

IP QoS Statistics Report Pack

Software Version: 3.30

HP Performance Insight 5.40

User Guide

January 2009



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

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

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1 Overview

This chapter covers the following topics:

- [Introduction to HP Performance Insight](#)
- [Processing Traffic According to Priority](#)
- [IP QoS Statistics Report Pack](#)
- [Options for Customizing Reports](#)
- [Sources for Additional Information](#)

HP Performance Insight

Performance Insight is a performance management application that 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
- Extensive aggregation (by day, week, month; by location, by customer)
- Thresholding and alerting
- Easy identification of bottlenecks
- Easy assessment of capacity trends
- Accurate and timely documentation for management
- Integration with NNM
- Integration with HP Operations/OM

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

Processing Traffic According to Priority

When a network that includes Cisco routers or Cisco Catalyst switches provides end-to-end Quality of Service (QoS), the routers and switches are able to distinguish higher-priority traffic from lower-priority traffic and process higher-priority traffic ahead of lower-priority traffic. End-to-end QoS offers the following benefits:

- Bandwidth can be dedicated to particular types of traffic
- Problems affecting real-time, interactive traffic (jitter and latency) can be controlled
- Loss characteristics can be improved

You can implement end-to-end QoS by using a router configuration interface to control the second byte in the header of the IP packet. The first three bits of the second byte indicate the level of precedence. There are eight precedence levels to choose from. The lowest level of precedence is 0 and the highest level of precedence is 7.

Although QoS allows you to dedicate bandwidth to particular types of traffic, control jitter and latency, and improve loss characteristics, QoS will not tell you how much traffic of each service class is traversing the network, nor will it provide the hourly and daily information needed to design efficient QoS schemes. To find this data, you need to poll byte and packet counters in the IP Statistics MIB and process the data you collect.

IP QoS Statistics Report Pack

The IP QoS Statistics Report Pack polls the IP Statistics MIB, issues processing directives to PI, and displays reports that show the distribution of traffic on a per-precedence basis. The IP QoS Statistics Report Pack contains three reports:

- Near Real Time Interface Activity
- Historical Interface Activity
- Inventory

The **Near Real Time** report contains rate data for the previous 24 hours. Use this report to see byte and packet totals for each precedence level, in each direction, for every poll cycle during the previous six hours.

The **Historical Interface Activity** report provides details about yesterday's traffic volume per IP precedence level and displays hourly, daily, and monthly aggregations for any interface that has had traffic during the previous six hours.

The **Inventory** report provides a list of all the ToS-enabled interfaces in your network. This report is refreshed after every poll cycle; the list of customers is updated once a day.

The IP QoS Statistics Report Pack does not contain a thresholds sub-package. However, if you want to be notified when traffic of a particular IP-precedence is traversing the network, you can configure the Thresholds Module to generate the appropriate notification. Configuring the Thresholds Module involves modifying action and configuration files. This procedure is documented in the *Thresholds Module User Guide*.

The following table provides details about recent enhancements to IP QoS Statistics.

Version	Release Date	Features/Enhancements
1.00	May 2003	3 reports Sybase support Cisco IPQoSStat Datapipe 1.00
2.00	October 2003	PI Object Manager support
3.00	April 2004	PI 5.00 support Oracle support Cisco IPQoSStat Datapipe 2.00
3.00	August 2004	UPGRADE_IP_QoS_Statistics_to_30.ap
3.10	April 2007	Location Independent Reporting (LIR) SQL modified to support IR node/interface delete Cisco IPQoSStat Datapipe 3.10 UPGRADE_IP_QoS_Statistics_to_31.ap
3.20	October 2007	Prerequisites: <ul style="list-style-type: none"> • PI 5.30 • Common Property Tables 3.70 UPGRADE_IP_QoS_Statistics_to_32.ap <ul style="list-style-type: none"> • QXCR1000439333: IP_QoS_Statistics defect in create_IPQoSStat_ObjMan.sql
3.30	February 2008	Copy Policy Enhancement UPGRADE_IP_QoS_Statistics_to_33.ap
3.30	January 2009	Prerequisites: <ul style="list-style-type: none"> • PI 5.40 • Common Property Tables 3.90



The “to_33.ap” upgrade package is not available on CD-ROM. The “to_33.ap” upgrade package is available as a download only. The next chapter, the installation chapter, contains several references to a report pack CD-ROM. Ignore those references. If you need help downloading or installing this upgrade package, refer to release notes.

Options for Customizing Reports

You can change the contents of reports by applying group filters, by editing parameters, and by changing view options for tables and graphs. While service providers use group filters to produce customer-specific reports, any user can apply a constraint to a report or edit tables and graphs. For details about view options for tables and graphs, see [Appendix A, Editing Tables and Graphs](#).

