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Enterprise

HPE Network Node Manager iSPI Performance for Quality

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for the Windows® and Linux® operating systems

Online Help for Reports

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Quality Assurance Reports

The Network Node Manager iSPI Performance for Quality Assurance Software (NNM iSPI Performance for QA) provides you with Quality Assurance reports. These reports enable you to do the following:

- Monitor the network performance, and drill-down to the root-cause of the problem
- Analyze the trend of the network performance for a specific time period
- Forecast any problem that may arise over a period of time
- Troubleshoot any problem in the network

NNM iSPI Performance for QA enables you to view the reports for the following policy types:

- A parent policy, that is, a policy that contains references to other policies
- An independent policy, that is, a policy that does not refer to any other policies

Multi-tenant architecture is also integrated with Network Performance Server and restricts a user to view only selective probes and reports. For example, while generating Top N report, a user can view the report of the nodes that can be accessed by the user.

Launching the Quality Assurance Reports

Follow the steps as given below to view a QA report:

1. Navigate to the Network Node Manager iSPI Performance for Metrics console using any of the following methods:
 - Click **Actions > HPE NNM iSPI Performance > Reporting-Report Menu** in the NNMi console. Alternatively, you can right-click a QA probe or QA group in the Quality Assurance inventory on the NNMi console, select **HPE NNM iSPI Performance**, and then select **Reporting - Report Menu**.
 - Log in to NPS using `http://<fully-qualified-serverName>:9300/p2pd/NPS.html` portal.
2. On the NPS home page, select **Reports** tab in the navigation panel.
3. Click **iSPI Quality Assurance**.
4. Click **Quality_Assurance**.
5. Click **QAMetrics**.
6. Select the report type.

For more information, see the *Network Node Manager iSPI Performance for Metrics Online Help*.

Before you start viewing the QA reports, ensure that Network Performance Server (NPS) is up and running.

Quality Assurance Baseline Sleeve Report

Baseline sleeve report enables you to analyze or forecast when the metric is likely to violate the threshold value.

This report enables you to do the following:

- Analyze if the network performance is within the normal range for the selected time range
- Detect if the threshold state of the metric is likely to cross the high or low threshold value
- View the details of the metric as a line chart and tabular format as well. For a specific time grain, you can view the time, baseline metric average, exceptions, lower normal and upper normal standard deviations in percentage

Quality Assurance Headline Report

Quality Assurance (QA) Headline report enables you to analyze and compare the different metrics in a single report, as follows:

- Response time (RTT) between the selected source node and destination node, based on the following:
 - Average response (msec)
 - Minimum response and Maximum response (msec)
- Ping latency between the selected source node and destination node, based on the following:
 - Reachability (avg)
 - Target error (avg)
 - Unresponsive target (avg)
- Jitter between the selected source node and destination node, based on the following:
 - Positive jitter (μ secs) (avg)
 - Negative jitter (μ secs) (avg)
- Packet loss between the selected source node and destination node, based on the following:
 - Two way packet loss (%) (avg)
- Mean Opinion Score between the selected source node and destination node.

Quality Assurance Managed Inventory Report

Quality Assurance Managed Inventory report enables you to view the topology elements used in a selected time range.

Using this report you can:

- View the utilization for each topology element used in your network.
- Analyze if any of the elements are over-utilized or underutilized for a specific time range.
- Track the utilization of topology elements to resolve an existing network problem.
- Track the number of QA probes and QA probe types run in your network.

Quality Assurance Most Changed Reports

This report compares performance of the components for two different (consecutive) time periods and ranks components by the amount of change. The sort order is most-changed to least-changed.

How to Run the Report

To launch the Quality Assurance Reports, navigate to **iSPI Quality Assurance > Quality_Assurance > Most Changed**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

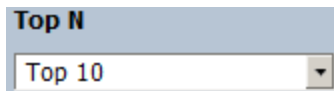
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top N

The Top N list helps you specify the number of data points that you want to see on the report.

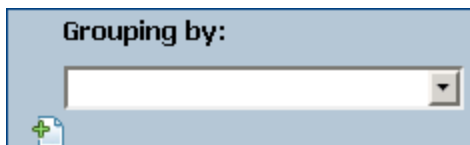
To select data points on the report:



In the Top N list, select a value of your choice.

Grouping By

To change the Grouping By option:



In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

- In the context menu, click **Send to Y1** if you want to select this metric. On the axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: QA Probe Name
- Metrics:
 - Y1: Round Trip Time (msecs) (avg)

Quality Assurance Peak Period Report

The Peak Period report ranks the utilization and performance of QA Probes during the busiest time of the selected time range. This report enables you to:

- Identify the performance and utilization of the selected metrics during the peak period.
- Identify QA Probes that have the highest or lowest performances or utilization levels during the peak period.
- Compare the performance for multiple QA Probes during the peak period using this report.

How to Run the Report

To launch the Quality Assurance Reports, navigate to **iSPI Quality Assurance > Quality_Assurance > Peak Period**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

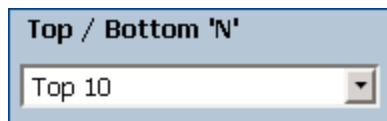
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

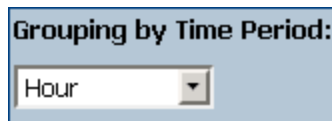
To select data points on the report:



The image shows a blue-bordered dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.

Grouping by Time Period:



The image shows a blue-bordered dropdown menu titled "Grouping by Time Period:". The selected option is "Hour".

In the Grouping by Time Period box, select the time period by which you want to group the peak values.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by Time Period: Hour
- Metrics:
 - Y1: Round Trip Time (msecs) (avg)
 - Y2: Round Trip Time (msecs) (max)

Quality Assurance Top N Frequency Distribution Report

The Top N Frequency Distribution report ranks network elements by the metrics you select and shows the distribution of metric values for each collected sample during the selected time range.

You can use this report as an alternative to the Top N report. In addition to providing all the details that are available on the Top N report, this report helps you see how much time the metric value has spent in each **bucket**¹.

How to Run the Report

To launch the Quality Assurance Reports, navigate to **iSPI Quality Assurance > Quality_Assurance > Top N Frequency Distribution**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

¹A bucket represents a range of values. The Top N Frequency Distribution report enables you to define 12 different buckets (or ranges of values) for a metric series—from bucket 0 (Bkt 0) through bucket 11 (Bkt 11). Each bucket is associated with a color code (in-built, not configurable). The generated report represents the distribution of different value ranges with the color codes that are associated with buckets.

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

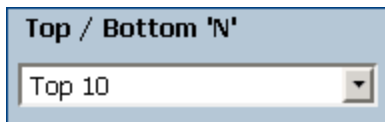
To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

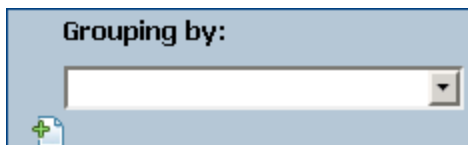
To select data points on the report:



The image shows a dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a dropdown menu titled "Grouping by:". The menu is currently empty, and a small plus icon is visible in the bottom left corner of the dropdown area.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: QA Probe Name
- Metrics:
 - Y1: Round Trip Time (msecs) (avg)
 - Y2: Round Trip Time (msecs) (max)

Quality Assurance Top N Report

The Top N report ranks QA Probes by the selected metrics. Use this report to spot the QA Probe that performed at the extremes and to analyze the historical data for QA Probes that exhibit unusual utilization levels.

The report enables you to:

- Detect any QA Probe that is experiencing a health or performance problem.
- Detect over-utilized and under-utilized QA Probes on the network.
- Compare the performance of multiple QA Probes

How to Run the Report

To launch the Quality Assurance Reports, navigate to **iSPI Quality Assurance > Quality_Assurance > Top N**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

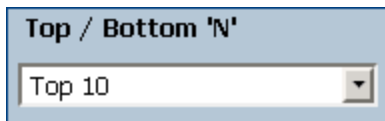
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

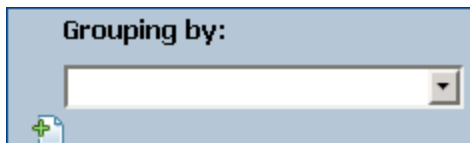
To select data points on the report:



The image shows a blue-bordered dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a blue-bordered dropdown menu titled "Grouping by:". The dropdown is currently empty, and a small green plus icon is visible in the bottom-left corner of the menu area.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

- In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: QA Probe Name
- Metrics:
 - Y1: Round Trip Time (msecs) (avg)
 - Y2: Round Trip Time (msecs) (max)

Tip: Check this report once a day to see which network component might need special attention.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Example

Some of the destination sites in your network are performing poorly. Using this report, you can group the QA probes reporting highest **Round Trip Time (RTT)** for each of the destination sites. The QA probe reporting the highest RTT is ranked first.

Quality Assurance Top N Table Report

This report ranks network elements by the metrics you select. Unlike the Top N report, this report does not show any bar charts or time series graphs and does not show the **others**¹ group. In a large environment, NPS can generate the Top N Table report faster than it can generate the Top N report. If you want to view Top N elements in the least possible time, choose the Top N Table report instead of the Top N report.

Use this report to spot the element that performed at the extremes and to analyze historical data for elements that are exhibiting unusual utilization levels. You can:

- Detect the QoS entitie that has a health or performance problem.
- Analyze the utilization of the NNMI-managed network QoS entities during a specific time range.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare performance for multiple network QA Probes.

How to Run the Report

To launch the Quality Assurance Reports, navigate to **iSPI Quality Assurance > Quality_Assurance > Top N Table**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the **Time**, **Topology**, and **Options** menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

To select data points on the report:

¹On a Top N report, elements that are not ranked by the report are grouped together and represented by the "others" row.

The image shows a light blue rectangular box with the title "Top / Bottom 'N'". Inside the box is a white dropdown menu with a downward-pointing arrow on the right side. The text "Top 10" is displayed in the dropdown menu.


In the Top/Bottom N list, select a value of your choice.

To change the Grouping By option:

The image shows a light blue rectangular box with the title "Grouping by:". Inside the box is a white dropdown menu with a downward-pointing arrow on the right side. The dropdown menu is currently empty. There is a small green plus icon in the bottom-left corner of the box.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: QA Probe Name
- Metrics:
 - Y1: Round Trip Time (msecs) (avg)
 - Y2: Round Trip Time (msecs) (max)

Tip: Check this report once a day to see which network component might need special attention.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Quality Assurance Top N Chart Report

This report ranks QA Probes by the metrics you select. This report displays the metric values for each rank with the help of a line graph.

Use this report to spot the QA Probe that performed at the extremes and to analyze historical data for QA Probes that are exhibiting unusual utilization levels. You can:

- Detect the QoS entitie that has a health or performance problem.
- Analyze the utilization of the NNMi-managed network QoS entities during a specific time range.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare performance for multiple network QA Probes.

How to Run the Report

To launch the Quality Assurance Reports, navigate to **iSPI Quality Assurance > Quality_Assurance > Top N Chart**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

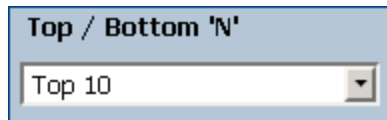
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

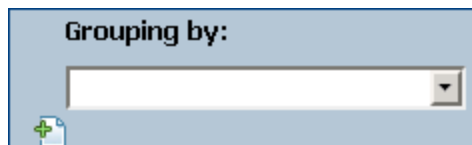
To select data points on the report:



The image shows a dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a dropdown menu titled "Grouping by:". The menu is currently empty, and a small green plus icon is visible in the bottom left corner of the dropdown area.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: QA Probe Name
- Metrics:
 - Y1: Round Trip Time (msecs) (avg)
 - Y2: Round Trip Time (msecs) (max)

Quality of Service (QoS) Reports

Quality of Service (QoS) Reports enable you to perform the following:

- Monitor the network performance, and drill-down to the root-cause of the problem
- Analyze the trend of the QoS entities in the network for a specific time period
- Forecast any problem that may arise over a period of time

Launching the NNM iSPI Performance for QA QoS Reports

Follow the steps as given below to view a QoS report:

1. Navigate to the Network Node Manager iSPI Performance for Metrics console using any of the following methods:
 - Click **Actions > HPE NNM iSPI Performance > Reporting-Report Menu** in the NNMi console.
Alternatively, you can right-click a QoS element in the Quality Assurance inventory on the NNMi console, select **HPE NNM iSPI Performance**, and then select **Reporting - Report Menu**.
 - Log in to NPS using `http://<fully-Qualified-serverName>:9300/p2pd/NPS.html` portal.
2. On the NPS home page, select **Reports** tab in the navigation panel.
3. Click **iSPI Quality Assurance**.
4. Click **Class_Based_QoS**.
5. Click **QoS Metrics**.
6. Select the report type.

For more information, see the *Network Node Manager iSPI Performance for Metrics Online Help*.

Before you start viewing the QoS reports, make sure that Network Performance Server (NPS) is up and running.

Quality of Service (QoS) Baseline Sleeve Report

Baseline sleeve report enables you to analyze or forecast when the selected QoS metric is likely to violate the threshold value.

You can set a QoS threshold value for a metric using the Configure QoS Threshold form in the Quality Assurance Configuration Console. For information on how to create QoS threshold, see *NNM iSPI Performance for QA QoS Threshold Configuration* section in *HPE Network Node Manager iSPI Performance for Quality Assurance Software Help for Administrators*.

This report enables you to do the following:

- Analyze if the performance of the selected QoS network element is within the normal range for the selected time range.

- Detect if the threshold state of the metric is likely to cross the high or low threshold value.
- View the details of the metric as a line chart and tabular format as well. For a specific time grain, you can view the time, baseline metric average, exceptions, lower normal and upper normal standard deviations in percentage.

Quality of Service (QoS) Calendar Report

The Calendar report uses a traditional, calendar-style layout to show hourly statistics of two metrics in a single, extended graph spanning over multiple days. You cannot use the Calendar report with a time range shorter than a day.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Calendar**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

Defaults

Time

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

- Relative start: Yes
- Interval: (Last rolling) 1 day
- Grain: 1 hour

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Quality of Service (QoS) Chart Detail Report

Use the Chart Detail Report to examine sampled data for any two metrics in detail. This report contains a graph representing data samples of two metrics and enables you to perform a trend analysis for health and performance of QoS entities based on historical data.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Chart Detail**. The section lists the default configuration of the report. You can modify the default settings of the report using the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Metrics

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

- In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

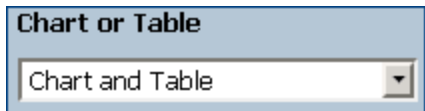
To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

To modify the report layout:



This drop-down list enables you to choose to view a chart or table or both on the report. Select Chart or Table or Chart and Table depending on your requirement.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Quality of Service (QoS) Heat Chart Report

The Heat Chart (or the normalized Heat Chart) report represents the *normalized* values of a metric, calculated at every hour of the day, in a tabular format. NPS uses color codes to indicate the performance characteristic

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

of the metric in this report, which helps you spot a condition that is gradually worsening and to distinguish satisfactory performance from unsatisfactory performance.

The legend at the top of the report maps a range of normalized performance values to a particular color.

Beneath the legend, a table represents the normalized values of a performance metric, with rows representing hours of the day and columns representing days. Each cell in table is color-coded and indicates a specific value of the metric. You can hover the mouse pointer on the cell to see the absolute metric value for each hour.

With this report, you can perform the following tasks:

- Identify gradual shifts from one range of performance to another range.
- Spot an isolated instance of poor performance that affected the results for one day.
- Spot day-of-week or hour-of-day patterns.
- Verify that an abnormal condition returned to normal after a problem was corrected.

You cannot launch this report with a time range of less than 24 hours.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Heat Chart**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric. On the axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Quality of Service (QoS) Managed Inventory Report

Use the QoS Managed Inventory report to view the utilization levels of the QoS interfaces, nodes, or node groups used in the selected time range.

Using this report you can:

- View the list of QoS elements used in your network. NNM iSPI Performance for QA discovers only Cisco QoS elements.
- Identify the over-utilized or under-utilized elements for a specific time range.

Quality of Service (QoS) Headline Report

QoS Headline report enables you to analyze and compare the performances of QoS managed policies, classes, and interfaces in a single report, as follows:

- Total bytes dropped
 - Pre policy (Before applying the policy)
 - Post policy (After applying the policy)
- Total bytes dropped for the egress and ingress directions, based on the following:
 - Dropped bytes (total bytes)
 - Dropped bytes (kbps) (avg)
- Queue utilization for all the traffic classes, based on the following directions:
 - Ingress
 - Egress

- Bandwidth utilization for all the traffic classes and configured bandwidth, based on the following directions:
 - Ingress
 - Egress
- Packet drop in a traffic stream (policing) (%)

Quality of Service (QoS) Most Changed Reports

This report compares performance of the components for two different (consecutive) time periods and ranks components by the amount of change. The sort order is most-changed to least-changed.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Most Changed**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top N

The Top N list helps you specify the number of data points that you want to see on the report.

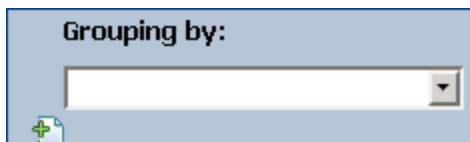
To select data points on the report:



In the Top N list, select a value of your choice.


Grouping By

To change the Grouping By option:



In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric. On the axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Qualified Interface Name
- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)

Quality of Service (QoS) Peak Period Report

The Peak Period report ranks the utilization and performance of QoS entities during the busiest time of the selected time range. This report enables you to:

- Identify the performance and utilization of the selected metrics during the peak period.
- Identify QoS entities that have the highest or lowest performances or utilization levels during the peak period.
- Compare the performance for multiple QoS entities during the peak period using this report.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Peak Period**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

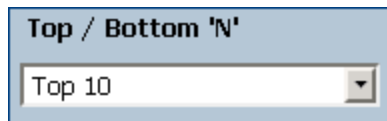
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

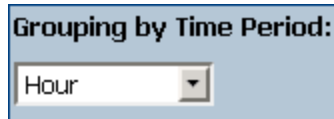
To select data points on the report:



The image shows a blue-bordered dropdown menu titled "Top / Bottom 'N'". The dropdown list is open, showing "Top 10" as the selected option.

In the Top/Bottom N list, select a value of your choice.

Grouping by Time Period:



The image shows a blue-bordered dropdown menu titled "Grouping by Time Period:". The dropdown list is open, showing "Hour" as the selected option.

In the Grouping by Time Period box, select the time period by which you want to group the peak values.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2**

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by Time Period: Hour
- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Quality of Service (QoS) Threshold Sleeve Report

This report analyzes how close the metric performance value is to the threshold levels. In other words, this report enables you to analyze when the metric will reach the threshold.

Using this report, you can:

- Forecast over-utilization or under-utilization of the selected QoS element.
- Detect if the metric performance is about to cross the high and low thresholds.

For example, if you generate the Threshold Sleeve Chart report for Availability (avg), the chart displays the how close the average QoS element availability is to the high and low threshold.

- Save multiple Threshold Sleeve Reports for a specific metric for different time ranges, and analyze the metric performance trend.

This report supports one metric.

- To change the Time Controls defaults, see *Using Reports > Change Time Settings with the Time Control Tab* section.
- To change the Topology Filters defaults, see *Set Topology Filters* in the *Using Reports* section.
- To change the Report Options defaults, see *Change Report Options* in the *Using Reports > Change Reports Options* section.

Quality of Service (QoS) Top N Report

The Top N report ranks QoS entities by the selected metrics. Use this report to spot the QoS entities that performed at the extremes and to analyze the historical data for QoS entities that exhibit unusual utilization levels.

The report enables you to:

- Detect any QoS entities that are experiencing health or performance problems.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare the performance of multiple QoS entities

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Top N**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

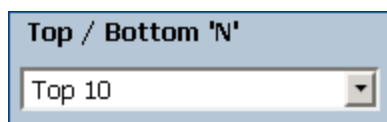
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

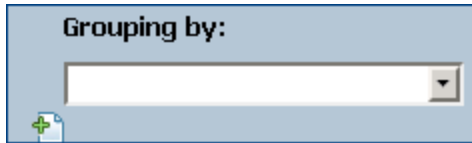
The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

To select data points on the report:




In the Top/Bottom N list, select a value of your choice.

To change the Grouping By option:



In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Qualified Interface Name
- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Tip: Check this report once a day to see which network component might need special attention.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Quality of Service (QoS) Top N Table Report

This report ranks network elements by the metrics you select. Unlike the Top N report, this report does not show any bar charts or time series graphs and does not show the **others**¹ group. In a large environment, NPS can generate the Top N Table report faster than it can generate the Top N report. If you want to view Top N elements in the least possible time, choose the Top N Table report instead of the Top N report.

Use this report to spot the element that performed at the extremes and to analyze historical data for elements that are exhibiting unusual utilization levels. You can:

- Detect the QoS entities that have health or performance problems.
- Analyze the utilization of the NNMI-managed network QoS entities during a specific time range.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare performance for multiple network QoS entities.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Top N Table**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

¹On a Top N report, elements that are not ranked by the report are grouped together and represented by the "others" row.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

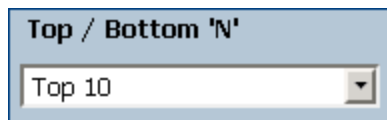
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

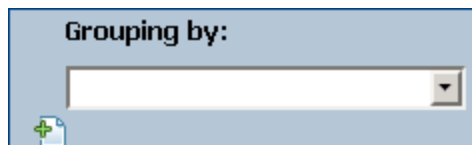
To select data points on the report:



The image shows a dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a dropdown menu titled "Grouping by:". The menu is currently empty, and there is a small green plus icon to the left of the dropdown arrow.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Qualified Interface Name
- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Tip: Check this report once a day to see which network component might need special attention.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Quality of Service (QoS) Top N Frequency Distribution Report

The Top N Frequency Distribution report ranks network elements by the metrics you select and shows the distribution of metric values for each collected sample during the selected time range.

You can use this report as an alternative to the Top N report. In addition to providing all the details that are available on the Top N report, this report helps you see how much time the metric value has spent in each **bucket**¹.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Top N Frequency Distribution**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the **Time**, **Topology**, and **Options** menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

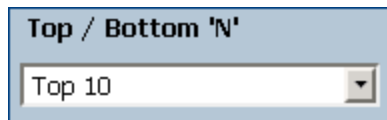
To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

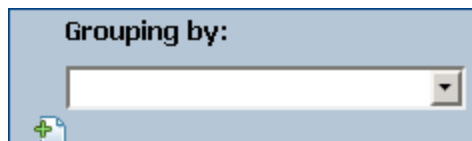
To select data points on the report:



The image shows a blue-bordered dropdown menu titled "Top / Bottom 'N'". The dropdown list is open, showing "Top 10" as the selected option.

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a blue-bordered dropdown menu titled "Grouping by:". The dropdown list is open, showing a blank space for selection. A small green plus icon is visible in the bottom left corner of the menu.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

¹A bucket represents a range of values. The Top N Frequency Distribution report enables you to define 12 different buckets (or ranges of values) for a metric series—from bucket 0 (Bkt 0) through bucket 11 (Bkt 11). Each bucket is associated with a color code (in-built, not configurable). The generated report represents the distribution of different value ranges with the color codes that are associated with buckets.

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Qualified Interface Name
- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Quality of Service (QoS) Top N Chart Report

This report ranks QoS entities by the metrics you select. This report displays the metric values for each rank with the help of a line graph.

Use this report to spot the QoS entities that performed at the extremes and to analyze historical data for QoS entities that are exhibiting unusual utilization levels. You can:

- Detect the QoS entities that have health or performance problems.
- Analyze the utilization of the NNMI-managed network QoS entities during a specific time range.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare performance for multiple network QoS entities.

How to Run the Report

To launch the QoS Reports, navigate to **iSPI Quality Assurance > Class_Based_QoS > Top N Chart**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

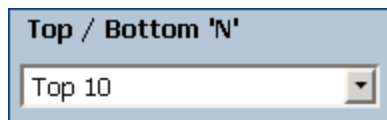
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

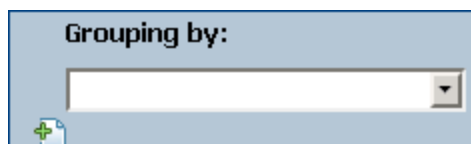
To select data points on the report:



The image shows a dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a dropdown menu titled "Grouping by:". There is a plus sign icon to the left of the dropdown arrow.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

- Top/Bottom N: Top 10
- Grouping by: Qualified Interface Name
- Metrics:
 - Y1: Pre Policy Rate (kbps) (avg)
 - Y2: Post Policy Rate (kbps) (avg)

Ping Latency Pair Reports

Ping Latency Pair Reports enable you to monitor and analyze the performance of the Ping Latency Pairs and drill-down to the root-cause of the problem.

Multi-tenant architecture is also integrated with Network Performance Server and restricts a user to view only selective Ping Latency Pairs and reports. For example, while generating Top N report, a user can view the report of the Ping Latency Pairs that can be accessed by the user.

Related Topic

[Launching the Ping Pair Reports](#)

Launching the Ping Latency Pair Reports

Follow the steps as discussed below to view a Ping Pair report:

1. Navigate to the Network Node Manager iSPI Performance for Metrics console using any of the following methods:
 - Click **Actions > HPE NNM iSPI Performance > Reporting-Report Menu** on the NNMi console. Alternatively you can right-click a ping pair in the Quality Assurance inventory on the NNMi console, select **HPE NNM iSPI Performance**, and then select **Reporting - Report Menu**.
 - Log in to NPS using `http://<fully-qualified-serverName>:9300/p2pd/NPS.html` portal.
2. On the NPS home page, select **Reports** tab in the navigation panel.
3. Click **iSPI Quality Assurance**.
4. Click **Ping_Latency**.
5. Click **PingPairMetrics**.
6. Select the report type.

For more information, see the *Network Node Manager iSPI Performance for Metrics Online Help*

Before you start viewing the Ping Pair reports, ensure that Network Performance Server (NPS) is up and running.

Ping Latency Pair Calendar Report

The Calendar report uses a traditional, calendar-style layout to show hourly statistics of two metrics in a single, extended graph spanning over multiple days. You cannot use the Calendar report with a time range shorter than a day.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Calendar**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 day
- Grain: 1 hour

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

Ping Latency Pair Chart Detail Report

Use the Chart Detail Report to examine sampled data for any two metrics in detail. This report contains a graph representing data samples of two metrics and enables you to perform a trend analysis for health and performance of ping latency pairs based on historical data.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Chart Detail**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Metrics

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

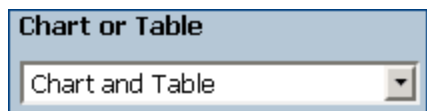
To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

To modify the report layout:



This drop-down list enables you to choose to view a chart or table or both on the report. Select Chart or Table or Chart and Table depending on your requirement.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

Ping Latency Pair Heat Chart Report

The Heat Chart (or the normalized Heat Chart) report represents the *normalized* values of a metric, calculated at every hour of the day, in a tabular format. NPS uses color codes to indicate the performance characteristic of the metric in this report, which helps you spot a condition that is gradually worsening and to distinguish satisfactory performance from unsatisfactory performance.

The legend at the top of the report maps a range of normalized performance values to a particular color.

Beneath the legend, a table represents the normalized values of a performance metric, with rows representing hours of the day and columns representing days. Each cell in table is color-coded and indicates a specific value of the metric. You can hover the mouse pointer on the cell to see the absolute metric value for each hour.

With this report, you can perform the following tasks:

- Identify gradual shifts from one range of performance to another range.
- Spot an isolated instance of poor performance that affected the results for one day.
- Spot day-of-week or hour-of-day patterns.
- Verify that an abnormal condition returned to normal after a problem was corrected.

You cannot launch this report with a time range of less than 24 hours.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Heat Chart**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric. On the axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

Ping Latency Pair Managed Inventory Report

Ping Pair Managed Inventory report enables you to view the ping pairs used in a selected time range.

Using this report you can:

- View the interface utilization for each ping pairs used in your network.
- Analyze if any of the interfaces for the selected ping pairs are over-utilized or underutilized for a specific time range.
- Track the network performances between the selected ping pairs to resolve an existing network problem.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Ping Latency Pair Most Changed Reports

This report compares performance of the components for two different (consecutive) time periods and ranks components by the amount of change. The sort order is most-changed to least-changed.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Most Changed**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top N

The Top N list helps you specify the number of data points that you want to see on the report.

To select data points on the report:

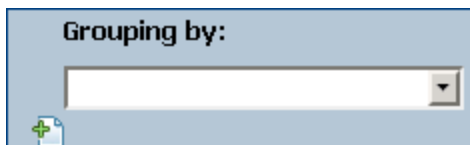


The image shows a dropdown menu titled "Top N" with a light blue header. The selected option is "Top 10".

In the Top N list, select a value of your choice.

Grouping By


To change the Grouping By option:



The image shows a dropdown menu titled "Grouping by:" with a light blue header. The dropdown is currently empty, and there is a small green plus icon in the bottom left corner of the menu area.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric. On the axis, you can select only one metric.

Tip: Click **Show Description** to see the metric definition.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Pair Name
- Metrics:
 - Y1: Interface Utilization(%) (avg)

Ping Latency Pair Peak Period Report

The Peak Period report ranks the utilization and performance of ping latency pairs during the busiest time of the selected time range. This report enables you to:

- Identify the performance and utilization of the selected metrics during the peak period.
- Identify ping latency pairs that have the highest or lowest performances or utilization levels during the peak period.
- Compare the performance for multiple ping latency pairs during the peak period using this report.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Peak Period**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

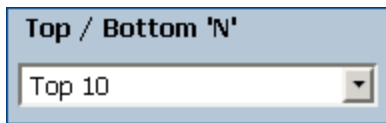
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

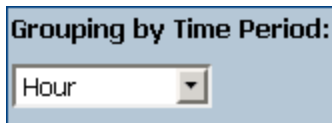
To select data points on the report:



The image shows a blue-bordered dropdown menu titled "Top / Bottom 'N'". The dropdown list is open, showing "Top 10" as the selected option.

In the Top/Bottom N list, select a value of your choice.

Grouping by Time Period:



The image shows a blue-bordered dropdown menu titled "Grouping by Time Period:". The dropdown list is open, showing "Hour" as the selected option.

In the Grouping by Time Period box, select the time period by which you want to group the peak values.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by Time Period: Hour
- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

Ping Latency Pair Top N Report

The Top N report ranks ping latency pairs by the selected metrics. Use this report to spot the ping latency pair that performed at the extremes and to analyze the historical data for ping latency pairs that exhibit unusual utilization levels.

The report enables you to:

- Detect any ping latency pair that is experiencing a health or performance problem.
- Detect over-utilized and under-utilized ping latency pairs on the network.
- Compare the performance of multiple ping latency pairs

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Top N**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

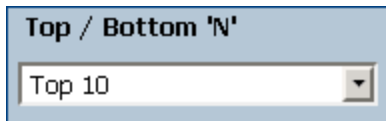
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

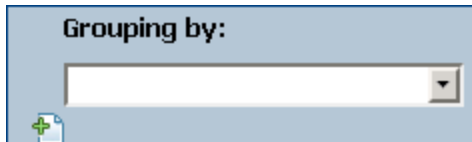
The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

To select data points on the report:




In the Top/Bottom N list, select a value of your choice.

To change the Grouping By option:



In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Pair Name
- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

Tip: Check this report once a day to see which network component might need special attention.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Ping Latency Pair Top N Table Report

This report ranks network elements by the metrics you select. Unlike the Top N report, this report does not show any bar charts or time series graphs and does not show the **others**¹ group. In a large environment, NPS

¹On a Top N report, elements that are not ranked by the report are grouped together and represented by the "others" row.

can generate the Top N Table report faster than it can generate the Top N report. If you want to view Top N elements in the least possible time, choose the Top N Table report instead of the Top N report.

Use this report to spot the element that performed at the extremes and to analyze historical data for elements that are exhibiting unusual utilization levels. You can:

- Detect the QoS entitie that has a health or performance problem.
- Analyze the utilization of the NNMI-managed network QoS entities during a specific time range.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare performance for multiple network ping latency pairs.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Top N Table**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

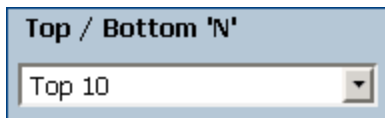
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

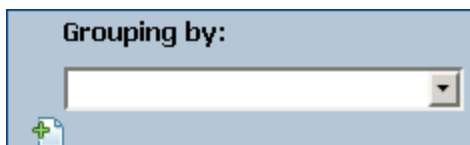
To select data points on the report:



The image shows a dropdown menu titled "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:



The image shows a dropdown menu titled "Grouping by:". The menu is currently empty, and there is a small green plus icon in the bottom left corner of the dropdown area.

In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Pair Name
- Metrics:

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

- Y1: Interface Utilization(%) (avg)
- Y2: RTT Average(ms) (avg)

Tip: Check this report once a day to see which network component might need special attention.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Ping Latency Pair Top N Frequency Distribution Report

The Top N Frequency Distribution report ranks network elements by the metrics you select and shows the distribution of metric values for each collected sample during the selected time range.

You can use this report as an alternative to the Top N report. In addition to providing all the details that are available on the Top N report, this report helps you see how much time the metric value has spent in each **bucket**¹.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Top N Frequency Distribution**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

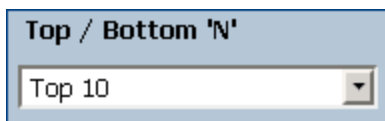
To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

Options

Top/Bottom N:

The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

To select data points on the report:

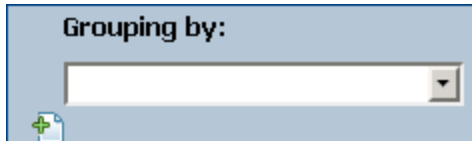


The image shows a dropdown menu with the title "Top / Bottom 'N'". The selected option is "Top 10".

In the Top/Bottom N list, select a value of your choice.


To change the Grouping By option:

¹A bucket represents a range of values. The Top N Frequency Distribution report enables you to define 12 different buckets (or ranges of values) for a metric series—from bucket 0 (Bkt 0) through bucket 11 (Bkt 11). Each bucket is associated with a color code (in-built, not configurable). The generated report represents the distribution of different value ranges with the color codes that are associated with buckets.



In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

1. Right-click the metric.

Tip: You can use the search feature to find the metric of your choice. To search a metric, type the metric name in the Search box.

You can also use **tag**¹s to narrow down your search. To use tags, click inside the Tags box, and then select tags of your choice.

2. In the context menu, click **Send to Y1** if you want to select this metric for the Y1 axis; click **Send to Y2** if you want to select this metric for the Y2 axis. On each axis, you can select up to six metrics.

Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

To remove a metric from an axis:

Right-click the metric on the axis, and then click **Delete**. The metric disappears from the axis.

To change the order of the metric:

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Pair Name
- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

Tip: Check this report once a day to see which network component might need special attention.

Check this report throughout the day to see which network components are performing at the extremes and might need special attention.

Ping Latency Pair Top N Chart Report

This report ranks ping latency pairs by the metrics you select. This report displays the metric values for each rank with the help of a line graph.

Use this report to spot the ping latency pair that performed at the extremes and to analyze historical data for ping latency pairs that are exhibiting unusual utilization levels. You can:

- Detect the QoS entitie that has a health or performance problem.
- Analyze the utilization of the NNMi-managed network QoS entities during a specific time range.
- Detect over-utilized and under-utilized QoS entities on the network.
- Compare performance for multiple network ping latency pairs.

How to Run the Report

To launch the Ping Latency Pair Reports, navigate to **iSPI Quality Assurance > Ping_Latency > Top N Chart**. The section lists the default configuration of the report. You can modify the default settings of the report with the help of the [Time](#), [Topology](#), and [Options](#) menus.

Time

To modify the time settings, click **Time** on the report. The Time Control workspace in the navigation panel opens.

Topology

To filter the report by topology attributes, click **Topology** on the report. Alternatively, click **Topology Filter** in the navigation panel, and then click **Launch Topology Selector**.

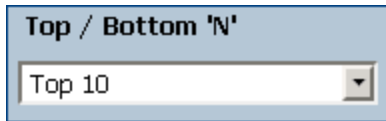
Options

To modify report options, first open the Report Options pane by clicking the **Options** menu on the report.

Top/Bottom N:

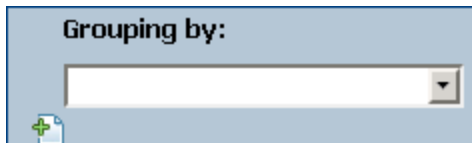
The Top/Bottom N list helps you specify the number of ranks that you want to see on this report.

To select data points on the report:




In the Top/Bottom N list, select a value of your choice.

To change the Grouping By option:



In the Grouping By list, select an attribute to define the grouping mechanism for the tabular data on the report.

To select more than one attribute, click  **Add New Grouping**. A new Grouping By box with the list of attributes appears.

To remove a grouping attribute, click  **Remove Grouping**.

Metrics:

To select a metric:

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Tip: Click **Show Description** to see the metric definition.

You can limit the number of rows on the report by specifying a range of values in the From and To boxes on each axis. After typing a value in the From or To box, you must press **Enter**. For the percentage type of metrics, specify values in decimal fractions. For example, to specify 9%, type 0.09.

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To change the order of the metric:

¹A tag is a keyword that represents an aggregation type or a domain-specific group.

Right-click the metric on the axis, and then click **Move Up** or **Move Down**. The metric changes its position on the axis and, subsequently, changes its position on the report when the report is launched.

Note: Right-clicking a metric on the Y1 or Y2 axis does not bring up any context menus when no other metrics are present on the axis.

Defaults

Time

- Relative start: Yes
- Interval: (Last rolling) 1 hour
- Grain: 5 minutes

Topology

- Topology group tracking method: SCD Type 1
- Filter attribute selection: None

Options

- Top/Bottom N: Top 10
- Grouping by: Pair Name
- Metrics:
 - Y1: Interface Utilization(%) (avg)
 - Y2: RTT Average(ms) (avg)

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Feedback on Online Help for Reports (Network Node Manager iSPI Performance for Quality Assurance Software 10.20)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to network-management-doc-feedback@hpe.com.

We appreciate your feedback!