



Hewlett Packard
Enterprise

HPE NNM iSPI Performance for QA

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Windows® and Linux® operating systems

Dictionary of Metrics

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Metrics Definition and Topology Attributes

This document provides the metrics definition and topology attributes for the following reports:

- [Quality Assurance Reports](#)
- [Ping Latency Reports](#)
- [Class Based QoS Reports](#)

Dictionary for Quality_Assurance

Topology

QATopology	Class Of Service	Pre-assigned class of service values of the discovered QA probes
QATopology	Destination Node	Node on which at least one QA probe runs
QATopology	Destination Node UUID	Universally Unique Identifier of the destination node available in the network
QATopology	Destination Site	Site on which at least one QA probe runs
QATopology	Interface Alias	The Alias value assigned to the interface by the device administrator
QATopology	Interface Name	Name of the interface
QATopology	Interface ODBID	ODBID is a custom attribute that the HP Network Node Manager i Software uses to integrate the NNMi topology with Business Service Management(BSM) software suite. The key value of the selected interface.
QATopology	Interface Speed	The bandwidth of the interface in bits per second (bps) Depending on the device vendor, this value may indicate the current speed or potential speed
QATopology	Interface Type	The physical link protocol type of the interface Possible values used by HP Network Node Manager i Software include Ethernet and frameRelay Note: Interfaces on non-SNMP nodes have an interface type of other
QATopology	Interface UUID	Universally Unique Identifier of the interface
QAMplsTopology	MPLS	Universally Unique Identifier of the MPLS Security Group

	SecGroup UUID	
QATopology	Management Server	Name of the NNMi management server for which you want to view the report
QATopology	Node Name	Name of the node from which at least one QA probe initiates
QATopology	Node ODBID	ODBID is a custom attribute that the HP Network Node Manager i Software uses to integrate the NNMi topology with Business Service Management(BSM) software suite. The key value of the selected node.
QATopology	Node UUID	Universally Unique Identifier of the source node available in the network
QAMetrics	Object Name	Object Name is used by most extensionPacks to identify instrumented object instance.
QAMetrics	Object Type	Object Type is used by most extensionPacks to identify instrumented object type.
QAMplsTopology	QA MPLS UUID	
QATopology	QA Probe Name	QA probe names that the NNM iSPI Performance for QA discovers in the network
QATopology	QA Probe Type	Type of the discovered QA probe
QATopology	QA Probe UUID	
QATopology	Qualified Interface Name	Fully qualified name of the interface
QATopology	SecGroup UUID	Universally Unique Identifier of the security group
QATopology	Source Site	Site from which at least one QA probe initiates
QATopology	Source Tenant	Tenant name of the QA Probe element
QAMplsTopology	VPN Name (MPLS)	Name of the VPN(MPLS)
QAMplsTopology	VRF Name (MPLS)	Name of the VRF(MPLS)
QAMplsTopology	VRF UUID (MPLS)	Universally Unique Identifier of the VRF

Metrics

QAMetrics	Baseline Exception Rate (avg)	Sample Baseline Exception Rate based on any baselined measure. Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.
QAMetrics	Class Of Service (countDistinct)	Pre-assigned class of service values of the discovered QA probes Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Destination Node (countDistinct)	Node on which at least one QA probe runs Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Destination Node UUID (countDistinct)	Universally Unique Identifier of the destination node available in the network Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Destination Site (countDistinct)	Site on which at least one QA probe runs Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Interface Alias (countDistinct)	The Alias value assigned to the interface by the device administrator Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Interface Name (countDistinct)	Name of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Interface ODBID (countDistinct)	ODBID is a custom attribute that the HP Network Node Manager i Software uses to integrate the NNMi topology with Business Service Management(BSM) software suite. The key value of the selected interface. Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Interface Speed (countDistinct)	The bandwidth of the interface in bits per second (bps) Depending on the device vendor, this value may indicate the current speed or potential speed Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Interface Type (countDistinct)	The physical link protocol type of the interface Possible values used by HP Network Node Manager i Software include Ethernet and frameRelay Note: Interfaces on non-SNMP nodes have an interface type of other Count Distinct: A count of the unique, distinct, values for this topology

		element.
QAMetrics	Interface UUID (countDistinct)	Universally Unique Identifier of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Invalid Data (avg)	Generated when the NNMi iSPI Performance for QA has successfully polled data from the target, but has determined that the data is invalid. Average: The total of all the values divided by the number of samples.
QAMetrics	MPLS SecGroup UUID (countDistinct)	Universally Unique Identifier of the MPLS Security Group Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Management Server (countDistinct)	Name of the NNMi management server for which you want to view the report Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Mean Opinion Scores (avg)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Average: The total of all the values divided by the number of samples.
QAMetrics	Mean Opinion Scores (max)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Maximum: The maximum, or largest, value.
QAMetrics	Mean Opinion Scores (min)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Minimum: The minimum, or smallest, value.
QAMetrics	Mean Opinion Scores (pctile05)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Mean Opinion Scores (pctile90)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Mean Opinion Scores (pctile95)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best.

		Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Mean Opinion Scores (pctile99)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Mean Opinion Scores - Baseline Average (avg)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline average: The normal, average value for this metric.
QAMetrics	Mean Opinion Scores - Baseline Deviation (avg)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Deviation: The size of one statistical deviation from the normal, average value. An indication of how widely spread the sampled values are.
QAMetrics	Mean Opinion Scores - Baseline Exception Count (sum)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Exception Count: The number of samples which were in an exception state due to baseline breaches.
QAMetrics	Mean Opinion Scores - Baseline Exception Rate (avg)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.
QAMetrics	Mean Opinion Scores - Days To Threshold (min)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.
QAMetrics	Mean Opinion Scores - Exception (sum)	Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. Number of MOS samples that exceeds the threshold value. Summation: The total of all the values.
QAMetrics	Mean Opinion	Mean Opinion Scores(MOS): Grade of quality of the data sample

	Scores - Exception Rate (avg)	<p>received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$ </p> <p>Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Mean Opinion Scores - Exception Rate (max)	<p>Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$ </p> <p>Maximum: The maximum, or largest, value.</p>
QAMetrics	Mean Opinion Scores - Exception Rate (min)	<p>Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$ </p> <p>Minimum: The minimum, or smallest, value.</p>
QAMetrics	Mean Opinion Scores - Exception Rate (pctile05)	<p>Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$ </p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
QAMetrics	Mean Opinion Scores - Exception Rate (pctile90)	<p>Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$ </p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
QAMetrics	Mean Opinion Scores - Exception	<p>Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and</p>

	Rate (pctile95)	<p>eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
QAMetrics	Mean Opinion Scores - Exception Rate (pctile99)	<p>Mean Opinion Scores(MOS): Grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>The number of samples that exceeds the threshold for the Mean Opinion Scores, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $\frac{\text{Sum of Mean Opinion Scores-Exception}}{\text{Total number of samples}} * 100$</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>
QAMetrics	Mean Opinion Scores - Forecast Baseline (12 week) (avg)	<p>The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>It is expressed in number, 1 being the worst, 5 the best.</p> <p>Forecast Baseline (12): The predicted baseline average value 12 weeks from now.</p>
QAMetrics	Mean Opinion Scores - Forecast Baseline (4 week) (avg)	<p>The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>It is expressed in number, 1 being the worst, 5 the best.</p> <p>Forecast Baseline (4): The predicted baseline average value 4 weeks from now.</p>
QAMetrics	Mean Opinion Scores - Forecast Baseline (8 week) (avg)	<p>The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>It is expressed in number, 1 being the worst, 5 the best.</p> <p>Forecast Baseline (8): The predicted baseline average value 8 weeks from now.</p>
QAMetrics	Mean Opinion Scores - Forecast Lower Normal (12 week) (min)	<p>The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>It is expressed in number, 1 being the worst, 5 the best.</p> <p>Forecast Lower Normal (12): The predicted lower normal value 12 weeks from now.</p>
QAMetrics	Mean Opinion Scores - Forecast Lower Normal (4 week) (min)	<p>The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs.</p> <p>It is expressed in number, 1 being the worst, 5 the best.</p> <p>Forecast Lower Normal (4): The predicted lower normal value 4 weeks</p>

		from now.
QAMetrics	Mean Opinion Scores - Forecast Lower Normal (8 week) (min)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Forecast Lower Normal (8): The predicted lower normal value 8 weeks from now.
QAMetrics	Mean Opinion Scores - Forecast Upper Normal (12 week) (max)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Forecast Upper Normal (12): The predicted upper normal value 12 weeks from now.
QAMetrics	Mean Opinion Scores - Forecast Upper Normal (4 week) (max)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Forecast Upper Normal (4): The predicted upper normal value 4 weeks from now.
QAMetrics	Mean Opinion Scores - Forecast Upper Normal (8 week) (max)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Forecast Upper Normal (8): The predicted upper normal value 8 weeks from now.
QAMetrics	Mean Opinion Scores - Lower Normal (min)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Lower Normal: The lower normal for this metric based upon historical data. An indication of the lowest typical value.
QAMetrics	Mean Opinion Scores - Slope (avg)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Slope: The slope ($\Delta x / \Delta y$) of the baseline values. An indication of how rapidly the value is changing.
QAMetrics	Mean Opinion Scores - Upper Normal (max)	The grade of quality of the data sample received by the destination network element after it is transmitted and eventually compressed using codecs. It is expressed in number, 1 being the worst, 5 the best. Baseline Upper Normal: The upper normal for this metric based upon historical data. An indication of the highest typical value.
QAMetrics	Negative Jitter	Negative Jitter: The inter-packet delay of a data sample is less than the

	Destination to Source (msecs) (avg)	<p>expected delay.</p> <p>The measure of negative jitter value for the data sample from the destination to the source network element, measured in milliseconds.</p> <p>Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Negative Jitter Destination to Source (msecs) (max)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample from the destination to the source network element, measured in milliseconds.</p> <p>Maximum: The maximum, or largest, value.</p>
QAMetrics	Negative Jitter Destination to Source (msecs) (min)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample from the destination to the source network element, measured in milliseconds.</p> <p>Minimum: The minimum, or smallest, value.</p>
QAMetrics	Negative Jitter Destination to Source (msecs) (pctile05)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample from the destination to the source network element, measured in milliseconds.</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
QAMetrics	Negative Jitter Destination to Source (msecs) (pctile90)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample from the destination to the source network element, measured in milliseconds.</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
QAMetrics	Negative Jitter Destination to Source (msecs) (pctile95)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample from the destination to the source network element, measured in milliseconds.</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
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QAMetrics	Negative Jitter Destination to Source (µsecs) (avg)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample to be delivered from the destination network element to the source network element, measured in microseconds.</p> <p>Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Negative Jitter Destination to Source (µsecs) (max)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample to be delivered from the destination network element to the source network element,</p>

		<p>measured in microseconds. Maximum: The maximum, or largest, value.</p>
QAMetrics	Negative Jitter Destination to Source (Âµsecs) (min)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample to be delivered from the destination network element to the source network element, measured in microseconds. Minimum: The minimum, or smallest, value.</p>
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QAMetrics	Negative Jitter Destination to Source (Âµsecs) (pctile90)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample to be delivered from the destination network element to the source network element, measured in microseconds. Percentile (90): The value below which 90% of all the samples fall.</p>
QAMetrics	Negative Jitter Destination to Source (Âµsecs) (pctile95)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample to be delivered from the destination network element to the source network element, measured in microseconds. Percentile (95): The value below which 95% of all the samples fall.</p>
QAMetrics	Negative Jitter Destination to Source (Âµsecs) (pctile99)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample to be delivered from the destination network element to the source network element, measured in microseconds. Percentile (99): The value below which 99% of all the samples fall.</p>
QAMetrics	Negative Jitter Destination to Source - Exception (sum)	<p>The number of samples that exceed the threshold for the destination-to-source negative jitter. Summation: The total of all the values.</p>
QAMetrics	Negative Jitter Destination to Source - Exception Rate (avg)	<p>The number of samples that exceed the threshold for the destination-to-source negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Negative Jitter Destination to Source-Exception / Total number of samples) * 100 Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Negative Jitter	<p>The number of samples that exceed the threshold for the destination-to-</p>

	Destination to Source - Exception Rate (max)	<p>source negative jitter, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $(\text{Sum of Negative Jitter Destination to Source-Exception} / \text{Total number of samples}) * 100$</p> <p>Maximum: The maximum, or largest, value.</p>
QAMetrics	Negative Jitter Destination to Source - Exception Rate (min)	<p>The number of samples that exceed the threshold for the destination-to-source negative jitter, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: $(\text{Sum of Negative Jitter Destination to Source-Exception} / \text{Total number of samples}) * 100$</p> <p>Minimum: The minimum, or smallest, value.</p>
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QAMetrics	Negative Jitter Source to Destination (msecs) (avg)	<p>Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.</p> <p>The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds.</p>

		Average: The total of all the values divided by the number of samples.
QAMetrics	Negative Jitter Source to Destination (msecs) (max)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Negative Jitter Source to Destination (msecs) (min)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Negative Jitter Source to Destination (msecs) (pctile05)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (msecs) (pctile90)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (msecs) (pctile95)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (msecs) (pctile99)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (Âµsecs) (avg)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Negative Jitter Source to Destination (Âµsecs) (max)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Maximum: The maximum, or largest, value.
QAMetrics	Negative Jitter Source to	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay.

	Destination (Âµsecs) (min)	The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Negative Jitter Source to Destination (Âµsecs) (pctile05)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (Âµsecs) (pctile90)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (Âµsecs) (pctile95)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination (Âµsecs) (pctile99)	Negative Jitter: The inter-packet delay of a data sample is less than the expected delay. The measure of negative jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination - Exception (sum)	The number of samples that exceed the threshold for the source-to-destination negative jitter. Summation: The total of all the values.
QAMetrics	Negative Jitter Source to Destination - Exception Rate (avg)	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Negative Jitter Source to Destination-Exception} / \text{Total number of samples}) * 100$ Average: The total of all the values divided by the number of samples.
QAMetrics	Negative Jitter Source to Destination - Exception Rate (max)	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Negative Jitter Source to Destination-Exception} / \text{Total number of samples}) * 100$ Maximum: The maximum, or largest, value.
QAMetrics	Negative Jitter Source to Destination -	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples.

	Exception Rate (min)	It is calculated using the following formula: (Sum of Negative Jitter Source to Destination-Exception / Total number of samples) * 100 Minimum: The minimum, or smallest, value.
QAMetrics	Negative Jitter Source to Destination - Exception Rate (pctile05)	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Negative Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination - Exception Rate (pctile90)	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Negative Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination - Exception Rate (pctile95)	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Negative Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Negative Jitter Source to Destination - Exception Rate (pctile99)	The number of samples that exceed the threshold for the source-to-destination negative jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Negative Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Node Name (countDistinct)	Name of the node from which at least one QA probe initiates Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Node ODBID (countDistinct)	ODBID is a custom attribute that the HP Network Node Manager i Software uses to integrate the NNMi topology with Business Service Management(BSM) software suite. The key value of the selected node. Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Node UUID (countDistinct)	Universally Unique Identifier of the source node available in the network Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Object Name	Object Name is used by most extensionPacks to identify instrumented

	(countDistinct)	object instance. Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Object Type (countDistinct)	Object Type is used by most extensionPacks to identify instrumented object type. Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Overall Days To Threshold (min)	Lowest Days To Threshold for any forecasted measure. Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.
QAMetrics	Overall Exception Rate (avg)	Sample Exception Rate based on any thresholded or baselined measure. Threshold Exception Rate: The number of samples which were in an exception state for threshold breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond threshold ranges.
QAMetrics	Packet Loss Destination to Source (%) (avg)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Average: The total of all the values divided by the number of samples.
QAMetrics	Packet Loss Destination to Source (%) (max)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Maximum: The maximum, or largest, value.
QAMetrics	Packet Loss Destination to Source (%) (min)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Minimum: The minimum, or smallest, value.
QAMetrics	Packet Loss Destination to Source (%) (pctile05)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Packet Loss Destination to Source (%) (pctile90)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Packet Loss Destination to Source (%) (pctile95)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Packet Loss Destination to Source (%) (pctile99)	Percentage of packet loss when a data sample travels from the destination network element to the source network element. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Packet Loss	Number of times the destination-to-source packet loss percentage for

	Destination to Source - Exception (sum)	the selected network element crossed the threshold value. Summation: The total of all the values.
QAMetrics	Packet Loss Destination to Source - Exception Rate (avg)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Packet Loss Destination to Source-Exception} / \text{Total number of samples}) * 100$ Average: The total of all the values divided by the number of samples.
QAMetrics	Packet Loss Destination to Source - Exception Rate (max)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Packet Loss Destination to Source-Exception} / \text{Total number of samples}) * 100$ Maximum: The maximum, or largest, value.
QAMetrics	Packet Loss Destination to Source - Exception Rate (min)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Packet Loss Destination to Source-Exception} / \text{Total number of samples}) * 100$ Minimum: The minimum, or smallest, value.
QAMetrics	Packet Loss Destination to Source - Exception Rate (pctile05)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Packet Loss Destination to Source-Exception} / \text{Total number of samples}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Packet Loss Destination to Source - Exception Rate (pctile90)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Packet Loss Destination to Source-Exception} / \text{Total number of samples}) * 100$ Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Packet Loss Destination to Source - Exception Rate (pctile95)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Packet Loss Destination to Source-Exception} / \text{Total number of samples}) * 100$ Percentile (95): The value below which 95% of all the samples fall.

QAMetrics	Packet Loss Destination to Source - Exception Rate (pctile99)	The number of samples that exceed the threshold for the destination-to-source packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Packet Loss Destination to Source-Exception / Total number of samples) * 100 Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Packet Loss Source to Destination (%) (avg)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Average: The total of all the values divided by the number of samples.
QAMetrics	Packet Loss Source to Destination (%) (max)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Maximum: The maximum, or largest, value.
QAMetrics	Packet Loss Source to Destination (%) (min)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Minimum: The minimum, or smallest, value.
QAMetrics	Packet Loss Source to Destination (%) (pctile05)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Packet Loss Source to Destination (%) (pctile90)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Packet Loss Source to Destination (%) (pctile95)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Packet Loss Source to Destination (%) (pctile99)	Percentage of packet loss when a data sample travels from the source network element to the destination network element. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Packet Loss Source to Destination - Exception (sum)	Number of times the source-to-destination packet loss percentage for the selected network element crossed the threshold value Summation: The total of all the values.
QAMetrics	Packet Loss Source to Destination - Exception Rate	The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula:

	(avg)	<p>(Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Packet Loss Source to Destination - Exception Rate (max)	<p>The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Maximum: The maximum, or largest, value.</p>
QAMetrics	Packet Loss Source to Destination - Exception Rate (min)	<p>The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Minimum: The minimum, or smallest, value.</p>
QAMetrics	Packet Loss Source to Destination - Exception Rate (pctile05)	<p>The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
QAMetrics	Packet Loss Source to Destination - Exception Rate (pctile90)	<p>The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
QAMetrics	Packet Loss Source to Destination - Exception Rate (pctile95)	<p>The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
QAMetrics	Packet Loss Source to Destination - Exception Rate (pctile99)	<p>The number of samples that exceed the threshold for the source-to-destination packet loss, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Packet Loss Source to Destination-Exception / Total number of samples) * 100</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>

QAMetrics	Period Length (secs) (sum)	The duration between two consecutive polling cycles of the NNM iSPI Performance for QA, measured in seconds. Summation: The total of all the values.
QAMetrics	Positive Jitter Destination to Source (msecs) (avg)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Positive Jitter Destination to Source (msecs) (max)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Positive Jitter Destination to Source (msecs) (min)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Positive Jitter Destination to Source (msecs) (pctile05)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (msecs) (pctile90)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (msecs) (pctile95)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (msecs) (pctile99)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (\hat{A} μ secs) (avg)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Average: The total of all the values divided by the number of samples.

QAMetrics	Positive Jitter Destination to Source (µsecs) (max)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Maximum: The maximum, or largest, value.
QAMetrics	Positive Jitter Destination to Source (µsecs) (min)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Positive Jitter Destination to Source (µsecs) (pctile05)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (µsecs) (pctile90)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (µsecs) (pctile95)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source (µsecs) (pctile99)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the destination to the source network element, measured in microseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source - Exception (sum)	The number of samples that exceed the threshold for the destination-to-source positive jitter. Summation: The total of all the values.
QAMetrics	Positive Jitter Destination to Source - Exception Rate (avg)	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Average: The total of all the values divided by the number of samples.
QAMetrics	Positive Jitter Destination to Source - Exception	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples.

	Rate (max)	It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Maximum: The maximum, or largest, value.
QAMetrics	Positive Jitter Destination to Source - Exception Rate (min)	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Minimum: The minimum, or smallest, value.
QAMetrics	Positive Jitter Destination to Source - Exception Rate (pctile05)	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source - Exception Rate (pctile90)	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source - Exception Rate (pctile95)	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Positive Jitter Destination to Source - Exception Rate (pctile99)	The number of samples that exceed the threshold for the destination-to-source positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Destination to Source-Exception / Total number of samples) * 100 Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (msecs) (avg)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Average: The total of all the values divided by the number of samples.

QAMetrics	Positive Jitter Source to Destination (msecs) (max)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Positive Jitter Source to Destination (msecs) (min)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Positive Jitter Source to Destination (msecs) (pctile05)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (msecs) (pctile90)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (msecs) (pctile95)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (msecs) (pctile99)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (avg)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (max)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds. Maximum: The maximum, or largest, value.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (min)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds.

		Minimum: The minimum, or smallest, value.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (pctile05)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (pctile90)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (pctile95)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination (Âµsecs) (pctile99)	Positive Jitter: The inter-packet delay of a data sample is more than the expected delay. The measure of positive jitter value for the data sample from the source to the destination network element, measured in microseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination - Exception (sum)	The number of samples that exceed the threshold for the source-to-destination positive jitter. Summation: The total of all the values.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (avg)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Positive Jitter Source to Destination-Exception} / \text{Total number of samples}) * 100$ Average: The total of all the values divided by the number of samples.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (max)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Positive Jitter Source to Destination-Exception} / \text{Total number of samples}) * 100$ Maximum: The maximum, or largest, value.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (min)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Positive Jitter Source to Destination-Exception} / \text{Total number$

		of samples) * 100 Minimum: The minimum, or smallest, value.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (pctile05)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (pctile90)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (pctile95)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Positive Jitter Source to Destination - Exception Rate (pctile99)	The number of samples that exceed the threshold for the source-to-destination positive jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Positive Jitter Source to Destination-Exception / Total number of samples) * 100 Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	QA MPLS UUID (countDistinct)	Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	QA Probe Name (countDistinct)	QA probe names that the NNM iSPI Performance for QA discovers in the network Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	QA Probe Type (countDistinct)	Type of the discovered QA probe Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	QA Probe UUID (countDistinct)	Count Distinct: A count of the unique, distinct, values for this topology element.

QAMetrics	Qualified Interface Name (countDistinct)	Fully qualified name of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Reachability (avg)	Measures the physical connectivity between the two network elements. Average: The total of all the values divided by the number of samples.
QAMetrics	Reachability (max)	Measures the physical connectivity between the two network elements. Maximum: The maximum, or largest, value.
QAMetrics	Reachability (min)	Measures the physical connectivity between the two network elements. Minimum: The minimum, or smallest, value.
QAMetrics	Reachability (pctile05)	Measures the physical connectivity between the two network elements. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Reachability (pctile90)	Measures the physical connectivity between the two network elements. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Reachability (pctile95)	Measures the physical connectivity between the two network elements. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Reachability (pctile99)	Measures the physical connectivity between the two network elements. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Reboot (avg)	Generated when the target component was restarted during the poll and no data could be retrieved from the component. NNMi checks the sysUptime metric to determine whether the component was restarted during the last poll. Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time (msecs) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time (msecs) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Round Trip Time (msecs) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Round Trip Time (msecs) (pctile05)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Round Trip Time (msecs) (pctile90)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Round Trip Time (msecs) (pctile95)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.

QAMetrics	Round Trip Time (msecs) (pctile99)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Round Trip Time (msecs) - Baseline Average (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline average: The normal, average value for this metric.
QAMetrics	Round Trip Time (msecs) - Baseline Deviation (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Deviation: The size of one statistical deviation from the normal, average value. An indication of how widely spread the sampled values are.
QAMetrics	Round Trip Time (msecs) - Baseline Exception Count (sum)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Exception Count: The number of samples which were in an exception state due to baseline breaches.
QAMetrics	Round Trip Time (msecs) - Baseline Exception Rate (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.
QAMetrics	Round Trip Time (msecs) - Days To Threshold (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.
QAMetrics	Round Trip Time (msecs) - Forecast Baseline (12 week) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Baseline (12): The predicted baseline average value 12 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Baseline (4 week) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Baseline (4): The predicted baseline average value 4 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Baseline (8 week) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Baseline (8): The predicted baseline average value 8 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Lower Normal (12 week) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Lower Normal (12): The predicted lower normal value 12 weeks from now.
QAMetrics	Round Trip Time	The time taken by the data sample to travel between the selected

	(msecs) - Forecast Lower Normal (4 week) (min)	source and destination network elements, measured in milliseconds. Forecast Lower Normal (4): The predicted lower normal value 4 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Lower Normal (8 week) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Lower Normal (8): The predicted lower normal value 8 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Upper Normal (12 week) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Upper Normal (12): The predicted upper normal value 12 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Upper Normal (4 week) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Upper Normal (4): The predicted upper normal value 4 weeks from now.
QAMetrics	Round Trip Time (msecs) - Forecast Upper Normal (8 week) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Forecast Upper Normal (8): The predicted upper normal value 8 weeks from now.
QAMetrics	Round Trip Time (msecs) - Lower Normal (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Lower Normal: The lower normal for this metric based upon historical data. An indication of the lowest typical value.
QAMetrics	Round Trip Time (msecs) - Slope (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Slope: The slope (Δ_x / Δ_y) of the baseline values. An indication of how rapidly the value is changing.
QAMetrics	Round Trip Time (msecs) - Upper Normal (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in milliseconds. Baseline Upper Normal: The upper normal for this metric based upon historical data. An indication of the highest typical value.
QAMetrics	Round Trip Time ($\hat{\text{A}}\mu\text{secs}$) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time ($\hat{\text{A}}\mu\text{secs}$) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Maximum: The maximum, or largest, value.
QAMetrics	Round Trip Time ($\hat{\text{A}}\mu\text{secs}$) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Round Trip Time ($\hat{\text{A}}\mu\text{secs}$) (pctile05)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds.

		Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Round Trip Time (Âµsecs) (pctile90)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Round Trip Time (Âµsecs) (pctile95)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Round Trip Time (Âµsecs) (pctile99)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Round Trip Time (Âµsecs) - Baseline Average (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline average: The normal, average value for this metric.
QAMetrics	Round Trip Time (Âµsecs) - Baseline Deviation (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline Deviation: The size of one statistical deviation from the normal, average value. An indication of how widely spread the sampled values are.
QAMetrics	Round Trip Time (Âµsecs) - Baseline Exception Count (sum)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline Exception Count: The number of samples which were in an exception state due to baseline breaches.
QAMetrics	Round Trip Time (Âµsecs) - Baseline Exception Rate (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.
QAMetrics	Round Trip Time (Âµsecs) - Days To Threshold (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.
QAMetrics	Round Trip Time (Âµsecs) - Forecast Baseline (12 week) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Baseline (12): The predicted baseline average value 12 weeks from now.
QAMetrics	Round Trip Time (Âµsecs) - Forecast Baseline (4 week) (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Baseline (4): The predicted baseline average value 4 weeks from now.
QAMetrics	Round Trip Time	The time taken by the data sample to travel between the selected

	($\hat{\mu}$ secs) - Forecast Baseline (8 week) (avg)	source and destination network elements, measured in microseconds. Forecast Baseline (8): The predicted baseline average value 8 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Forecast Lower Normal (12 week) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Lower Normal (12): The predicted lower normal value 12 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Forecast Lower Normal (4 week) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Lower Normal (4): The predicted lower normal value 4 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Forecast Lower Normal (8 week) (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Lower Normal (8): The predicted lower normal value 8 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Forecast Upper Normal (12 week) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Upper Normal (12): The predicted upper normal value 12 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Forecast Upper Normal (4 week) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Upper Normal (4): The predicted upper normal value 4 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Forecast Upper Normal (8 week) (max)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Forecast Upper Normal (8): The predicted upper normal value 8 weeks from now.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Lower Normal (min)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline Lower Normal: The lower normal for this metric based upon historical data. An indication of the lowest typical value.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Slope (avg)	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds. Baseline Slope: The slope (Δ_x / Δ_y) of the baseline values. An indication of how rapidly the value is changing.
QAMetrics	Round Trip Time ($\hat{\mu}$ secs) - Upper	The time taken by the data sample to travel between the selected source and destination network elements, measured in microseconds.

	Normal (max)	Baseline Upper Normal: The upper normal for this metric based upon historical data. An indication of the highest typical value.
QAMetrics	Round Trip Time - Connection (msecs) (avg)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time - Connection (msecs) (max)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Round Trip Time - Connection (msecs) (min)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Round Trip Time - Connection (msecs) (pctile05)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Round Trip Time - Connection (msecs) (pctile90)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Round Trip Time - Connection (msecs) (pctile95)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Round Trip Time - Connection (msecs) (pctile99)	For HTTP/HTTPS probes, the time taken by the source network element to establish a connection with the destination network element, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Round Trip Time - DNS (msecs) (avg)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time - DNS (msecs) (max)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Round Trip Time - DNS (msecs) (min)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Minimum: The minimum, or smallest, value.

QAMetrics	Round Trip Time - DNS (msecs) (pctile05)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Round Trip Time - DNS (msecs) (pctile90)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Round Trip Time - DNS (msecs) (pctile95)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Round Trip Time - DNS (msecs) (pctile99)	For HTTP/HTTPS probes, the time taken by the source network element to resolve the hostname of the destination network element, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Round Trip Time - Exception (sum)	The number of samples that exceed the round-trip time threshold for the selected network element. Summation: The total of all the values.
QAMetrics	Round Trip Time - Exception Rate (avg)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$ Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time - Exception Rate (max)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$ Maximum: The maximum, or largest, value.
QAMetrics	Round Trip Time - Exception Rate (min)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$ Minimum: The minimum, or smallest, value.
QAMetrics	Round Trip Time - Exception Rate (pctile05)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Round Trip Time - Exception Rate (pctile90)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$

		Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Round Trip Time - Exception Rate (pctile95)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$ Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Round Trip Time - Exception Rate (pctile99)	The number of samples that exceed the threshold for the round-trip time, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Round Trip Time-Exception} / \text{Total number of samples}) * 100$ Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Round Trip Time - Operation (msecs) (avg)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get the response back to the source network element, measured in milliseconds. Average: The total of all the values divided by the number of samples.
QAMetrics	Round Trip Time - Operation (msecs) (max)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get the response back to the source network element, measured in milliseconds. Maximum: The maximum, or largest, value.
QAMetrics	Round Trip Time - Operation (msecs) (min)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get the response back to the source network element, measured in milliseconds. Minimum: The minimum, or smallest, value.
QAMetrics	Round Trip Time - Operation (msecs) (pctile05)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get the response back to the source network element, measured in milliseconds. Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Round Trip Time - Operation (msecs) (pctile90)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get the response back to the source network element, measured in milliseconds. Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Round Trip Time - Operation (msecs) (pctile95)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get the response back to the source network element, measured in milliseconds. Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Round Trip Time - Operation (msecs)	For HTTP/HTTPS probes, the time taken by the source network element to send a request to the destination network element and get

	(pctile99)	the response back to the source network element, measured in milliseconds. Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Sample Count (sum)	Sample Count: The total number of collected samples.
QAMetrics	SecGroup UUID (countDistinct)	Universally Unique Identifier of the security group Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Source Site (countDistinct)	Site from which at least one QA probe initiates Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Source Tenant (countDistinct)	Tenant name of the QA Probe element Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	Target Error (avg)	Generated when the target component returns any of the following SNMP error responses: * Authentication Error * No such name * No such object Average: The total of all the values divided by the number of samples.
QAMetrics	Two Way Jitter (msecs) (avg)	The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds. It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4 Average: The total of all the values divided by the number of samples.
QAMetrics	Two Way Jitter (msecs) (max)	The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds. It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4 Maximum: The maximum, or largest, value.
QAMetrics	Two Way Jitter (msecs) (min)	The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds. It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4 Minimum: The minimum, or smallest, value.

QAMetrics	Two Way Jitter (msecs) (pctile05)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
QAMetrics	Two Way Jitter (msecs) (pctile90)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
QAMetrics	Two Way Jitter (msecs) (pctile95)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
QAMetrics	Two Way Jitter (msecs) (pctile99)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>
QAMetrics	Two Way Jitter (msecs) - Baseline Average (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Baseline average: The normal, average value for this metric.</p>
QAMetrics	Two Way Jitter (msecs) - Baseline Deviation (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p>

		<p>Destination to Source) / 4</p> <p>Baseline Deviation: The size of one statistical deviation from the normal, average value. An indication of how widely spread the sampled values are.</p>
QAMetrics	Two Way Jitter (msecs) - Baseline Exception Count (sum)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Exception Count: The number of samples which were in an exception state due to baseline breaches.</p>
QAMetrics	Two Way Jitter (msecs) - Baseline Exception Rate (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.</p>
QAMetrics	Two Way Jitter (msecs) - Days To Threshold (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Baseline (12 week) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Baseline (12): The predicted baseline average value 12 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Baseline (4 week) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula:</p>

		<p>(Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Baseline (4): The predicted baseline average value 4 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Baseline (8 week) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Baseline (8): The predicted baseline average value 8 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Lower Normal (12 week) (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Lower Normal (12): The predicted lower normal value 12 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Lower Normal (4 week) (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Lower Normal (4): The predicted lower normal value 4 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Lower Normal (8 week) (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Lower Normal (8): The predicted lower normal value 8 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Upper Normal (12 week) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to</p>

		<p>Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Upper Normal (12): The predicted upper normal value 12 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Upper Normal (4 week) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Upper Normal (4): The predicted upper normal value 4 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Forecast Upper Normal (8 week) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Upper Normal (8): The predicted upper normal value 8 weeks from now.</p>
QAMetrics	Two Way Jitter (msecs) - Lower Normal (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Lower Normal: The lower normal for this metric based upon historical data. An indication of the lowest typical value.</p>
QAMetrics	Two Way Jitter (msecs) - Slope (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Slope: The slope (delta_x / delta_y) of the baseline values. An indication of how rapidly the value is changing.</p>
QAMetrics	Two Way Jitter (msecs) - Upper Normal (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in milliseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p>

		<p>Destination to Source) / 4</p> <p>Baseline Upper Normal: The upper normal for this metric based upon historical data. An indication of the highest typical value.</p>
QAMetrics	Two Way Jitter (Âµsecs) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Two Way Jitter (Âµsecs) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Maximum: The maximum, or largest, value.</p>
QAMetrics	Two Way Jitter (Âµsecs) (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Minimum: The minimum, or smallest, value.</p>
QAMetrics	Two Way Jitter (Âµsecs) (pctile05)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
QAMetrics	Two Way Jitter (Âµsecs) (pctile90)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
QAMetrics	Two Way Jitter (Âµsecs) (pctile95)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to</p>

		<p>the source network element, measured in microseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
QAMetrics	Two Way Jitter (Âµsecs) (pctile99)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Baseline Average (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Baseline average: The normal, average value for this metric.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Baseline Deviation (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Baseline Deviation: The size of one statistical deviation from the normal, average value. An indication of how widely spread the sampled values are.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Baseline Exception Count (sum)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p> <p>Baseline Exception Count: The number of samples which were in an exception state due to baseline breaches.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Baseline Exception Rate (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: $(\text{Positive Jitter Source to Destination} + \text{Negative Jitter Source to Destination} + \text{Positive Jitter Destination to Source} + \text{Negative Jitter Destination to Source}) / 4$</p>

		<p>Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Days To Threshold (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Baseline (12 week) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Baseline (12): The predicted baseline average value 12 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Baseline (4 week) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Baseline (4): The predicted baseline average value 4 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Baseline (8 week) (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Baseline (8): The predicted baseline average value 8 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Lower Normal (12 week)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula:</p>

	(min)	<p>(Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Lower Normal (12): The predicted lower normal value 12 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Lower Normal (4 week) (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Lower Normal (4): The predicted lower normal value 4 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Lower Normal (8 week) (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Lower Normal (8): The predicted lower normal value 8 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Upper Normal (12 week) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Upper Normal (12): The predicted upper normal value 12 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Upper Normal (4 week) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Upper Normal (4): The predicted upper normal value 4 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Forecast Upper Normal (8 week) (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to</p>

		<p>Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Forecast Upper Normal (8): The predicted upper normal value 8 weeks from now.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Lower Normal (min)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Lower Normal: The lower normal for this metric based upon historical data. An indication of the lowest typical value.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Slope (avg)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Slope: The slope (delta_x / delta_y) of the baseline values. An indication of how rapidly the value is changing.</p>
QAMetrics	Two Way Jitter (Âµsecs) - Upper Normal (max)	<p>The average Jitter value of the data sample that travels from the source network element to the destination network element and then back to the source network element, measured in microseconds.</p> <p>It is calculated using the formula: (Positive Jitter Source to Destination + Negative Jitter Source to Destination + Positive Jitter Destination to Source + Negative Jitter Destination to Source) / 4</p> <p>Baseline Upper Normal: The upper normal for this metric based upon historical data. An indication of the highest typical value.</p>
QAMetrics	Two Way Jitter - Exception (sum)	<p>The number of samples that exceed the two-way jitter threshold for the selected network element.</p> <p>Summation: The total of all the values.</p>
QAMetrics	Two Way Jitter - Exception Rate (avg)	<p>The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Two Way Jitter-Exception / Total number of samples) * 100</p> <p>Average: The total of all the values divided by the number of samples.</p>
QAMetrics	Two Way Jitter - Exception Rate (max)	<p>The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples.</p> <p>It is calculated using the following formula: (Sum of Two Way Jitter-Exception / Total number of samples) * 100</p> <p>Maximum: The maximum, or largest, value.</p>

QAMetrics	Two Way Jitter - Exception Rate (min)	The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Two Way Jitter-Exception} / \text{Total number of samples}) * 100$ Minimum: The minimum, or smallest, value.
QAMetrics	Two Way Jitter - Exception Rate (pctile05)	The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Two Way Jitter-Exception} / \text{Total number of samples}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Two Way Jitter - Exception Rate (pctile90)	The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Two Way Jitter-Exception} / \text{Total number of samples}) * 100$ Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Two Way Jitter - Exception Rate (pctile95)	The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Two Way Jitter-Exception} / \text{Total number of samples}) * 100$ Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Two Way Jitter - Exception Rate (pctile99)	The number of samples that exceed the threshold for the two-way jitter, expressed as a percentage of the total number of samples. It is calculated using the following formula: $(\text{Sum of Two Way Jitter-Exception} / \text{Total number of samples}) * 100$ Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Two Way Packet Loss (%) (avg)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Average: The total of all the values divided by the number of samples.
QAMetrics	Two Way Packet Loss (%) (max)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Maximum: The maximum, or largest, value.
QAMetrics	Two Way Packet Loss (%) (min)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$

		Minimum: The minimum, or smallest, value.
QAMetrics	Two Way Packet Loss (%) (pctile05)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Two Way Packet Loss (%) (pctile90)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Two Way Packet Loss (%) (pctile95)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Two Way Packet Loss (%) (pctile99)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Two Way Packet Loss (%) - Baseline Average (avg)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Baseline average: The normal, average value for this metric.
QAMetrics	Two Way Packet Loss (%) - Baseline Deviation (avg)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Baseline Deviation: The size of one statistical deviation from the normal, average value. An indication of how widely spread the sampled values are.

QAMetrics	Two Way Packet Loss (%) - Baseline Exception Count (sum)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element.</p> <p>It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$</p> <p>Baseline Exception Count: The number of samples which were in an exception state due to baseline breaches.</p>
QAMetrics	Two Way Packet Loss (%) - Baseline Exception Rate (avg)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element.</p> <p>It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$</p> <p>Baseline Exception Rate: The number of samples which were in an exception state for baseline breaches, expressed as a percentage of the total number of samples. An indication of how frequently the value goes beyond the normal range.</p>
QAMetrics	Two Way Packet Loss (%) - Days To Threshold (min)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element.</p> <p>It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$</p> <p>Baseline Days To Threshold: The number of days before the normal, average value reaches the threshold.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Baseline (12 week) (avg)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element.</p> <p>It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$</p> <p>Forecast Baseline (12): The predicted baseline average value 12 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Baseline (4 week) (avg)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element.</p> <p>It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$</p> <p>Forecast Baseline (4): The predicted baseline average value 4 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Baseline (8 week) (avg)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element.</p> <p>It is calculated using the formula:</p>

		<p>$(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Forecast Baseline (8): The predicted baseline average value 8 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Lower Normal (12 week) (min)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Forecast Lower Normal (12): The predicted lower normal value 12 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Lower Normal (4 week) (min)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Forecast Lower Normal (4): The predicted lower normal value 4 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Lower Normal (8 week) (min)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Forecast Lower Normal (8): The predicted lower normal value 8 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Upper Normal (12 week) (max)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Forecast Upper Normal (12): The predicted upper normal value 12 weeks from now.</p>
QAMetrics	Two Way Packet Loss (%) - Forecast Upper Normal (4 week) (max)	<p>The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: $(\text{Packet Loss Source to Destination} + \text{Packet Loss Destination to Source}) / 2$ Forecast Upper Normal (4): The predicted upper normal value 4 weeks from now.</p>
QAMetrics	Two Way Packet	<p>The average percentage of packet loss when a data sample travels from</p>

	Loss (%) - Forecast Upper Normal (8 week) (max)	the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: (Packet Loss Source to Destination + Packet Loss Destination to Source) / 2 Forecast Upper Normal (8): The predicted upper normal value 8 weeks from now.
QAMetrics	Two Way Packet Loss (%) - Lower Normal (min)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: (Packet Loss Source to Destination + Packet Loss Destination to Source) / 2 Baseline Lower Normal: The lower normal for this metric based upon historical data. An indication of the lowest typical value.
QAMetrics	Two Way Packet Loss (%) - Slope (avg)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: (Packet Loss Source to Destination + Packet Loss Destination to Source) / 2 Baseline Slope: The slope (delta_x / delta_y) of the baseline values. An indication of how rapidly the value is changing.
QAMetrics	Two Way Packet Loss (%) - Upper Normal (max)	The average percentage of packet loss when a data sample travels from the source network element to the destination network element, and then back to the source network element. It is calculated using the formula: (Packet Loss Source to Destination + Packet Loss Destination to Source) / 2 Baseline Upper Normal: The upper normal for this metric based upon historical data. An indication of the highest typical value.
QAMetrics	Two Way Packet Loss - Exception (sum)	The number of samples that exceed the threshold for the two-way packet loss for the selected network element. Summation: The total of all the values.
QAMetrics	Two Way Packet Loss - Exception Rate (avg)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Two Way Packet Loss-Exception / Total number of samples) * 100 Average: The total of all the values divided by the number of samples.
QAMetrics	Two Way Packet Loss - Exception Rate (max)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: (Sum of Two Way Packet Loss-Exception / Total number of samples) * 100

		Maximum: The maximum, or largest, value.
QAMetrics	Two Way Packet Loss - Exception Rate (min)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $\left(\frac{\text{Sum of Two Way Packet Loss-Exception}}{\text{Total number of samples}} \right) * 100$ Minimum: The minimum, or smallest, value.
QAMetrics	Two Way Packet Loss - Exception Rate (pctile05)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $\left(\frac{\text{Sum of Two Way Packet Loss-Exception}}{\text{Total number of samples}} \right) * 100$ Percentile (05): The value below which 5% of all the samples fall.
QAMetrics	Two Way Packet Loss - Exception Rate (pctile90)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $\left(\frac{\text{Sum of Two Way Packet Loss-Exception}}{\text{Total number of samples}} \right) * 100$ Percentile (90): The value below which 90% of all the samples fall.
QAMetrics	Two Way Packet Loss - Exception Rate (pctile95)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $\left(\frac{\text{Sum of Two Way Packet Loss-Exception}}{\text{Total number of samples}} \right) * 100$ Percentile (95): The value below which 95% of all the samples fall.
QAMetrics	Two Way Packet Loss - Exception Rate (pctile99)	The number of samples that exceed the threshold for the two-way packet loss, expressed as a percentage of the total number of samples. It is calculated using the following formula: $\left(\frac{\text{Sum of Two Way Packet Loss-Exception}}{\text{Total number of samples}} \right) * 100$ Percentile (99): The value below which 99% of all the samples fall.
QAMetrics	Unresponsive Target (avg)	Generated when the SNMP agent did not respond when collecting metrics for a particular polling policy. Average: The total of all the values divided by the number of samples.
QAMetrics	VPN Name(MPLS) (countDistinct)	Name of the VPN(MPLS) Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	VRF Name(MPLS) (countDistinct)	Name of the VRF(MPLS) Count Distinct: A count of the unique, distinct, values for this topology element.
QAMetrics	VRF UUID(MPLS) (countDistinct)	Universally Unique Identifier of the VRF Count Distinct: A count of the unique, distinct, values for this topology element.

Dictionary for Ping_Latency

Topology

PingLatencyTopology	Destination IP Address	IP address of the ping pair destination node
PingLatencyTopology	Destination Interface Name	Name of the ping pair destination interface
PingLatencyTopology	Destination Interface Type	Physical link protocol type of the destination interface
PingLatencyTopology	Destination Interface UUID	Universally Unique Identifier of the ping pair destination interface
PingLatencyTopology	Destination Node Name	Name of the ping pair destination node
PingLatencyTopology	Destination Node UUID	Universally Unique Identifier of the ping pair destination node
PingLatencyTopology	Interface Name	Name of the interface
PingLatencyTopology	Interface Type	The physical link protocol type of the interface Possible values used by HP Network Node Manager i Software include Ethernet and frameRelay. Note: Interfaces on non-SNMP nodes have an interface type of other.
PingLatencyTopology	Interface UUID	Universally Unique Identifier of the interface
PingLatencyTopology	Management Server	Name of the NNMi management server
PingLatencyTopology	Node Name	Name of the source node of the ping pair
PingLatencyTopology	Node UUID	Universally Unique Identifier of the source node
PingPairMetrics	Object Name	Object Name is used by most extensionPacks to identify instrumented object instance.
PingPairMetrics	Object Type	Object Type is used by most extensionPacks to identify instrumented object type.
PingLatencyTopology	Pair Name	Ping Latency pair name with associated source and destination endpoints
PingLatencyTopology	Pair UUID	
PingLatencyTopology	Proxy IP	Proxy IP address of the ping pair source node

	Address	
PingLatencyTopology	Proxy Interface Name	Proxy interface name of the ping pair source node
PingLatencyTopology	Proxy Node Name	Proxy name of the ping pair source node
PingLatencyTopology	Qualified Interface Name	Fully qualified name of the interface
PingLatencyTopology	SecGroup UUID	Universally Unique Identifier of the security group
PingLatencyTopology	Source IP Address	IP address of the source node of the ping pair

Metrics

PingPairMetrics	Destination IP Address (countDistinct)	IP address of the ping pair destination node Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Destination Interface Name (countDistinct)	Name of the ping pair destination interface Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Destination Interface Type (countDistinct)	Physical link protocol type of the destination interface Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Destination Interface UUID (countDistinct)	Universally Unique Identifier of the ping pair destination interface Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Destination Node Name (countDistinct)	Name of the ping pair destination node Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Destination Node UUID (countDistinct)	Universally Unique Identifier of the ping pair destination node Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Errors - Packets (sum)	Total number of inbound and outbound ICMP control packets that contained errors and failed to be delivered at the destination element of the ping pair. Calculated using the following formula: (ifInErrors + IfOutErrors) Summation: The total of all the values.
PingPairMetrics	Errors - Packets In (sum)	Total number of inbound packets that contained errors and failed to be delivered at the destination element of the ping pair Summation: The total of all the values.

PingPairMetrics	Errors - Packets Out (sum)	Total number of outbound ICMP control packets that contained errors and failed to be delivered at the destination element of the ping pair Summation: The total of all the values.
PingPairMetrics	Interface In Utilization(%) (avg)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Average: The total of all the values divided by the number of samples.
PingPairMetrics	Interface In Utilization(%) (max)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Maximum: The maximum, or largest, value.
PingPairMetrics	Interface In Utilization(%) (min)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Minimum: The minimum, or smallest, value.
PingPairMetrics	Interface In Utilization(%) (pctile05)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (05): The value below which 5% of all the samples fall.
PingPairMetrics	Interface In Utilization(%) (pctile90)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (90): The value below which 90% of all the samples fall.
PingPairMetrics	Interface In Utilization(%) (pctile95)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (95): The value below which 95% of all the samples fall.
PingPairMetrics	Interface In Utilization(%) (pctile99)	Percentage of interface utilization for the incoming packets. Calculated using the following formula: $(\Delta \text{ifInOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	Interface Name (countDistinct)	Name of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Interface Out Utilization(%) (avg)	Percentage of interface utilization for the outgoing packets. Calculated using the following formula: $(\Delta \text{ifOutOctets} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Average: The total of all the values divided by the number of samples.
PingPairMetrics	Interface Out Utilization(%)	Percentage of interface utilization for the outgoing packets.

	(max)	Calculated using the following formula: $(\Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Maximum: The maximum, or largest, value.
PingPairMetrics	Interface Out Utilization(%) (min)	Percentage of interface utilization for the outgoing packets. Calculated using the following formula: $(\Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Minimum: The minimum, or smallest, value.
PingPairMetrics	Interface Out Utilization(%) (pctile05)	Percentage of interface utilization for the outgoing packets. Calculated using the following formula: $(\Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (05): The value below which 5% of all the samples fall.
PingPairMetrics	Interface Out Utilization(%) (pctile90)	Percentage of interface utilization for the outgoing packets. Calculated using the following formula: $(\Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (90): The value below which 90% of all the samples fall.
PingPairMetrics	Interface Out Utilization(%) (pctile95)	Percentage of interface utilization for the outgoing packets. Calculated using the following formula: $(\Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (95): The value below which 95% of all the samples fall.
PingPairMetrics	Interface Out Utilization(%) (pctile99)	Percentage of interface utilization for the outgoing packets. Calculated using the following formula: $(\Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	Interface Type (countDistinct)	The physical link protocol type of the interface Possible values used by HP Network Node Manager i Software include Ethernet and frameRelay. Note: Interfaces on non-SNMP nodes have an interface type of other. Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Interface UUID (countDistinct)	Universally Unique Identifier of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Interface Utilization(%) (avg)	Percentage of interface utilization for the incoming and outgoing packets. Calculated using the following formula: 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max}(\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ Average: The total of all the values divided by the number of samples.
PingPairMetrics	Interface	Percentage of interface utilization for the incoming and outgoing

	Utilization(%) (max)	<p>packets.</p> <p>Calculated using the following formula:</p> <ol style="list-style-type: none"> 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max} (\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ <p>Maximum: The maximum, or largest, value.</p>
PingPairMetrics	Interface Utilization(%) (min)	<p>Percentage of interface utilization for the incoming and outgoing packets.</p> <p>Calculated using the following formula:</p> <ol style="list-style-type: none"> 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max} (\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ <p>Minimum: The minimum, or smallest, value.</p>
PingPairMetrics	Interface Utilization(%) (pctile05)	<p>Percentage of interface utilization for the incoming and outgoing packets.</p> <p>Calculated using the following formula:</p> <ol style="list-style-type: none"> 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max} (\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ <p>Percentile (05): The value below which 5% of all the samples fall.</p>
PingPairMetrics	Interface Utilization(%) (pctile90)	<p>Percentage of interface utilization for the incoming and outgoing packets.</p> <p>Calculated using the following formula:</p> <ol style="list-style-type: none"> 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max} (\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ <p>Percentile (90): The value below which 90% of all the samples fall.</p>
PingPairMetrics	Interface Utilization(%) (pctile95)	<p>Percentage of interface utilization for the incoming and outgoing packets.</p> <p>Calculated using the following formula:</p> <ol style="list-style-type: none"> 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max} (\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ <p>Percentile (95): The value below which 95% of all the samples fall.</p>
PingPairMetrics	Interface Utilization(%) (pctile99)	<p>Percentage of interface utilization for the incoming and outgoing packets.</p> <p>Calculated using the following formula:</p> <ol style="list-style-type: none"> 1. For half duplex media: $(\Delta \text{ifInOctects} + \Delta \text{ifOutOctects} \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$ 2. For full-duplex media: $(\text{Max} (\Delta \text{ifInOctects}, \Delta \text{ifOutOctects}) \times 8 \times 100) / (\text{Numbers of seconds in } \Delta \times \text{ifSpeed})$

		Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	Invalid Data (avg)	Generated when the NNMi iSPI Performance for QA has successfully polled data from the target, but has determined that the data is invalid. Average: The total of all the values divided by the number of samples.
PingPairMetrics	Management Server (countDistinct)	Name of the NNMi management server Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	NoAccess (avg)	Average: The total of all the values divided by the number of samples.
PingPairMetrics	Node Name (countDistinct)	Name of the source node of the ping pair Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Node UUID (countDistinct)	Universally Unique Identifier of the source node Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Object Name (countDistinct)	Object Name is used by most extensionPacks to identify instrumented object instance. Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Object Type (countDistinct)	Object Type is used by most extensionPacks to identify instrumented object type. Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Packet Loss(%) (avg)	Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula: $\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ Average: The total of all the values divided by the number of samples.
PingPairMetrics	Packet Loss(%) (max)	Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula: $\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ Maximum: The maximum, or largest, value.
PingPairMetrics	Packet Loss(%) (min)	Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula:

		$\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ <p>Minimum: The minimum, or smallest, value.</p>
PingPairMetrics	Packet Loss(%) (pctile05)	<p>Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula: $\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ Percentile (05): The value below which 5% of all the samples fall.</p>
PingPairMetrics	Packet Loss(%) (pctile90)	<p>Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula: $\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ Percentile (90): The value below which 90% of all the samples fall.</p>
PingPairMetrics	Packet Loss(%) (pctile95)	<p>Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula: $\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ Percentile (95): The value below which 95% of all the samples fall.</p>
PingPairMetrics	Packet Loss(%) (pctile99)	<p>Percentage of data loss when the ICMP control packet travels from the source network element to the destination network element. Calculated using the following formula: $\frac{(\text{ciscoPingSentPackets} - \text{ciscoPingReceivedPackets})}{\text{ciscoPingSentPackets}} * 100$ Percentile (99): The value below which 99% of all the samples fall.</p>
PingPairMetrics	Pair Name (countDistinct)	<p>Ping Latency pair name with associated source and destination endpoints Count Distinct: A count of the unique, distinct, values for this topology element.</p>
PingPairMetrics	Pair UUID (countDistinct)	<p>Count Distinct: A count of the unique, distinct, values for this topology element.</p>
PingPairMetrics	Period Length (secs) (sum)	<p>Summation: The total of all the values.</p>
PingPairMetrics	Proxy IP Address (countDistinct)	<p>Proxy IP address of the ping pair source node Count Distinct: A count of the unique, distinct, values for this topology element.</p>
PingPairMetrics	Proxy Interface Name (countDistinct)	<p>Proxy interface name of the ping pair source node Count Distinct: A count of the unique, distinct, values for this topology element.</p>

PingPairMetrics	Proxy Node Name (countDistinct)	Proxy name of the ping pair source node Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Qualified Interface Name (countDistinct)	Fully qualified name of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	RTT Average (ms) (avg)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Average: The total of all the values divided by the number of samples.
PingPairMetrics	RTT Average (ms) (max)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Maximum: The maximum, or largest, value.
PingPairMetrics	RTT Average (ms) (min)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Minimum: The minimum, or smallest, value.
PingPairMetrics	RTT Average (ms) (pctile05)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (05): The value below which 5% of all the samples fall.
PingPairMetrics	RTT Average (ms) (pctile90)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (90): The value below which 90% of all the samples fall.
PingPairMetrics	RTT Average (ms) (pctile95)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (95): The value below which 95% of all the samples fall.
PingPairMetrics	RTT Average (ms) (pctile99)	The average Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	RTT Max(ms) (avg)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Average: The total of all the values divided by the number of samples.
PingPairMetrics	RTT Max(ms) (max)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds

		Maximum: The maximum, or largest, value.
PingPairMetrics	RTT Max(ms) (min)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Minimum: The minimum, or smallest, value.
PingPairMetrics	RTT Max(ms) (pctile05)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (05): The value below which 5% of all the samples fall.
PingPairMetrics	RTT Max(ms) (pctile90)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (90): The value below which 90% of all the samples fall.
PingPairMetrics	RTT Max(ms) (pctile95)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (95): The value below which 95% of all the samples fall.
PingPairMetrics	RTT Max(ms) (pctile99)	The maximum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	RTT Min(ms) (avg)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Average: The total of all the values divided by the number of samples.
PingPairMetrics	RTT Min(ms) (max)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Maximum: The maximum, or largest, value.
PingPairMetrics	RTT Min(ms) (min)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Minimum: The minimum, or smallest, value.
PingPairMetrics	RTT Min(ms) (pctile05)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (05): The value below which 5% of all the samples fall.
PingPairMetrics	RTT Min(ms) (pctile90)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (90): The value below which 90% of all the samples fall.

PingPairMetrics	RTT Min(ms) (pctile95)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (95): The value below which 95% of all the samples fall.
PingPairMetrics	RTT Min(ms) (pctile99)	The minimum Round Trip Time taken by the ICMP control packet to travel between the selected source and destination network element, measured in milliseconds Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	Reachability (avg)	Measures the physical connectivity between a ping pair made of two network elements Average: The total of all the values divided by the number of samples.
PingPairMetrics	Reachability (max)	Measures the physical connectivity between a ping pair made of two network elements Maximum: The maximum, or largest, value.
PingPairMetrics	Reachability (min)	Measures the physical connectivity between a ping pair made of two network elements Minimum: The minimum, or smallest, value.
PingPairMetrics	Reachability (pctile05)	Measures the physical connectivity between a ping pair made of two network elements Percentile (05): The value below which 5% of all the samples fall.
PingPairMetrics	Reachability (pctile90)	Measures the physical connectivity between a ping pair made of two network elements Percentile (90): The value below which 90% of all the samples fall.
PingPairMetrics	Reachability (pctile95)	Measures the physical connectivity between a ping pair made of two network elements Percentile (95): The value below which 95% of all the samples fall.
PingPairMetrics	Reachability (pctile99)	Measures the physical connectivity between a ping pair made of two network elements Percentile (99): The value below which 99% of all the samples fall.
PingPairMetrics	Reboot (avg)	Generated when the target component was restarted during the poll and no data could be retrieved from the component Average: The total of all the values divided by the number of samples.
PingPairMetrics	Sample Count (sum)	Sample Count: The total number of collected samples.
PingPairMetrics	SecGroup UUID (countDistinct)	Universally Unique Identifier of the security group Count Distinct: A count of the unique, distinct, values for this topology element.
PingPairMetrics	Source IP Address	IP address of the source node of the ping pair Count Distinct: A count of the unique, distinct, values for this

	(countDistinct)	topology element.
PingPairMetrics	Target Error (avg)	Generated when the target component returns any of the following SNMP error responses: * Authentication Error * No such name * No such object Average: The total of all the values divided by the number of samples.
PingPairMetrics	Unresponsive Target (avg)	Generated when the SNMP agent did not respond when collecting metrics for a particular polling policy Average: The total of all the values divided by the number of samples.

Dictionary for Class_Based_QoS

Topology

ClassMapActionTopology	Configured Bandwidth	Configured bandwidth of the QoS element
ClassMapActionTopology	Direction	The policy applied on the incoming or outgoing traffic for a particular interface
ClassMapActionTopology	Full Qualified Name	Fully Qualified Name (FQDN) of the node where the QoS element resides
ClassMapActionTopology	Interface Name	Name of the interface
ClassMapActionTopology	Interface Type	The physical link protocol type of the interface Possible values used by HP Network Node Manager i Software include Ethernet and frameRelay Note: Interfaces on non-SNMP nodes have an interface type of other.
ClassMapActionTopology	Interface UUID	Universally Unique Identifier of the interface
ClassMapActionTopology	Management Server	Name of the NNMi management server
ClassMapActionTopology	Node Name	Name of the source node
ClassMapActionTopology	Node UUID	Universally Unique Identifier of the source node
CBQoSMetrics	Object Name	Object Name is used by most extensionPacks to identify instrumented object instance.
CBQoSMetrics	Object Type	Object Type is used by most extensionPacks to identify

		instrumented object type.
ClassMapActionTopology	Policy Name	Name of the policy applied on the QoS element
ClassMapActionTopology	Policy_UUID	Universally Unique Identifier of the policy
ClassMapActionTopology	Qualified Interface Name	Fully qualified name of the interface
ClassMapActionTopology	Qualified Name	Fully Qualified Name (FQDN) of the QoS entity
ClassMapActionTopology	Qualified Policy Name	Fully qualified name of the policy associated to the QoS element
ClassMapActionTopology	SecGroup UUID	Universally Unique Identifier of the security group
ClassMapActionTopology	Source Tenant	Tenant name of the QoS element
ClassMapActionTopology	Traffic Class Name	Class name associated to the QoS element
ClassMapActionTopology	Traffic Class UUID	

Metrics

CBQoSMetrics	Bandwidth Utilization(%) (avg)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p> <ul style="list-style-type: none"> * As absolute value. * As a percentage of the total bandwidth. <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$ Average: The total of all the values divided by the number of samples.</p>
CBQoSMetrics	Bandwidth Utilization(%) (max)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p> <ul style="list-style-type: none"> * As absolute value. * As a percentage of the total bandwidth. <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$ Maximum: The maximum, or largest, value.</p>
CBQoSMetrics	Bandwidth Utilization(%) (min)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p>

		<p>* As absolute value.</p> <p>* As a percentage of the total bandwidth.</p> <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$</p> <p>Minimum: The minimum, or smallest, value.</p>
CBQoSMetrics	Bandwidth Utilization(%) (pctile05)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p> <p>* As absolute value.</p> <p>* As a percentage of the total bandwidth.</p> <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
CBQoSMetrics	Bandwidth Utilization(%) (pctile90)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p> <p>* As absolute value.</p> <p>* As a percentage of the total bandwidth.</p> <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
CBQoSMetrics	Bandwidth Utilization(%) (pctile95)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p> <p>* As absolute value.</p> <p>* As a percentage of the total bandwidth.</p> <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
CBQoSMetrics	Bandwidth Utilization(%) (pctile99)	<p>Percentage of the bandwidth utilized by the selected QoS class. Available only when the bandwidth reservation per class is measured as one of the following values:</p> <p>* As absolute value.</p> <p>* As a percentage of the total bandwidth.</p> <p>Bandwidth Utilization is calculated using the following formula: $(\text{PostPolicyBytes in kbps} / \text{Bandwidth configured in kbps}) * 100$</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>
CBQoSMetrics	Configured Bandwidth (countDistinct)	<p>Configured bandwidth of the QoS element</p> <p>Count Distinct: A count of the unique, distinct, values for this topology element.</p>
CBQoSMetrics	Current Queue Depth (avg)	<p>The current depth of the queue for the selected class</p> <p>Average: The total of all the values divided by the number of samples.</p>
CBQoSMetrics	Current Queue Depth (max)	<p>The current depth of the queue for the selected class</p> <p>Maximum: The maximum, or largest, value.</p>

CBQoSMetrics	Current Queue Depth (min)	The current depth of the queue for the selected class Minimum: The minimum, or smallest, value.
CBQoSMetrics	Current Queue Depth (pctile05)	The current depth of the queue for the selected class Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Current Queue Depth (pctile90)	The current depth of the queue for the selected class Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Current Queue Depth (pctile95)	The current depth of the queue for the selected class Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Current Queue Depth (pctile99)	The current depth of the queue for the selected class Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Direction (countDistinct)	The policy applied on the incoming or outgoing traffic for a particular interface Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Drop Rate(kbps) (avg)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Drop Rate(kbps) (max)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Maximum: The maximum, or largest, value.
CBQoSMetrics	Drop Rate(kbps) (min)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Minimum: The minimum, or smallest, value.
CBQoSMetrics	Drop Rate(kbps) (pctile05)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Drop Rate(kbps) (pctile90)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Drop Rate(kbps) (pctile95)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Drop Rate(kbps) (pctile99)	The bit rate of bytes dropped for each QoS class after applying the QoS policy, measured in kbps Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Dropped Bytes (sum)	Total number of bytes dropped for each class after applying the QoS policy Summation: The total of all the values.
CBQoSMetrics	Dropped Packets	Total number of packets dropped for each class after applying the

	(sum)	the QoS policy Summation: The total of all the values.
CBQoSMetrics	Full Qualified Name (countDistinct)	Fully Qualified Name (FQDN) of the node where the QoS element resides Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Interface Name (countDistinct)	Name of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Interface Type (countDistinct)	The physical link protocol type of the interface Possible values used by HP Network Node Manager i Software include Ethernet and frameRelay Note: Interfaces on non-SNMP nodes have an interface type of other. Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Interface UUID (countDistinct)	Universally Unique Identifier of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Management Server (countDistinct)	Name of the NNMi management server Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Marked DSCP Packets(%) (avg)	Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming IP packets. It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Marked DSCP Packets(%) (max)	Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming IP packets. It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Marked DSCP Packets(%) (min)	Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming IP packets. It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Minimum: The minimum, or smallest, value.
CBQoSMetrics	Marked DSCP Packets(%)	Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming

	(pctile05)	<p>IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Percentile (05): The value below which 5% of all the samples fall.</p>
CBQoSMetrics	<p>Marked DSCP Packets(%) (pctile90)</p>	<p>Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Percentile (90): The value below which 90% of all the samples fall.</p>
CBQoSMetrics	<p>Marked DSCP Packets(%) (pctile95)</p>	<p>Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Percentile (95): The value below which 95% of all the samples fall.</p>
CBQoSMetrics	<p>Marked DSCP Packets(%) (pctile99)</p>	<p>Percentage of packets marked with IP DSCP bits for the QoS class. The class sets a configured DSCP value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP DSCP bit set} / \text{Pre Policy Packets}) * 100$ Percentile (99): The value below which 99% of all the samples fall.</p>
CBQoSMetrics	<p>Marked FRDE Packets(%) (avg)</p>	<p>Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP FRDE bit set} / \text{Pre Policy Packets}) * 100$ Average: The total of all the values divided by the number of samples.</p>
CBQoSMetrics	<p>Marked FRDE Packets(%) (max)</p>	<p>Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP FRDE bit set} / \text{Pre Policy Packets}) * 100$ Maximum: The maximum, or largest, value.</p>
CBQoSMetrics	<p>Marked FRDE Packets(%) (min)</p>	<p>Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP FRDE bit set} / \text{Pre Policy Packets}) * 100$ Minimum: The minimum, or smallest, value.</p>
CBQoSMetrics	<p>Marked FRDE Packets(%) (pctile05)</p>	<p>Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets.</p> <p>It is calculated using the following formula:</p>

		(Packets with the IP FRDE bit set / Pre Policy Packets) * 100 Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Marked FRDE Packets(%) (pctile90)	Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets. It is calculated using the following formula: (Packets with the IP FRDE bit set / Pre Policy Packets) * 100 Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Marked FRDE Packets(%) (pctile95)	Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets. It is calculated using the following formula: (Packets with the IP FRDE bit set / Pre Policy Packets) * 100 Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Marked FRDE Packets(%) (pctile99)	Percentage of packets marked with IP FRDE bits for the QoS class. The class sets a configured FRDE value for the incoming IP packets. It is calculated using the following formula: (Packets with the IP FRDE bit set / Pre Policy Packets) * 100 Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Marked IP Precedence Packets(%) (avg)	Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the incoming IP packets. It is calculated using the following formula: (Packets with the IP precedence bit set / Pre Policy Packets) * 100 Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Marked IP Precedence Packets(%) (max)	Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the incoming IP packets. It is calculated using the following formula: (Packets with the IP precedence bit set / Pre Policy Packets) * 100 Maximum: The maximum, or largest, value.
CBQoSMetrics	Marked IP Precedence Packets(%) (min)	Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the incoming IP packets. It is calculated using the following formula: (Packets with the IP precedence bit set / Pre Policy Packets) * 100 Minimum: The minimum, or smallest, value.
CBQoSMetrics	Marked IP Precedence Packets(%)	Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the

	(pctile05)	<p>incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP precedence bit set} / \text{Pre Policy Packets}) * 100$</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
CBQoSMetrics	Marked IP Precedence Packets(%) (pctile90)	<p>Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP precedence bit set} / \text{Pre Policy Packets}) * 100$</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
CBQoSMetrics	Marked IP Precedence Packets(%) (pctile95)	<p>Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP precedence bit set} / \text{Pre Policy Packets}) * 100$</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
CBQoSMetrics	Marked IP Precedence Packets(%) (pctile99)	<p>Percentage of packets marked with IP Precedence for the QoS class. The class sets a configured Precedence value for the incoming IP packets.</p> <p>It is calculated using the following formula: $(\text{Packets with the IP precedence bit set} / \text{Pre Policy Packets}) * 100$</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>
CBQoSMetrics	Max Queue Depth (avg)	<p>The maximum depth of the queue for the selected class</p> <p>Average: The total of all the values divided by the number of samples.</p>
CBQoSMetrics	Max Queue Depth (max)	<p>The maximum depth of the queue for the selected class</p> <p>Maximum: The maximum, or largest, value.</p>
CBQoSMetrics	Max Queue Depth (min)	<p>The maximum depth of the queue for the selected class</p> <p>Minimum: The minimum, or smallest, value.</p>
CBQoSMetrics	Max Queue Depth (pctile05)	<p>The maximum depth of the queue for the selected class</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
CBQoSMetrics	Max Queue Depth (pctile90)	<p>The maximum depth of the queue for the selected class</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
CBQoSMetrics	Max Queue Depth (pctile95)	<p>The maximum depth of the queue for the selected class</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
CBQoSMetrics	Max Queue Depth (pctile99)	<p>The maximum depth of the queue for the selected class</p> <p>Percentile (99): The value below which 99% of all the samples fall.</p>
CBQoSMetrics	Node Name	Name of the source node

	(countDistinct)	Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Node UUID (countDistinct)	Universally Unique Identifier of the source node Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Object Name (countDistinct)	Object Name is used by most extensionPacks to identify instrumented object instance. Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Object Type (countDistinct)	Object Type is used by most extensionPacks to identify instrumented object type. Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Packets DE bit set (sum)	Total number of packets whose Frame Relay DE Bit is marked by Set feature Summation: The total of all the values.
CBQoSMetrics	Packets DSCP Value set (sum)	Total number of packets whose DSCP field is marked by Set feature Summation: The total of all the values.
CBQoSMetrics	Packets Precedence set (sum)	Total number of packets whose Precedence field is marked by Set feature Summation: The total of all the values.
CBQoSMetrics	Per Class Packet Drop(%) (avg)	Percentage of packets dropped for the selected class. It is calculated using the following formula: $(\text{Total number of dropped packets} / \text{Total number of packets transmitted for the selected class}) * 100$ Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Per Class Packet Drop(%) (max)	Percentage of packets dropped for the selected class. It is calculated using the following formula: $(\text{Total number of dropped packets} / \text{Total number of packets transmitted for the selected class}) * 100$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Per Class Packet Drop(%) (min)	Percentage of packets dropped for the selected class. It is calculated using the following formula: $(\text{Total number of dropped packets} / \text{Total number of packets transmitted for the selected class}) * 100$ Minimum: The minimum, or smallest, value.
CBQoSMetrics	Per Class Packet Drop(%) (pctile05)	Percentage of packets dropped for the selected class. It is calculated using the following formula: $(\text{Total number of dropped packets} / \text{Total number of packets transmitted for the selected class}) * 100$ Percentile (05): The value below which 5% of all the samples fall.

CBQoSMetrics	Per Class Packet Drop(%) (pctile90)	Percentage of packets dropped for the selected class. It is calculated using the following formula: (Total number of dropped packets / Total number of packets transmitted for the selected class) * 100 Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Per Class Packet Drop(%) (pctile95)	Percentage of packets dropped for the selected class. It is calculated using the following formula: (Total number of dropped packets / Total number of packets transmitted for the selected class) * 100 Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Per Class Packet Drop(%) (pctile99)	Percentage of packets dropped for the selected class. It is calculated using the following formula: (Total number of dropped packets / Total number of packets transmitted for the selected class) * 100 Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Period Length (secs) (sum)	The duration between the two consecutive polling cycles of the NNM iSPI Performance for QA, measured in seconds Summation: The total of all the values.
CBQoSMetrics	Police Conform Bytes (sum)	Total number of bytes that conform to the policing configurations applied on the selected traffic class Summation: The total of all the values.
CBQoSMetrics	Police Conform Packets (sum)	Total number of packets that conform to the policing configurations applied on the selected traffic class Summation: The total of all the values.
CBQoSMetrics	Police Conform Rate(kbps) (avg)	The bit rate of incoming traffic, measured in kbps Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Police Conform Rate(kbps) (max)	The bit rate of incoming traffic, measured in kbps Maximum: The maximum, or largest, value.
CBQoSMetrics	Police Conform Rate(kbps) (min)	The bit rate of incoming traffic, measured in kbps Minimum: The minimum, or smallest, value.
CBQoSMetrics	Police Conform Rate(kbps) (pctile05)	The bit rate of incoming traffic, measured in kbps Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Police Conform Rate(kbps) (pctile90)	The bit rate of incoming traffic, measured in kbps Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Police Conform Rate(kbps) (pctile95)	The bit rate of incoming traffic, measured in kbps Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Police Conform	The bit rate of incoming traffic, measured in kbps

	Rate(kbps) (pctile99)	Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Police Exceed Bytes (sum)	Total number of bytes that exceed the configurations defined in the policing action applied on the traffic class Summation: The total of all the values.
CBQoSMetrics	Police Exceed Packet Drop(%) (avg)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Police Exceed Packet Drop(%) (max)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Police Exceed Packet Drop(%) (min)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Minimum: The minimum, or smallest, value.
CBQoSMetrics	Police Exceed Packet Drop(%) (pctile05)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Police Exceed Packet Drop(%) (pctile90)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Police Exceed Packet Drop(%) (pctile95)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Police Exceed Packet Drop(%) (pctile99)	Percentage of pre-policy packets dropped when the traffic exceeds the threshold. It is calculated using the following formula: $(\text{Exceeded packets} / \text{Pre Policy Packets}) * 100$ Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Police Exceed Packets (sum)	Total number of packets that exceed the configurations defined in the policing action applied on the traffic class

		Summation: The total of all the values.
CBQoSMetrics	Police Exceed Rate (kbps) (avg)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Police Exceed Rate (kbps) (max)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Maximum: The maximum, or largest, value.
CBQoSMetrics	Police Exceed Rate (kbps) (min)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Minimum: The minimum, or smallest, value.
CBQoSMetrics	Police Exceed Rate (kbps) (pctile05)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Police Exceed Rate (kbps) (pctile90)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Police Exceed Rate (kbps) (pctile95)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Police Exceed Rate (kbps) (pctile99)	The bit rate of traffic that exceeds the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Police Packet Drop (%) (avg)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Police Packet Drop (%) (max)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Maximum: The maximum, or largest, value.
CBQoSMetrics	Police Packet Drop (%) (min)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Minimum: The minimum, or smallest, value.

CBQoSMetrics	Police Packet Drop (%) (pctile05)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Police Packet Drop (%) (pctile90)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Police Packet Drop (%) (pctile95)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Police Packet Drop (%) (pctile99)	Percentage of packets dropped for the selected class due to violated or exceeded policies. It is calculated using the following formula: (Dropped Packets / Total number of packets transmitted for the selected class) * 100 Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Police Violate Bytes (sum)	Total number of bytes that violate the configurations defined in the policing action applied on the traffic class Summation: The total of all the values.
CBQoSMetrics	Police Violate Packet Drop(%) (avg)	Percentage of pre-policy packets dropped when the traffic violates the threshold. It is calculated using the following formula: (Violated packets / Pre Policy Packets) * 100 Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Police Violate Packet Drop(%) (max)	Percentage of pre-policy packets dropped when the traffic violates the threshold. It is calculated using the following formula: (Violated packets / Pre Policy Packets) * 100 Maximum: The maximum, or largest, value.
CBQoSMetrics	Police Violate Packet Drop(%) (min)	Percentage of pre-policy packets dropped when the traffic violates the threshold. It is calculated using the following formula: (Violated packets / Pre Policy Packets) * 100 Minimum: The minimum, or smallest, value.
CBQoSMetrics	Police Violate	Percentage of pre-policy packets dropped when the traffic violates

	Packet Drop(%) (pctile05)	the threshold. It is calculated using the following formula: $(\text{Violated packets} / \text{Pre Policy Packets}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Police Violate Packet Drop(%) (pctile90)	Percentage of pre-policy packets dropped when the traffic violates the threshold. It is calculated using the following formula: $(\text{Violated packets} / \text{Pre Policy Packets}) * 100$ Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Police Violate Packet Drop(%) (pctile95)	Percentage of pre-policy packets dropped when the traffic violates the threshold. It is calculated using the following formula: $(\text{Violated packets} / \text{Pre Policy Packets}) * 100$ Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Police Violate Packet Drop(%) (pctile99)	Percentage of pre-policy packets dropped when the traffic violates the threshold. It is calculated using the following formula: $(\text{Violated packets} / \text{Pre Policy Packets}) * 100$ Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Police Violate Packets (sum)	Total number of packets that violate the configurations defined in the action applied on the traffic class Summation: The total of all the values.
CBQoSMetrics	Police Violate Rate (kbps) (avg)	The bit rate of traffic that violates the configurations defined in the policing action applied on the traffic class, measured in kbps Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Police Violate Rate (kbps) (max)	The bit rate of traffic that violates the configurations defined in the policing action applied on the traffic class, measured in kbps Maximum: The maximum, or largest, value.
CBQoSMetrics	Police Violate Rate (kbps) (min)	The bit rate of traffic that violates the configurations defined in the policing action applied on the traffic class, measured in kbps Minimum: The minimum, or smallest, value.
CBQoSMetrics	Police Violate Rate (kbps) (pctile05)	The bit rate of traffic that violates the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Police Violate Rate (kbps) (pctile90)	The bit rate of traffic that violates the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Police Violate Rate (kbps) (pctile95)	The bit rate of traffic that violates the configurations defined in the policing action applied on the traffic class, measured in kbps Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Police Violate Rate	The bit rate of traffic that violates the configurations defined in the

	(kbps) (pctile99)	policing action applied on the traffic class, measured in kbps Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Policy Name (countDistinct)	Name of the policy applied on the QoS element Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Policy_UUID (countDistinct)	Universally Unique Identifier of the policy Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Post Policy Bytes (sum)	Total number of inbound bytes per class after applying the QoS policy Summation: The total of all the values.
CBQoSMetrics	Post Policy rate (kbps) (avg)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Post Policy rate (kbps) (max)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Maximum: The maximum, or largest, value.
CBQoSMetrics	Post Policy rate (kbps) (min)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Minimum: The minimum, or smallest, value.
CBQoSMetrics	Post Policy rate (kbps) (pctile05)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Post Policy rate (kbps) (pctile90)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Post Policy rate (kbps) (pctile95)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Post Policy rate (kbps) (pctile99)	The bit rate of the traffic for each class after applying the QoS policy, measured in kbps Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Pre Policy Bytes (sum)	Total number of inbound bytes per class before applying the QoS policy Summation: The total of all the values.
CBQoSMetrics	Pre Policy Packets (sum)	Total number of inbound packets for each class before applying the QoS policy Summation: The total of all the values.
CBQoSMetrics	Pre Policy Rate	The bit rate of the traffic for each class before applying the QoS

	(kbps) (avg)	policy, measured in kbps Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Pre Policy Rate (kbps) (max)	The bit rate of the traffic for each class before applying the QoS policy, measured in kbps Maximum: The maximum, or largest, value.
CBQoSMetrics	Pre Policy Rate (kbps) (min)	The bit rate of the traffic for each class before applying the QoS policy, measured in kbps Minimum: The minimum, or smallest, value.
CBQoSMetrics	Pre Policy Rate (kbps) (pctile05)	The bit rate of the traffic for each class before applying the QoS policy, measured in kbps Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Pre Policy Rate (kbps) (pctile90)	The bit rate of the traffic for each class before applying the QoS policy, measured in kbps Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Pre Policy Rate (kbps) (pctile95)	The bit rate of the traffic for each class before applying the QoS policy, measured in kbps Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Pre Policy Rate (kbps) (pctile99)	The bit rate of the traffic for each class before applying the QoS policy, measured in kbps Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Qualified Interface Name (countDistinct)	Fully qualified name of the interface Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Qualified Name (countDistinct)	Fully Qualified Name (FQDN) of the QoS entity Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Qualified Policy Name (countDistinct)	Fully qualified name of the policy associated to the QoS element Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Queue Discard Bytes (sum)	Total number of bytes dropped for the selected class due to the queuing action Summation: The total of all the values.
CBQoSMetrics	Queue Discard Packets (sum)	Total number of packets dropped for the selected class due to the queuing action Summation: The total of all the values.
CBQoSMetrics	Queue Packet Discard(%) (avg)	Percentage of packets discarded for the selected class due to the queuing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Average: The total of all the values divided by the number of

		samples.
CBQoSMetrics	Queue Packet Discard(%) (max)	Percentage of packets discarded for the selected class due to the queueing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Queue Packet Discard(%) (min)	Percentage of packets discarded for the selected class due to the queueing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Minimum: The minimum, or smallest, value.
CBQoSMetrics	Queue Packet Discard(%) (pctile05)	Percentage of packets discarded for the selected class due to the queueing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Queue Packet Discard(%) (pctile90)	Percentage of packets discarded for the selected class due to the queueing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Queue Packet Discard(%) (pctile95)	Percentage of packets discarded for the selected class due to the queueing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Queue Packet Discard(%) (pctile99)	Percentage of packets discarded for the selected class due to the queueing action. It is calculated using the following formula: $(\text{Total number of discarded packets} / \text{Pre Policy Packets}) * 100$ Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Queue Utilization (%) (avg)	Utilization rate for the queue. It is calculated using the following formula: $(\text{Queue depth} / \text{Maximum queue depth})$ Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Queue Utilization (%) (max)	Utilization rate for the queue. It is calculated using the following formula: $(\text{Queue depth} / \text{Maximum queue depth})$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Queue Utilization (%) (min)	Utilization rate for the queue. It is calculated using the following formula: $(\text{Queue depth} / \text{Maximum queue depth})$

		Minimum: The minimum, or smallest, value.
CBQoSMetrics	Queue Utilization (%) (pctile05)	Utilization rate for the queue. It is calculated using the following formula: (Queue depth / Maximum queue depth) Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Queue Utilization (%) (pctile90)	Utilization rate for the queue. It is calculated using the following formula: (Queue depth / Maximum queue depth) Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Queue Utilization (%) (pctile95)	Utilization rate for the queue. It is calculated using the following formula: (Queue depth / Maximum queue depth) Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Queue Utilization (%) (pctile99)	Utilization rate for the queue. It is calculated using the following formula: (Queue depth / Maximum queue depth) Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	RED Average Queue Size(Bytes) (avg)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Average: The total of all the values divided by the number of samples.
CBQoSMetrics	RED Average Queue Size(Bytes) (max)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Maximum: The maximum, or largest, value.
CBQoSMetrics	RED Average Queue Size(Bytes) (min)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Minimum: The minimum, or smallest, value.
CBQoSMetrics	RED Average Queue Size(Bytes) (pctile05)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	RED Average Queue Size(Bytes) (pctile90)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	RED Average Queue Size(Bytes) (pctile95)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	RED Average Queue Size(Bytes) (pctile99)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in bytes Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	RED Average Queue Size	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets

	(Packets) (avg)	Average: The total of all the values divided by the number of samples.
CBQoSMetrics	RED Average Queue Size (Packets) (max)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets Maximum: The maximum, or largest, value.
CBQoSMetrics	RED Average Queue Size (Packets) (min)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets Minimum: The minimum, or smallest, value.
CBQoSMetrics	RED Average Queue Size (Packets) (pctile05)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	RED Average Queue Size (Packets) (pctile90)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	RED Average Queue Size (Packets) (pctile95)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	RED Average Queue Size (Packets) (pctile99)	Average queue size calculated by the Weighted Random Early Detection (WRED) algorithm, measured in packets Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	RED Congestion Marked Bytes (sum)	Total number of congestion marked bytes when the following condition is true for the queues associated to all classes: Number of packets in the queues are greater than the minimum threshold and less than the maximum threshold Summation: The total of all the values.
CBQoSMetrics	RED Congestion Marked Packets (sum)	Total number of congestion marked packets when the following condition is true for the queues associated to all classes: Number of packets in the queues are greater than the minimum threshold and less than the maximum threshold Summation: The total of all the values.
CBQoSMetrics	RED Drop Bytes (sum)	Total number of bytes dropped when the following condition is true for the queues associated to all classes: Number of packets in the queues are greater than the minimum threshold and less than the maximum threshold Summation: The total of all the values.
CBQoSMetrics	RED Drop Packets (sum)	Total number of packets dropped when the following condition is true for the queues associated to all classes: Number of packets in the queues are greater than the minimum threshold and less than the maximum threshold Summation: The total of all the values.
CBQoSMetrics	RED Packet Drop (%) (avg)	Percentage of packets dropped for the selected class due to the buffer overflow.

		<p>It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Average: The total of all the values divided by the number of samples.</p>
CBQoSMetrics	RED Packet Drop (%) (max)	<p>Percentage of packets dropped for the selected class due to the buffer overflow. It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Maximum: The maximum, or largest, value.</p>
CBQoSMetrics	RED Packet Drop (%) (min)	<p>Percentage of packets dropped for the selected class due to the buffer overflow. It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Minimum: The minimum, or smallest, value.</p>
CBQoSMetrics	RED Packet Drop (%) (pctile05)	<p>Percentage of packets dropped for the selected class due to the buffer overflow. It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Percentile (05): The value below which 5% of all the samples fall.</p>
CBQoSMetrics	RED Packet Drop (%) (pctile90)	<p>Percentage of packets dropped for the selected class due to the buffer overflow. It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Percentile (90): The value below which 90% of all the samples fall.</p>
CBQoSMetrics	RED Packet Drop (%) (pctile95)	<p>Percentage of packets dropped for the selected class due to the buffer overflow. It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Percentile (95): The value below which 95% of all the samples fall.</p>
CBQoSMetrics	RED Packet Drop (%) (pctile99)	<p>Percentage of packets dropped for the selected class due to the buffer overflow. It is calculated using the following formula: $(\text{Total number of packets dropped due to the buffer overflow} / \text{Total number of packets transmitted for the selected class}) * 100$ Percentile (99): The value below which 99% of all the samples fall.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (avg)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold. It is calculated using the following formula:</p>

		<p>(Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p> <p>Average: The total of all the values divided by the number of samples.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (max)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold.</p> <p>It is calculated using the following formula: (Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p> <p>Maximum: The maximum, or largest, value.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (min)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold.</p> <p>It is calculated using the following formula: (Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p> <p>Minimum: The minimum, or smallest, value.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (pctile05)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold.</p> <p>It is calculated using the following formula: (Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p> <p>Percentile (05): The value below which 5% of all the samples fall.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (pctile90)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold.</p> <p>It is calculated using the following formula: (Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p> <p>Percentile (90): The value below which 90% of all the samples fall.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (pctile95)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold.</p> <p>It is calculated using the following formula: (Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p> <p>Percentile (95): The value below which 95% of all the samples fall.</p>
CBQoSMetrics	RED Packet Tail Drop(%) (pctile99)	<p>Percentage of packets dropped due to greater number of packets in the queue than the maximum threshold.</p> <p>It is calculated using the following formula: (Total number of packets dropped due to greater number of packets in the queue than the maximum threshold / Pre Policy Packets) * 100</p>

		Packets) * 100 Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	RED Tail Drop Bytes (sum)	Total number of bytes dropped when the following condition is true for the queues associated to all classes: Number of packets in the queues are greater than the maximum threshold value Summation: The total of all the values.
CBQoSMetrics	RED Tail Drop Packets (sum)	Total number of packets dropped when the following condition is true for the queues associated to all classes: Number of packets in the queues are greater than the maximum threshold value Summation: The total of all the values.
CBQoSMetrics	RED Transmit Bytes (sum)	Total number of bytes transmitted Summation: The total of all the values.
CBQoSMetrics	RED Transmit Packets (sum)	Total number of packets transmitted Summation: The total of all the values.
CBQoSMetrics	Sample Count (sum)	Sample Count: The total number of collected samples.
CBQoSMetrics	SecGroup UUID (countDistinct)	Universally Unique Identifier of the security group Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Shape Delayed Packet(%) (avg)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Shape Delayed Packet(%) (max)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Shape Delayed Packet(%) (min)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Minimum: The minimum, or smallest, value.
CBQoSMetrics	Shape Delayed Packet(%) (pctile05)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Shape Delayed Packet(%) (pctile90)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Percentile (90): The value below which 90% of all the samples fall.

CBQoSMetrics	Shape Delayed Packet(%) (pctile95)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Shape Delayed Packet(%) (pctile99)	Percentage of pre-policy packets delayed due to shaping action. It is calculated using the following formula: $(\text{Shape Delay packets} / \text{Pre Policy Packets}) * 100$ Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Shape Packet Drop (%) (avg)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: $(\text{Total number of dropped packets due to shaping} / \text{Number of packets transmitted for the selected class}) * 100$ Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Shape Packet Drop (%) (max)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: $(\text{Total number of dropped packets due to shaping} / \text{Number of packets transmitted for the selected class}) * 100$ Maximum: The maximum, or largest, value.
CBQoSMetrics	Shape Packet Drop (%) (min)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: $(\text{Total number of dropped packets due to shaping} / \text{Number of packets transmitted for the selected class}) * 100$ Minimum: The minimum, or smallest, value.
CBQoSMetrics	Shape Packet Drop (%) (pctile05)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: $(\text{Total number of dropped packets due to shaping} / \text{Number of packets transmitted for the selected class}) * 100$ Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Shape Packet Drop (%) (pctile90)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: $(\text{Total number of dropped packets due to shaping} / \text{Number of packets transmitted for the selected class}) * 100$ Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Shape Packet Drop (%) (pctile95)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: $(\text{Total number of dropped packets due to shaping} / \text{Number of packets transmitted for the selected class}) * 100$ Percentile (95): The value below which 95% of all the samples fall.

CBQoSMetrics	Shape Packet Drop (%) (pctile99)	Percentage of packets dropped for the selected class by Random Early Detection (RED) algorithm. It is calculated using the following formula: (Total number of dropped packets due to shaping / Number of packets transmitted for the selected class) * 100 Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Shape Queue Depth (avg)	The queue depth when the current traffic-shaping policy is applied, measured in packets Average: The total of all the values divided by the number of samples.
CBQoSMetrics	Shape Queue Depth (max)	The queue depth when the current traffic-shaping policy is applied, measured in packets Maximum: The maximum, or largest, value.
CBQoSMetrics	Shape Queue Depth (min)	The queue depth when the current traffic-shaping policy is applied, measured in packets Minimum: The minimum, or smallest, value.
CBQoSMetrics	Shape Queue Depth (pctile05)	The queue depth when the current traffic-shaping policy is applied, measured in packets Percentile (05): The value below which 5% of all the samples fall.
CBQoSMetrics	Shape Queue Depth (pctile90)	The queue depth when the current traffic-shaping policy is applied, measured in packets Percentile (90): The value below which 90% of all the samples fall.
CBQoSMetrics	Shape Queue Depth (pctile95)	The queue depth when the current traffic-shaping policy is applied, measured in packets Percentile (95): The value below which 95% of all the samples fall.
CBQoSMetrics	Shape Queue Depth (pctile99)	The queue depth when the current traffic-shaping policy is applied, measured in packets Percentile (99): The value below which 99% of all the samples fall.
CBQoSMetrics	Shaped Delay Bytes (sum)	Total number of bytes delayed due to the shaping action Summation: The total of all the values.
CBQoSMetrics	Shaped Delay Packets (sum)	Total number of packets delayed due to the shaping action Summation: The total of all the values.
CBQoSMetrics	Shaped Drop Bytes (sum)	Total number of bytes dropped due to the shaping action Summation: The total of all the values.
CBQoSMetrics	Shaped Drop Packets (sum)	Total number of packets dropped due to the shaping action Summation: The total of all the values.
CBQoSMetrics	Source Tenant (countDistinct)	Tenant name of the QoS element Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Traffic Class Name	Class name associated to the QoS element

	(countDistinct)	Count Distinct: A count of the unique, distinct, values for this topology element.
CBQoSMetrics	Traffic Class UUID (countDistinct)	Count Distinct: A count of the unique, distinct, values for this topology element.

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