



HP OpenView Performance Insight Report Pack for Quality Assurance

Meet service level commitments

Meeting clients' service level expectations is a complex challenge for IT organizations everywhere – going beyond network availability to encompass the performance and responsiveness of key business applications. Customers demand “always on” applications just as they assume the network is always available. HP OpenView Performance Insight Report Pack for Quality Assurance provides a total view of the overall performance and service delivery of Cisco-powered networks – from interfaces to applications. With these reports, your operators can identify overloaded interfaces and poorly performing applications and fix them – before service is disrupted and users feel the impact.

Measuring application performance

Using Cisco's Service Assurance Agent (SAA), this report pack provides comprehensive insight into how applications are performing across a network, allowing enterprises and service providers to improve their quality of service and meet service level commitments. Cisco SAA is a network performance measurement agent embedded within Cisco IOS Software. It collects performance information on various network statistics and provides the mechanism to monitor performance for different classes of traffic over the same connection.

This report pack uses the SAA-collected data to help organizations monitor how their Cisco-powered networks are being used, to optimize existing services and to conduct capacity planning. Operators can view network statistics such as response time, exception counts, availability, jitter (inter-packet delay), throughput and traffic volume to understand better how your network services are being used by applications.

Measuring performance between device pairs

Cisco Ping was originally an application of the Internet Control Message Protocol (ICMP) to set up, perform and retrieve ICMP activity between remote devices, and it

was later added to the Cisco IOS Software as a troubleshooting tool. Network operators use the Cisco Ping MIB to better understand network response time and packet loss information for activity occurring between a pair of Cisco devices.

HP OpenView Performance Insight Report Pack for Quality Assurance uses data collected from the Cisco Ping MIB and two additional MIBlets (Cisco System and Interface Reporting Basic Info) to monitor round-trip time, interface utilization, CPU utilization, threshold breaches and device availability over time. Because it collects performance data from individual pairs of interfaces residing on source and destination devices, it facilitates accurate problem identification. Quickly troubleshoot any performance problems that your network may be experiencing to improve quality of service and determine future capacity needs. Your network operators can easily determine appropriate follow-up actions to optimize your network and service delivery and proactively plan appropriate service capacity. As a result, your organization can better meet your service level commitments to customers, whether they are internal or external.

Understanding traffic priorities

HP OpenView Performance Insight Report Pack for Quality Assurance also provides comprehensive reports that show whether your organization is meeting its service level agreements (SLAs) for traffic guarantees. By analyzing precedence data, which is mapped to one of eight levels of ToS (Type of Service), your operators can determine what types of traffic are being delivered throughout the network. They can understand the priority of the packets received and delivered through particular interfaces and determine how much traffic is actually delivered to customers. They can analyze how the use of quality of service precedence settings, pre-established with the Cisco CAR (Committed Access Rate) MIB, impacts network traffic. And, they can find out how rate limiters affect customer traffic and how much traffic is unaffected, discarded and tagged low priority.

Detailed reports provide proof for customers that SLAs are being met and enable your IT organization to bill appropriately for traffic use, based on priority settings. With information from these reports, your operators can tune Cisco IP precedence settings to optimize network traffic flow across the enterprise and justify customer equipment upgrades necessary to meet guaranteed service levels.

Key Features

HP OpenView Performance Insight Report Pack for Quality Assurance provides in-depth reports that:

- Use Cisco IOS Service Assurance Agent data to monitor network performance for applications.
- Collect Cisco Ping statistics, interface utilization statistics, and CPU utilization statistics to show how Cisco-powered networks are performing.
- Automatically discover all Cisco Ping MIB devices located on the network.
- Use Cisco IP-STAT MIB data to monitor types of IP traffic flowing through your network.

- Use Cisco CAR MIB data to see the effects of quality of service precedence settings on network traffic.
- Generate traps based on service level thresholds. Alerts can be sent to HP OpenView NNM when limits are exceeded.
- Can be customized (look and feel as well as the type of data that is shown)

Performance management reports in this report pack present a number of indicators of a Cisco-powered network's usage and general health, including:

- Response time—round-trip time used by a specific SAA test
- Exception count—number of SAA tests that exceeded the pre-defined response time threshold
- Availability—derived from the number of successful and unsuccessful SAA tests
- Jitter—the variation in packet inter-arrival time
- Throughput—a derived estimate of the bytes per seconds used during an SAA test
- Number of transactions—number of SAA tests that have completed
- Traffic volume—the total number of bytes sent and received by an SAA source device

HP OpenView Performance Insight Report Pack for Quality Assurance is a member of the HP OpenView Performance Insight family, delivering comprehensive and customizable network performance management reports for managing service level commitments. This report pack can be used with other HP OpenView products for complete infrastructure and service management.

Comprehensive Performance Reports

Get a complete picture your service delivery levels across your entire network – infrastructure to application – from a single, comprehensive report pack. HP OpenView Performance Insight Report Pack for Quality Assurance integrates with other HP OpenView products such as HP OpenView Operations and HP OpenView Network Node Manager. In addition, the report pack filters reports based on customer or subscriber and/or location, with the ability to drill down to more detailed data presented at the source, destination or application level. Reports can be run using hourly or daily information. Get reports with only the information you want, presented in the form that is most meaningful to you.

Application Performance Reports

The application performance reports include default hourly and daily thresholds for standard service level commitments. If 75% of SAA tests in any given hour or if 50% of the SAA tests in a day exceed the default threshold for response time, a trap is sent to HP OpenView Operations and/or HP OpenView Network Node Manager.

- *Exception* – shows elements that have exceeded predefined response time thresholds.

- *Top Ten* – lists top ten elements for: worse response time; worst throughput; most number of transactions; forecasted response time increase; forecasted throughput decrease, and greatest amount of traffic (bytes sent/received).
- *Jitter Summary* – summarizes performance metrics for response time, jitter, packet loss, and packets by error type. Note that the report presents “source to destination” and “destination to source” data for both jitter and packet loss.
- *Summary* – presents a summary of response time, number of transactions, availability, throughput, exception counts and traffic. Includes data from last 24 hours and last 30 days.
- *Near Real-Time* – displays SAA test data from last six hours including data collected in most recent polling.
- *Forecast* – presents detailed summary of response time and throughput forecasts.

Device Pairs Performance Reports

These reports detail the performance of interface pairs (by device pair, location, and customer) and produces views showing hourly, daily, and monthly trends. The reports support both simple response time thresholds and qualified SLA thresholds that compare utilizations to provisioned SLA threshold values. Your network operators can drill down to gather additional information such as baseline values, daily forecast summaries, or the previous day’s interface and CPU utilization.

- *Executive Summary* – aggregates data for all device pairs, providing a summary of hourly and daily performance.
- *Forecast* – ranks the worst performing pairs by daily round-trip time or packet delivery ratio. Your operators can drill down to baseline values, a daily summary and projected values.
- *Worst Performing Pairs* – ranks the worst performing device pairs, by round trip and by packet delivery ratio.
- *QuickView* – displays a rolling daily summary showing round-trip time and packet delivery ratio for a selected device pair.
- *Threshold Breaches* – provides a monthly total of threshold breaches for every pair. The report tracks packet delivery ratio, round trip time, interface utilization and CPU utilization. Your operators can drill down from the monthly summary to see daily data.
- *Near Real Time* – provides a rolling summary of threshold breaches or round-trip time and packet delivery ratio for selected pairs for previous six hours. The report tracks packet delivery ratio, round trip time, interface utilization and CPU utilization. Your operators can drill down to see hourly data.

Traffic Performance Reports

- *Interface Inventory* – lists individual interfaces and their types of service. Also, lists all interfaces configured with rate limiting objects. Lets you examine configured interfaces on a customer-by-customer basis.
- *Historical Interface Activity* – shows the performance of individual interfaces and their types of service, based on the last several months. Also, displays the performance of individual CAR rate limit objects up to the last poll cycle. Can be used to identify which rate limit is responsible for dropping traffic.

- *Near Real Time* – provides a detailed look at the performance of individual interfaces and their types of service traffic. Or, lists devices ranked by percentage of filtered traffic, highest to lowest.

Ordering information

<i>Product ID</i>	<i>Description [use style "table column head"]</i>
T2660AA	HP OpenView Performance Insight Report Pack for Quality Assurance

System requirements

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| Software | <ul style="list-style-type: none">○ HP OpenView Performance Insight 4.5, 4.6, or 5.0○ HP OpenView Performance Insight Report Pack for Infrastructure Usage○ Cisco IOS V12.2 and higher○ Cisco IP-STAT MIB (for IP QOS Statistics)○ Cisco CAR MIB (for IP Access Rate) |
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