the timestamp of the last status. The default value is the current time.
dsi_descr		Set to same value as dsi_table_key
GRP_LEVEL		Same as dsi_target_name
OVO_SERVER	Varchar(128)	trend_sum populates based on by variable "OVO_SERVER"
NODE_NAME	Varchar(254) Varchar2(1024)	trend_sum populates based on by variable "NODE_NAME"
APPLICATION	Varchar2(254)	trend_sum populates based on by variable "APPLICATION"
SERVICE_NAME	Varchar2(2048)	trend_sum populates based on by variable "SERVICE_NAME"
ACKN_USER	Varchar2(20)	trend_sum populates based on by variable "ACKN_USER"
MESSAGE_GROUP	VARCHAR(255)	trend_sum populates based on by variable "MSG_GROUP"
MSG_SOURCE_NAME	VARCHAR(255)	trend_sum populates based on by variable "TEMPLATE"
APPLICATION_ID	number	Unique hash for application
COND_DESCRIPTION_ID	number	Unique hash for condition description
SERVICE_NAME_ID	number	
CONDITION_DESCR	VARCHAR(255)	trend_sum populates based on by variable "CONDITION"
OTHER standard columns found in PI RPs		

## History Message Data Table

Destination Table	Rollup Processing Populating Table
SH_OVO_MSG	Populated by several roll-up combinations: SH_OVO_MSG.nnn
SD_OVO_MSG	Populated by trend_sum using SD_OVO_MSG.sum
SW_OVO_MSG	Populated by trend_sum using SW_OVO_MSG.sum
SM_OVO_MSG	Populated by trend_sum using SM_OVO_MSG.sum

## Consolidated Message Metrics by Time Period

Metric	Hour	Day	Week	Month
CNT_MESSAGES	X	X	X	X
CNT_UNKNOWN	X	X	X	X
CNT_NORMAL	X	X	X	X
CNT_WARNING	X	X	X	X
CNT_CRITICAL	X	X	X	X
CNT_MINOR	X	X	X	X
CNT_MAJOR	X	X	X	X
MIN_RECEIVE_DELAY	X	X	X	X
MAX_RECEIVE_DELAY	X	X	X	X
AVG_RECEIVE_DELAY	X	X	X	X
TOT_RECEIVE_DELAY	X	X	X	X
MIN_AGE_MSG	X	X	X	X
MAX_AGE_MSG	X	X	X	X
AVG_AGE_MSG	X	X	X	X
TOT_AGE_MSG	X	X	X	X
CNT_AGE_5_MIN	X	X	X	X
CNT_AGE_5_10_MIN	X	X	X	X
CNT_AGE_10_30_MIN	X	X	X	X
CNT_AGE_30_60_MIN	X	X	X	X

<b>Metric</b>	<b>Hour</b>	<b>Day</b>	<b>Week</b>	<b>Month</b>
CNT_AGE_60_120_MIN	X	X	X	X
CNT_AGE_120_720_MIN	X	X	X	X
CNT_AGE_720_1440_MIN	X	X	X	X
CNT_AGE_GT_1440_MIN	X	X	X	X
CNT_PREV_BUFFERED	X	X	X	X
CNT_DUPL_COUNT	X	X	X	X
CNT_DUPL_MSG	X	X	X	X
CNT_ESCALATE_FLAG	X	X	X	X
CNT_AUTO_ACKN_FLAG	X	X	X	X
CNT_LOG_ONLY_FLAG	X	X	X	X
CNT_NOTIFICATION_FLAG	X	X	X	X
CNT_TROUBLE_TICK_FLAG	X	X	X	X
CNT_ACKN_AFTER_TT_FLAG	X	X	X	X

## Active Message Property Table

All OVO for UNIX/HPOM for UNIX Active Message summarized data tables are associated with the K\_OVO\_ACT property table.

### K\_OVO\_ACT

Column Name	Data Type	Population Method
dsi_key_id		Maintained by PI
dsi_target_name		ON: OVO_SERVER - NODE_NAME OS: OVO_SERVER - SERVICE_NAME OM: OVO_SERVER - MSG_GROUP ONA: OVO_SERVER – NODE_NAME - APPLICATION ONS: OVO_SERVER – NODE_NAME - SERVICE_NAME ONM: OVO_SERVER – NODE_NAME - MSG_GROUP All Msgs executive summary across all messages A: APPLICATION S: SERVICE_NAME M: MSG_GROUP
node_id	varchar2(128)	Unique ID of node where event occurred.
dsi_status	number(3,0)	Specifies the global status attribute for the managed object. The default value is 2.
dsi_status_time	date	Contains the timestamp of the last status. The default value is the current time.
dsi_table_key		Due to custom rollup, all by variables, <i>except</i> for GRP_LEVEL and the interval by variable, will be concatenated and inserted into dsi_table_key
dsi_descr		NULL. Not used
GRP_LEVEL		Same as dsi_target_name
OVO_SERVER	varchar(128)	trend_sum populates based on by variable “OVO_SERVER”
NODE_NAME	varchar(254) archar2(2048)	trend_sum populates based on by variable “NODE_NAME”
APPLICATION	varchar2(254)	trend_sum populates based on by variable “APPLICATION”
SERVICE_NAME	varchar2(2048)	trend_sum populates based on by variable “SERVICE_NAME”

Column Name	Data Type	Population Method
MSG_GROUP	varchar2(32)	trend_sum populates based on by variable "MSG_GROUP"
APPLICATION_ID	Number	Unique hash for the application
SERVICE_NAME_ID	Number	Unique hash for the service
OTHER standard columns found in PI RPs		

## Active Message Data Table

Destination Table	Rollup Processing Populating Table
SH_OVO_ACT	Populated by several roll-up combinations: SH_OVO_ACT. <i>nnn</i>
SD_OVO_ACT	Populated by trend_sum using SD_OVO_ACT.sum
SW_OVO_ACT	Populated by trend_sum using SW_OVO_ACT.sum
SM_OVO_ACT	Populated by trend_sum using SM_OVO_ACT.sum



## Active Message Metrics By Time Interval

Metric	Hour	Day	Week	Month
CNT_MESSAGES	X	X	X	X
CNT_UNKNOWN	X	X	X	X
CNT_NORMAL	X	X	X	X
CNT_WARNING	X	X	X	X
CNT_CRITICAL	X	X	X	X
CNT_MINOR	X	X	X	X
CNT_MAJOR	X	X	X	X
MIN_AGE_MSG	X	X	X	X
MAX_AGE_MSG	X	X	X	X
AVG_AGE_MSG	X	X	X	X
TOT_AGE_MSG	X	X	X	X
CNT_AGE_5_MIN	X	X	X	X
CNT_AGE_5_10_MIN	X	X	X	X
CNT_AGE_10_30_MIN	X	X	X	X
CNT_AGE_30_60_MIN	X	X	X	X
CNT_AGE_60_120_MIN	X	X	X	X
CNT_AGE_120_720_MIN	X	X	X	X
CNT_AGE_720_1440_MIN	X	X	X	X
CNT_AGE_GT_1440_MIN	X	X	X	X
CNT_CURR_BUFFERED	X	X	X	X
CNT_PREV_BUFFERED	X	X	X	X
CNT_DUPL_COUNT	X	X	X	X
CNT_DUPL_MSG	X	X	X	X
CNT_ESCALATE_FLAG	X	X	X	X
CNT_AUTO_ACKN_FLAG	X	X	X	X
CNT_LOG_ONLY_FLAG	X	X	X	X
CNT_NOTIFICATION_FLAG	X	X	X	X
CNT_TROUBLE_TICK_FLAG	X	X	X	X
CNT_ACKN_AFTER_TT_FLAG	X	X	X	X

## Service Log Property Table

All OVO for UNIX/HPOM for UNIX Service Log summarized data tables are associated with the K\_OVO\_SRVLOG property table.

### K\_OVO\_SRVLOG

Column Name	Population Method
dsi_key_id	Maintained by PI
dsi_target_name	trend_sum populates based on by variable "OVO_SERVER"
dsi_table_key	trend_sum populates based on by variable "SERVICE_NAME"
dsi_descr	NULL. Not used
OVO_SERVER	trend_sum populates based on by variable "OVO_SERVER"
SERVICE_NAME	trend_sum populates based on by variable "SERVICE_NAME"

## Service Log Data Tables

The following OVO for UNIX/HPOM for UNIX Service Log rollup tables are used for reporting:

Destination Table	Rollup Processing Populating Table
SD_OVO_SRVLOG	Populated by trend_sum using the following program: SD_OVO_SRVLOG.sum
SW_OVO_SRVLOG	Populated by trend_sum using the following program: SW_OVO_SRVLOG.sum
SM_OVO_SRVLOG	Populated by trend_sum using the following program: SM_OVO_SRVLOG.sum

## Service Log Metrics by Time Interval

Metric	Day	Week	Month
CNT_MESSAGES	X	X	X
DURATION_TOTAL	X	X	X
DURATION_UNKNOWN	X	X	X
DURATION_NORMAL	X	X	X
DURATION_WARNING	X	X	X
DURATION_CRITICAL	X	X	X
DURATION_MINOR	X	X	X
DURATION_MAJOR	X	X	X



## B PI Report Packs

Business Technology	Reporting Solution
Application Server	<ul style="list-style-type: none"><li>• Application Server Report Pack<ul style="list-style-type: none"><li>— WebLogic SPI</li><li>— WebSphere SPI</li></ul></li></ul>
Database SPI	<ul style="list-style-type: none"><li>• Database Report Pack</li></ul>
HP Business Process Insight	<ul style="list-style-type: none"><li>• BPI Report Pack</li></ul>
HP Internet Services	<ul style="list-style-type: none"><li>• Internet Services Report Pack</li></ul>
HP Network Node Manager	<ul style="list-style-type: none"><li>• NNM Event &amp; Availability Report Pack</li></ul>
HP Service Desk	<ul style="list-style-type: none"><li>• Service Desk Report Pack</li><li>• Change Management Report Pack</li><li>• SLM Integration Report Pack</li></ul>
HP Sitescope	<ul style="list-style-type: none"><li>• Sitescope Report Pack</li></ul>
IP Telephony	<ul style="list-style-type: none"><li>• Cisco IP Telephony Call Detail</li><li>• Cisco IP Telephony Gateway Statistics</li></ul>
MPLS VPN	<ul style="list-style-type: none"><li>• MPLS VPN Report Pack</li></ul>
Networking	<p><b>Traffic Profiling</b></p> <ul style="list-style-type: none"><li>• RMON II</li><li>• NetFlow Interface</li><li>• NetFlow Global View</li><li>• IP QoS Report Pack</li><li>• Class-Based QoS Report Pack</li></ul> <p><b>Quality Assurance</b></p> <ul style="list-style-type: none"><li>• Cisco Ping</li><li>• Service Assurance</li><li>• IP Access Rate</li></ul> <p><b>Infrastructure Usage</b></p> <ul style="list-style-type: none"><li>• Interface Reporting</li><li>• Device Resource</li></ul>

<b>Business Technology</b>	<b>Reporting Solution</b>
Networking (con't)	<p>LAN/WAN Edge</p> <ul style="list-style-type: none"> <li>• Frame Relay (SNMP only)</li> <li>• ATM (SNMP only)</li> </ul> <p>WAN Core</p> <ul style="list-style-type: none"> <li>• Frame Relay (multiple switch vendors)</li> <li>• ATM (multiple switch vendors)</li> </ul>
System Resources	<ul style="list-style-type: none"> <li>• System Resource Report Pack</li> </ul>

## C Message Types for HPOM 9.0

The following table lists the message types available in HPOM 9.0

<b>Message Source Type</b>	<b>Message Source Type Name</b>
1	Console
2	Message
4	Logfile
8	Monitor
16	SNMP Trap
32	ECS
256	Schedule
512	Adv. Monitor
1024	WBEM
2048	WMI
8192	Serv. Dist.
16384	Node Info
32768	Mgr. Conf.
65536	Config File
69632	Subagent
4096	Internal
Any other code	Unknown





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