SolarWinds® Orion®

NetFlow Traffic Analyzer
Page Help

<u>About SolarWinds</u>

SolarWinds, Inc develops and markets an array of network management, monitoring, and discovery tools to meet the diverse requirements of today's network management and consulting professionals. SolarWinds products continue to set benchmarks for quality and performance and have positioned the company as the leader in network management and discovery technology. The SolarWinds customer base includes over 45 percent of the Fortune 500 and customers from over 90 countries. Our global business partner distributor network exceeds 100 distributors and resellers.

<u>Contacting SolarWinds</u>

You can contact SolarWinds in a number of ways, including the following:

Team	Contact Information
Sales	sales@solarwinds.com www.solarwinds.com 1.866.530.8100 +353.21.5002900
Technical Support	www.solarwinds.com/support
User Forums	thwack.com

Conventions

The documentation uses consistent conventions to help you identify items throughout the printed and online library.

Convention	Specifying
Bold	Window items, including buttons and fields.
Italics	Book and CD titles, variable names, new terms
`Fixed font`	File and directory names, commands and code examples, text typed by you
Straight brackets, as in [*value*]	Optional command parameters
Curly braces, as in {*value*}	Required command parameters
Logical OR, as in *value1|value2*	Exclusive command parameters where only one of the options can be specified

SolarWinds NetFlow Traffic Analyzer Documentation Library

The following documents are included in the SolarWinds NetFlow Traffic Analyzer documentation library:

Document	Purpose
Administrator Guide	Provides detailed setup, configuration, and conceptual information.
Page Help	Provides help for every window in the NetFlow Traffic Analyzer user interface
QuickStart Guide	Provides installation, setup, and common scenarios for which NetFlow Traffic Analyzer provides a simple yet powerful solution.
Release Notes	Provides late-breaking information, known issues, and updates. The latest Release Notes can be found at www.solarwinds.com.

Contents

Chapter 1

NetFlow Traffic Analyzer Page Help

The following sections provide detailed information about the NetFlow Traffic Analyzer resources that are available within the Orion NPM Web Console. This document is not meant to be read as a stand-alone volume, but it should be accessed through the help button that is available for each web console resource.

Getting Started with Orion NTA

If you need to know how and by whom your bandwidth is being used, Orion NetFlow Traffic Analyzer (NTA) provides a simple, integrated answer. You can quickly trace and monitor the bandwidth usage of a particular application or type of traffic. For example, if you see excessive bandwidth use on a particular interface, you can use Orion NTA to see that the company meeting, consisting of streaming video, is consuming 80% of the available bandwidth through a particular switch. Unlike many other NetFlow analysis products, the network and Flow data presented in Orion NTA solution are not purely extrapolated data, but they are based on real information collected about the network by the Orion Network Performance Monitor product that is at the heart of Orion NTA.

Out of the box, Orion NTA offers broad monitoring and charting capabilities, coupled with detail-driven statistics, including the following:

- Distribution of bandwidth across traffic types

- Usage patterns over time

- External traffic identification and tracking

- Tight integration with detailed interface performance statistics

These monitoring capabilities, along with the customizable Orion Web Console and reporting engines, make Orion NTA the easiest choice you will make involving your Flow monitoring needs.

How Orion NTA Works

Flow- and CBQoS-enabled devices can provide a wealth of IP-related traffic information. Orion NTA collects this traffic data, correlates it into a useable format, and then presents it, with detailed network performance data collected by SolarWinds Orion Network Performance Monitor, as easily read graphs and reports on bandwidth use on your network. These reports help you monitor and shape bandwidth usage, track conversations between internal and external endpoints, analyze traffic patterns, and plan bandwidth capacity needs.

The following diagram provides an overview of a simple Orion NTA installation showing, generally, how Flow analysis and CBQoS polling function in Orion NTA. Flow analysis and CBQoS polling occur simultaneously: Flow-enabled devices send Flow data to the Orion NTA collector on port 2055, and the Orion NTA collector polls CBQoS-enabled devices for traffic-shaping policies and results on port 161.

Note: CBQoS and Flow monitoring are shown separately to emphasize the difference in collection methods. Network endpoints are not shown, and a typical Orion NTA installation would not require that all CBQoS- and Flow-capable devices be configured to interact directly with the Orion NTA collector. For more information about effectively deploying NetFlow on your network, see this SolarWinds technical reference.
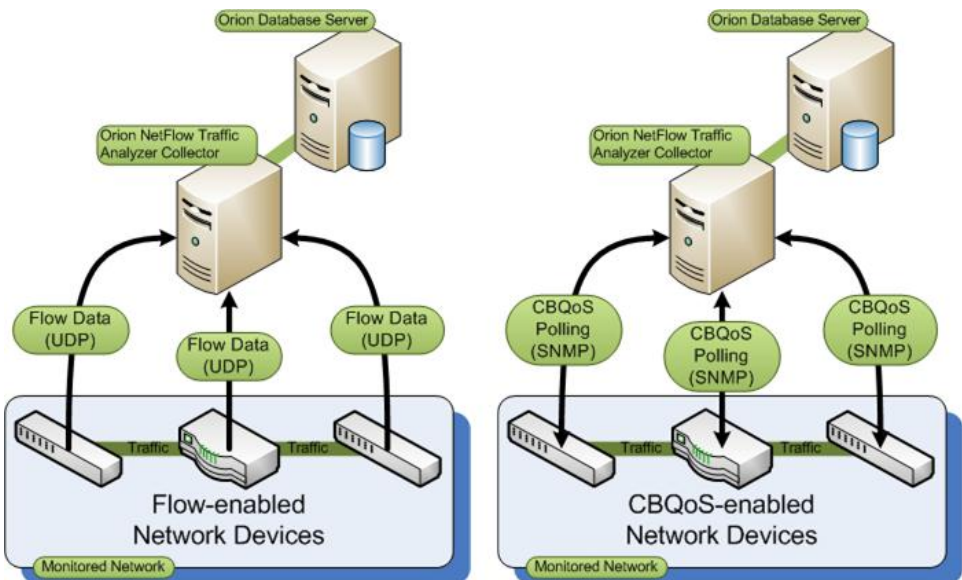
Orion NTA Features

The following valuable features provided the impetus for the development of current version of Orion NTA, and they are the foundation upon which Orion NTA is built:

Orion alerts integration

Orion NTA automatically adds top talker information to Orion interface utilization alerts. You can navigate directly to NTA interface details from messages in the Orion Events resource.

Customizable rate-based charts

Stacked area charts and line charts offer options to include splines showing data trends, and chart unit options now include Rate (Kbps), Percent of interface speed, Percent of total traffic, and Data transferred per interval.

Advanced port and application mapping

Application mappings may be defined based on source and destination IP addresses, in addition to ports and protocols.

Flow monitoring support for Cisco Adaptive Security Appliances (ASA)

Orion NTA can report network traffic data provided by NetFlow-enabled Cisco ASA devices.

Filtered views including both ingress and egress traffic

Orion NTA now provides the ability to select the direction of traffic over any viewed interface. On any monitored interface, you can now view traffic data for ingress traffic, egress traffic, or both.

Global Flow Direction Settings

Orion NTA now provides a flow direction settings that pertain to all resources on relevant views. All global settings can be manually over-ridden at the resource level.

Support for IPFIX-enabled devices

Internet Protocol Flow Information Export is a developing standard for formatting and transmitting IP-based network traffic information. As more devices features IPFIX capability, Orion NTA will immediately be able to provide IPFIX Flow monitoring.

Cisco class-based quality of service (CBQoS) monitoring

Orion NTA provides resources giving you the ability to easily view, chart, and report on the effects of the class-based quality of service policies you have enabled on your CBQoS-capable Cisco devices. CBQoS monitoring includes Orion Advanced Alerts (for Pre-Policy, Post-Policy, Drop thresholds that you set), and seven historical reports (on Pre-Policy, Post-Policy, and Drop events).

Improved availability and performance

With Orion NTA, you can quickly detect, diagnose, and resolve network slowdowns and outages. Orion NTA offers fast, efficient CNQoS polling, report load times, and summary views.

Analytical capacity planning

Orion NTA highlights trends in network traffic, enabling you to intelligently anticipate changes in bandwidth to areas that are experiencing bottlenecks. Capacity planning support features include reports on Top Conversations with Applications and Top 50 Endpoints; and resources showing Top Traffic Sources and Destinations by Domain, and Top IP Address Group Conversations.

What is NetFlow?

Strictly speaking, NetFlow is Cisco's technology for collecting and exporting data about the packets the pass through Cisco network devices. More broadly understood, NetFlow is the process of collecting and exporting such data. Vendors other than Cisco have their own names for what is the same technology.

For an excellent in-depth overview of NetFlow, consult this SolarWinds technical reference.

What is CBQoS?

CBQoS is Cisco's implementation of class-based traffic routing. As part of Cisco IOS 12.4(4)T and above, CBQoS enables Cisco network devices to set the TOS/Diffserv bits in IP headers, determining what priority a set of IP packets is given in the routing queue.

How traffic is classed becomes important when an interface link becomes congested. In this case, applied policy rules result in more highly prioritized traffic continuing to smoothly pass through the network while less highly prioritized traffic gets delayed or even dropped.

CBQoS also includes features that keep track of QoS packet routing activity in a MIB database. In terms of monitoring how QoS policies are affecting traffic on the network, SolarWinds Orion NetFlow Traffic Analyzer polls network devices for CBQoS MIB data over SNMP, through the default port (161).

For information on configuring CBQoS on your Cisco devices, refer to this SolarWinds Knowledge Base article.

CBQoS Settings

These settings enable CBQoS globally for your NetFlow sources. You can enable and disable specific NetFlow Sources in the Manage NetFlow Sources resource, but you must first enable CBQoS here first, in CBQoS Settings.

To enable CBQoS for your NetFlow sources:

1. Click the **Enable CBQoS Polling checkbox**.
2. Set the polling interval.
3. Click **Save**.

CBQoS Policy Details

Clicking Edit in the resource header allows you to edit the attributes of CBQoS Policy Details Map resource:

- Use **Chart Style default** for view. The Chart Style default is the Interactive style. Check the box to select the default Chart Style. Leave the box unchecked to use the Classic Style chart.

- The **Title** of the resource

- The **Subtitle** of the resource

- Click **Submit** after configuring your CBQoS Policy Details resource.

Class Based Quality of Service (CBQoS) Details View

The following resources are available by default in the CBQoS Details view:

Note: Because there are different formulas for calculating bitrate in loading CBQoS resources and in generating reports, there is a case in which the numbers on 24 hour views do no correlate. When the device from which the data is being collected has not yet been a CBQoS source node for less than 24 hours, the CBQoS Policy Details resource will show a different number compared to the comparable CBQoS report.

The difference is visible only first 24 hours after installation. When we have CBQoS data in the DB, it shows the same numbers.
Reason: On WEB we calculate bitrate by following formula:
SumOfData / Selected TimePeriod (24 Hours - when user selects Show data for Last 24 Hours).

In REPORTS, we calculate bitrate by following formula: SumOfData / Length of data in DB (1 Hour when we have 1 Hour of data, 2 Hours when we have 2 hours of data and so on up to selected time period).

So when we get 24 hours of data, we get same results in both cases. For more information, see:

- CBQoS Drops

- CBQoS Post-Policy Class Map

- CBQoS Pre-Policy Class Map

CBQoS Drops

If this resource is displayed on any Interface Details view, the CBQoS Drops resource provides both a graph and a table reporting each of the defined classes and corresponding amounts of traffic that are filtered out or dropped as a result of policy maps currently enacted on the viewed interface.

If this resource is displayed on the CBQoS Details view, the CBQoS Drops resource provides both a graph and a table reporting the amount of traffic corresponding to the selected CBQoS policy class that is filtered out or dropped as a result of policy maps currently enacted on the viewed interface.

Clicking **Edit** allows you to edit the **Title** and **Subtitle** of the CBQoS Drops resource. Click **Submit** after any configuration changes.

CBQoS Policy Details

If this resource is displayed on any Interface Details view, the CBQoS Policy Details resource provides both a graph and a table reporting the amount of traffic corresponding to defined classes that has passed over the viewed interface in both the hour and the 24 hours prior to the currently viewed time period.

If this resource is displayed on the CBQoS Details view, the CBQoS Policy Details resource provides both a graph and a table detailing the amount of traffic corresponding to the selected CBQoS policy class that has passed over the viewed interface in both the hour and the 24 hours prior to the currently viewed time period.

Clicking **Edit** allows you to edit the following attributes of the CBQoS Drops resource:

- **Resource Style** indicates whether or not the resource displays a chart.

- **Chart Style** provides options for displaying area or 2D or 3D pie charts.

- Click **Submit** after configuring your CBQoS Drops resource.

CBQoS Post-Policy Class Map

If this resource is displayed on any Interface Details view, the CBQoS Post-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to defined classes passing through the viewed interface resulting from the application of policy maps on the viewed interface.

If this resource is displayed on the CBQoS Details view, the CBQoS Post-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to the selected CBQoS policy class passing through the viewed interface resulting from the application of policy maps on the viewed interface.

Clicking **Edit** allows you to edit the following attributes of the CBQoS Post-Policy Class Map resource:

- **Resource Style** indicates whether or not the resource displays a chart.

- **Chart Style** provides options for displaying area or 2D or 3D pie charts.

- Click **Submit** after configuring your CBQoS Post-Policy Class Map resource.

CBQoS Pre-Policy Class Map

 If this resource is displayed on any Interface Details view, the CBQoS Pre-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to defined classes passing through the viewed interface prior to the application of any policy maps.

If this resource is displayed on the CBQoS Details view, the CBQoS Pre-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to the selected CBQoS policy class passing through the viewed interface prior to the application of any policy maps.

Clicking **Edit** allows you to edit the following attributes of the CBQoS Pre-Policy Class Map resource:

- **Resource Style** indicates whether or not the resource displays a chart.

- **Chart Style** provides options for displaying area or 2D or 3D pie charts.

- Click **Submit** after configuring your CBQoS Post-Policy Class Map resource.

CBQoS Drops

If this resource is displayed on any Interface Details view, the CBQoS Drops resource provides both a graph and a table reporting each of the defined classes and corresponding amounts of traffic that are filtered out or dropped as a result of policy maps currently enacted on the viewed interface.

If this resource is displayed on the CBQoS Details view, the CBQoS Drops resource provides both a graph and a table reporting the amount of traffic corresponding to the selected CBQoS policy class that is filtered out or dropped as a result of policy maps currently enacted on the viewed interface.

Edit Resource: CBQoS Drops

Clicking **Edit** in the resource header allows you to edit the following attributes of CBQoS Drops:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in using of the following choices:

- o **Rate Kbps) (default)**
- o **% of total traffic**
- o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring CBQoS Drops.

CBQoS Post-Policy Class Map

If this resource is displayed on any Interface Details view, the CBQoS Post-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to defined classes passing through the viewed interface resulting from the application of policy maps on the viewed interface.

If this resource is displayed on the CBQoS Details view, the CBQoS Post-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to the selected CBQoS policy class passing through the viewed interface resulting from the application of policy maps on the viewed interface.

Edit Resource: CBQoS Post-Policy Class Map
Clicking **Edit** in the resource header allows you to edit the following attributes of CBQoS Post-Policy Class Map:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring CBQoS Post-Policy Class Map.

CBQoS Pre-Policy Class Map

If this resource is displayed on any Interface Details view, the CBQoS Pre-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to defined classes passing through the viewed interface prior to the application of any policy maps.

If this resource is displayed on the CBQoS Details view, the CBQoS Pre-Policy Class Map resource provides both a graph and a table detailing both the average and the most recently polled amount of traffic corresponding to the selected CBQoS policy class passing through the viewed interface prior to the application of any policy maps.

Edit Resource: CBQoS Pre-Policy Class Map

Clicking **Edit** allows you to edit the following attributes of the CBQoS Pre-Policy Class Map resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your CBQoS Pre-Policy Map.

CBQoS Policy Details

If this resource is displayed on any Interface Details view, the CBQoS Policy Details resource provides both a graph and a table reporting the amount of traffic corresponding to defined classes that has passed over the viewed interface in both the hour and the 24 hours prior to the currently viewed time period.

If this resource is displayed on the CBQoS Details view, the CBQoS Policy Details resource provides both a graph and a table detailing the amount of traffic corresponding to the selected CBQoS policy class that has passed over the viewed interface in both the hour and the 24 hours prior to the currently viewed time period.

Edit Resource: CBQoS Policy Details Map

Clicking **Edit** in the resource header allows you to edit the following attributes of a CBQoS Policy Details Map:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring the CBQoS Policy Details Map.

NetFlow Traffic Analyzer

The following resources are available by default in the NetFlow Traffic Analysis Summary view.

- Last 25 Traffic Analysis Events

- NetFlow Collector Services

- Top XX Applications

- Top XX Conversations

- Top XX IP Address Groups Conversations

- Top XX Autonomous Systems

- Top XX Autonomous Systems Conversations

- NetFlow Sources

- thwack Recent NetFlow Posts Resource

- What's New in NetFlow Traffic Analyzer

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Traffic Analysis Summary view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

NetFlow Sources

Provides a list of Flow- and CBQoS-enabled nodes and interfaces that are currently monitored by Orion NPM. For each listed device, the NetFlow Sources resource provides the following information:

- A color-coded device status icon

- An icon indicating the device type or manufacturer

- For each listed source interface, both the incoming and outgoing traffic volumes are reported.

- For all listed Flow-enabled devices, a date-time stamp of the last Flow packet received by the Orion NTA collector.

- For all listed CBQoS-enabled devices, a date-time stamp of the last CBQoS poll completed by the Orion NTA collector.

Device status icons are color-coded as indicated in the following table.

Icon Color	Device Status Indication
Green	The selected source is either able to actively send Flow data or it is currently able to provide CBQoS information.
Yellow	Device status is unknown, Flow data has not been received, or CBQoS information cannot be polled from the selected device. This color may be displayed for interfaces on a Down node, as it is impossible to determine interface status when the parent node is down.
Red	The selected device is unable to actively provide Flow or CBQoS data.

Clicking **+** next to a listed node expands the list of interfaces on the selected parent node.

Clicking a node name opens the NetFlow Node Details view for the selected node. For more information, see NetFlow Node Details View.

Clicking an interface name opens the NetFlow Interface Details view for the selected interface. For more information, see NetFlow Interface Details View.

Note: If you are not seeing expected Flow- or CBQoS-enabled devices in the NetFlow Sources resource, confirm that the following is true for your Flow- and CBQoS-enabled devices:

- Confirm that the automatic addition of NetFlow sources option is enabled on the NetFlow Traffic Analysis Settings view. For more information, see Enabling the Automatic Addition of Flow Sources in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

- Flow-enabled nodes and interfaces must be monitored by Orion NPM before they can be recognized in as Flow sources in Orion NTA. For more information about adding devices for monitoring by Orion NPM, see Flow-enabled Devices and Interfaces in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

- Flow-enabled devices must be configured to send Flow data to the Orion NPM server on which you have installed Orion NTA. For more information about configuring devices to send Flows to Orion NTA, see Configuring Flow Sources and CBQoS Devices in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

- Confirm that the SolarWinds NetFlow Service has been started in the Windows Services listing. To view a list of services, log on to your Orion NTA server as an administrator, and then click **Start> Administrative Tools> Services**.

Clicking **Manage Sources** opens the Manage NetFlow Sources view where you can select available Flow sources and CBQoS-enabled devices. For more information, see Configuring Flow Sources and CBQoS Devices in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

Clicking **Edit** allows you to edit the resource Title and indicate if you want to **Show NetFlow sources** or **Show CBQoS sources**. Click **Submit** after editing the NetFlow Sources resource to keep all changes.

Last 25 Traffic Analysis Events

Provides a list of the last 25 Orion NTA-related events. These events can include but are not limited to stopping or starting the NetFlow Receiver service and the reception of NetFlow data on an unmonitored interface.

Note: Depending on the type of event, clicking a link in a listed event may open an Orion NPM view. For more information about Orion NPM, see the *SolarWinds Orion Network Performance Monitor Administrator Guide*.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing the resource to keep all changes.

NetFlow Collector Services

Provides status information about the servers on which you have installed Orion NetFlow Traffic Analyzer to collect Flow and CBQoS information . The following information about the collectors and the ports on which they are listening for Flow and CBQoS data is provided in the table:

Status Icon

>   Displays collector status visually, where a green icon indicates that the collector can actively receive Flow and CBQoS data and a red icon indicates that the collector cannot actively receive Flow and CBQoS data.

Server Name

>   The network identification of the NetFlow collector.

Receiver Status

> A verbal statement of collector status.

Collection Port

> This is the port on which the NetFlow collector is listening for NetFlow data. The collection port is set during the installation and configuration of Orion NetFlow Traffic Analyzer.

Clicking **Edit** opens the Edit NetFlow Collector Services view where you can select the ports on which the selected collector listens for Flows.

Note: Separate listed ports with a single comma, as in `2055,9995`.

Clicking **Delete** next to any listed collector deletes it, if necessary. For more information about the Edit NetFlow Collector Services view, see Configuring Netflow Collector Services Ports in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

Note: If you delete all collectors, you must either run the Configuration Wizard again to restore your initial settings or provide another collector from a different Orion poller. No NetFlow data is collected if all collectors are deleted.

Search by Application/Port

The Search by Application/Port resource allows you to search, by name or by port, for applications or ports in use on your monitored network, as shown in the following procedure.

To search for an application or port associated with monitored traffic:

1. Select either **Application Name** or **Port** from the **Search by** menu.
2. Enter application name keywords or port numbers, as appropriate, in the **Find** field.

    Note: The asterisk (∗) may be used as a wildcard.

3. Click the arrow at the left to select an appropriate **Named**, **Relative** or **Absolute Time Period** from the dropdown, and then click **Submit**. (By default, the Search tool searches within the Last 15 Minutes.)
4. Click **Search** to generate a list of results.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing the resource to keep all changes.

Search by Endpoint

The Search by Endpoint resource allows you to search for NetFlow endpoints involved in monitored traffic on your network, using any of the following criteria:

- **IP Address**
- **Hostname**
- **IP Address Group Name**
- **Country**
- **Domain**

To search for a NetFlow endpoint:

1. Select a search criterion from the **Search by** menu.
2. Enter search keywords in the **Find** field.

   Note: The asterisk (∗) may be used as a wildcard.

3. Click the arrow at the left to select an appropriate **Named**, **Relative** or **Absolute Time Period** from the dropdown, and then click **Submit**. (By default, the Search tool searches within the Last 15 Minutes.)
4. Click **Search** to generate a list of results.

Clicking **Edit** allows you to edit the resource Title and select an appropriate default **Named**, **Relative** or **Absolute Time Period**. Click **Submit** after editing the resource to keep all changes.

thwack Recent NetFlow Posts Resource

This resource shows the most recent Orion NTA-related posts that have been submitted to thwack, the online SolarWinds user community.

Clicking the title of any listed post opens the corresponding thwack post in a new browser.

Clicking **Edit** gives you the option to set the **Maximum Number of Posts to Display** in the resource. Provide the number of post titles you want to display in the resource, and then click **Submit**.

Clicking **View All** opens the thwack NetFlow Traffic Analyzer forum, where you can read all posts related to Orion NTA.

Clicking **Join thwack** opens the thwack registration page where you can become a member of thwack, the SolarWinds online community. Provide requested information, and then click **Join Now!** to gain immediate access to the thwack community.

Top XX NetFlow Sources by Percent Utilization

Provides a view of the monitored NetFlow sources that are producing the most traffic.

The table provides the name or IP address of each NetFlow source, the interface, the received percent utilization, and the transmitted percent utilization.

Clicking a node opens the NetFlow Node Details view. For more information, see NetFlow Node Details View.

Clicking an interface opens the NetFlow Interface Details view. For more information, see NetFlow Node Details View.

The following options may be modified by clicking **Edit**:

- The **Title** of the Top XX NetFlow Sources by Percent Utilization resource.

- **Maximum Number of Items to Display** is the number of NetFlow sources for which you want to monitor traffic in the Top XX NetFlow Sources by Percent Utilization view.

- Click **Submit** after editing the resource to keep all changes.

What's New in NetFlow Traffic Analyzer?

This resource highlights the new features and improvements of the current version of Orion NTA. Provided links display the new features and improvements included in this version.

Note: Click **Remove this Resource** to keep this resource from displaying in the future. This resource may display again if you choose to upgrade Orion NTA in the future.

New Interactive Charts

The new interactive charts in Orion NTA let you easily zoom in to focus on problem areas. The new charts load faster than the previous charts, and display tool tips on mouseover. Orion NTA enables the new charts by default on all views.

Japanese Localization

Orion NTA is now fully localized in Japanese. Customers interested in running the Japanese version of NTA will need to perform a fresh Orion NTA installation. For more information on localizing Orion NTA, see Installing a Localized Version of Orion NTA in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

Support for non-SNMP-enabled Devices

Orion NTA can now receive flows from non-SNMP-enabled devices, such as the VMware® vSwitch®. Orion NTA achieves this support by receiving flows from unmanageable interfaces from nodes NPM manages. Adding the device's interface to NPM enables the NetFlow Receiver Service to process the flow data it exports to NTA.

Support for sFlow v2 and v4

In addition to already supporting sFlow version 5, Orion NTA is now backwards-compatible with sFlow versions 2 and 4.

SQL Server 2012 Compatibility

Orion NTA can now be used with Microsoft's newest database, SQL Server 12.

Top XX Applications

This resource provides a view of the top XX applications responsible for monitored traffic on your network, ranked in order of traffic volume.

When placed on the Node Details or Interface Details view, this resource provides a view of the applications responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Applications (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of applications through which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

If you are viewing the Top XX Applications resource on an Unmonitored traffic view, click **Monitor Port** to enable monitoring of the listed port. In the Monitor Application window, provide the **Port(s)** and corresponding **Protocol**, with an appropriate **Description**, and then click **Add Application** to enable monitoring.

The table below the chart provides the following information:

- The application name with its assigned port number in parentheses

- The amount of data, in both bytes and packets, flowing to the selected application through the viewed node

- The percentage of all traffic through the viewed node that can be attributed to use of the listed application.

Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces over which selected application traffic is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Conversations

 This resource provides a list of the XX most bandwidth-consuming conversations conducted over your monitored network. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations initiated or terminated at the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic conducted over the selected Flow-enabled node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- Conversation endpoints with IP addresses in parentheses

- The amount of data, in both bytes and packets, flowing in the selected conversation through the viewed node or interface.

- The percentage of all traffic through the viewed node or interface that can be attributed to a particular conversation.

Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

    If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

    o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

    o **Line Chart** is a simple area chart created using lines to connect a series of data points.

    o **Spline** is a line chart that plots a fitted curve through each data point in a series.

    o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.
  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Countries

 This resource provides a view of the countries hosting endpoints that transmit the most data through the viewed node or interface over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Countries (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of countries to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

For each listed country, this resource provides the following information:

- The name of the country

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed country over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed country

Clicking **+** to expand a listed country provides a list of the nodes and their respective interfaces through which the selected country is currently passing data.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

* a **2D Pie Chart** that presents a "flat" view of your data.

* a **3D Pie Chart.**

* an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

* **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

* **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

* **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

* **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Sources by Country

This resource provides a view of the countries that serve as biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for sending most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed country

- The percentage of all traffic that is traceable to endpoints in the country

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Destinations by Country

This resource provides a view of the countries that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries that receive the most traffic from the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed country

- The percentage of all traffic that is routed to endpoints within the listed country

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.
  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top Traffic Sources by Domain

Provides a list of domains from which traffic running through the node is originating. Domains are listed in descending order by the number of packets and bytes and the overall percentage of traffic they are sending.

The table below the chart provides the following information:

• The name of the domain

• The amount of traffic, in both bytes and packets, sent from each domain through the viewed node over the selected period of time

• The percentage of all traffic over the selected node that is traceable to each listed domain

Top XX Resources provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays. **Chart Type** is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

Note: You must first select **Area Chart** from the **Chart Type** menu to display **Data Units** options.

• **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

• **% of interface speed** displays the percentage of interface speed consumed to transfer data.

   Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Clicking **Edit** in the resource header allows you to edit the following attributes of the Top XX Conversations resource:

- The **Maximum Number of Items to Display** is the maximum number of conversations that you want the Top XX Conversations resource to display.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  - **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- The **Data Units** setting includes options for displaying data transfer rates, % of total traffic, or the data transferred over a specific interval. The **Data Units** selection provides the following options:

Top Traffic Destinations by Domain

Provides a list of domains to which traffic running through the node is destined. Domains are listed in descending order by the number of packets and bytes and the overall percentage of traffic they are receiving.

The table below the chart provides the following information:

- The name of the domain

- The amount of traffic, in both bytes and packets, sent to each domain through the viewed node over the selected period of time

- The percentage of all traffic over the selected node that is traceable to each listed domain

Top XX Resources provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays. **Chart Type** is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

Note: You must first select **Area Chart** from the **Chart Type** menu to display **Data Units** options.

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

   Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Clicking **Edit** in the resource header allows you to edit the following attributes of the Top XX Conversations resource:

- The **Maximum Number of Items to Display** is the maximum number of conversations that you want the Top XX Conversations resource to display.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- The **Data Units** setting includes options for displaying data transfer rates, % of total traffic, or the data transferred over a specific interval. The **Data Units** selection provides the following options:

Top XX Traffic Sources by Domain

This resource provides a view of the domains that serve as biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for sending most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each domain:

- The name of the domain

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed domain

- The percentage of all traffic that is traceable from endpoints in the domain

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top *XX* Traffic Destinations by Domain

This resource provides a view of the domains that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains that receive the most traffic from the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each domain:

- The name of the domain

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed domain

- The percentage of all traffic that is routed to endpoints within the listed domain

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

       Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

       Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

       Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

       Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

    If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

    o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

    o **Line Chart** is a simple area chart created using lines to connect a series of data points.

    o **Spline** is a line chart that plots a fitted curve through each data point in a series.

    o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Endpoints

This resource provides an at-a-glance chart view of the monitored endpoints that are producing the most traffic on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the endpoints responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Endpoints (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of endpoints to which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

For each listed endpoint, this resource provides the following information:

- The endpoint hostname or IP address

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed endpoint over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed endpoint

Note: Because there are always two endpoints for each communication packet processed through a network device, the total traffic counted for endpoints can seem double what it is.

Clicking an endpoint opens the NetFlow Endpoints view. For more information, see NetFlow Endpoints View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking the arrow next to the time period setting below the resource name (for example, "NetFlow Endpoints Summary") allows you to set the time period in three ways:

- **Named Time Period**: Interval can be Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, or Today.

- **Relative Time Period**: Interval can be set in Minutes, Hours, Days, Months.

- **Absolute Time Period**: Interval can be set with a specific range of dates and times.

Note: For Named Time Period and Relative Time Period, due to the way NTA uses aggregated data to calculate the Top Talker statistics, you will always be presented with 2 minutes of data less of actual data than your setting. For example, if you set the interval to cover the last 5 minutes, you will see 5 minutes but the last 2 minutes of actual data will not be reflected. This is so because there is a 2 minute delay in loading data into the database.

Clicking **+** to expand a listed endpoint provides a list of the nodes and their respective interfaces over which traffic to or from the selected endpoint is currently flowing. Clicking any expanded nodes or interfaces opens the NetFlow Endpoint view presenting related statistics for each endpoint. For more information, see NetFlow Endpoints View.

Clicking **+** to expand a listed country provides a list of the nodes and their respective interfaces through which the selected country is currently passing data.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

Absolute Time Period

Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

   If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

   o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

   o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

   o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

   o **Line Chart** is a simple area chart created using lines to connect a series of data points.

   o **Spline** is a line chart that plots a fitted curve through each data point in a series.

   o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Domains

This resource provides a view of the domains responsible for the most traffic through the viewed node over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Domains (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of domains to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Note: If you have enabled On Demand DNS resolution to enhance Orion NTA and database performance, you will not be able to view Top XX Domains information. For more information about DNS resolution options in Orion NTA see Configuring DNS Resolution.

Assuming you are seeing Top XX Domains information, since packet flow for both IP Groups and Countries can include two domains within each communication packet processed through a network device, the total traffic m presented for top domains may appear as much as twice what it actually is.

The table below the chart provides the following information:

- The domain logo icon, if available, and name

- The amount of traffic, in both bytes and packets, transmitted by each domain through the viewed interface over the selected period of time

- The percentage of all traffic over the selected interface that is traceable to the listed domain.

Clicking **+** to expand a listed conversations provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

*   a **2D Pie Chart** that presents a "flat" view of your data.

*   a **3D Pie Chart.**

*   an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

*   **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

*   **% of interface speed** displays the percentage of interface speed consumed to transfer data.

    Note: This option only displays when you view ingress and egress data through a selected interface.

*   **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

*   **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Transmitters

This resource provides a list of the XX transmitters consuming the bandwidth over your monitored network. Transmitters are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the transmitters responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Transmitters (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of transmitters that initiated traffic to the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The name or IP address of the transmitting endpoint

- The amount of data, in both bytes and packets, routed through the viewed node transmitted by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is transmitted by the listed endpoint over the specified period of time

Clicking **+** to expand a listed transmitter provides a list of the nodes and their respective interfaces through which data is currently flowing from the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

    If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.
- o **Line Chart** is a simple area chart created using lines to connect a series of data points.
- o **Spline** is a line chart that plots a fitted curve through each data point in a series.
- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.
  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Receivers

This resource provides a list of the XX receivers consuming the bandwidth over your monitored network. Receivers are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the receivers responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Receivers (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of receivers to which the selected node or interface initiated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The name or IP address of the receiving endpoint

- The amount of data, in both bytes and packets, routed through the viewed node received by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is received by the listed endpoint over the specified period of time

Clicking **+** to expand a listed receiver provides a list of the nodes and their respective interfaces through which data is currently being received by the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o   **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o   **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o   **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o   **Line Chart** is a simple area chart created using lines to connect a series of data points.

o   **Spline** is a line chart that plots a fitted curve through each data point in a series.

o   **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

•   a **2D Pie Chart** that presents a "flat" view of your data.

•   a **3D Pie Chart.**

•   an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Protocols

This resource provides an at-a-glance chart view of the protocols used most for traffic on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the protocols responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Protocols (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of protocols over which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The protocol type

- The amount of data, in both bytes and packets, using the listed protocol as it is routed through the viewed node over the specified period of time

- The percentage of all traffic through the viewed node that has been using each listed protocol over the specified period of time

Clicking any listed protocol opens the NetFlow Protocol view that presents similar statistics for each protocol. For more information, see [NetFlow Protocol View](#).

Clicking **+** to expand a listed protocol provides a list of the nodes and their respective interfaces over which traffic associated with the selected protocol is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow Protocol view presenting related statistics for each protocol. For more information, see [NetFlow Protocol View](#).

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    > Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Types of Service

This resource provides a view of the most active services on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the service types responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Types of Service (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of service types with which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The type of service

- The amount of traffic, in both bytes and packets, handled by the listed service through the viewed node over the selected period of time

- The percentage of all serviced traffic through the viewed node that is handled by the listed type of service

You can click each listed service type to open the NetFlow Types of Service Details view that presents similar statistics for each service type. Clicking a service type opens the NetFlow Type of Service view for the selected service type. For more information, see Configuring NetFlow Types of Service.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Autonomous Systems

This resource provides a list of the most bandwidth-intensive autonomous systems. Autonomous systems are listed with the amount of data (kbps) transferred, in both bytes and packets, and the percentage of all traffic generated by the autonomous system over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the autonomous systems responsible for the most traffic passing through the viewed node or interface over the selected period of time.

Clicking a listed autonomous system or drilling down to relevant nodes and interfaces opens the NetFlow Autonomous Systems Summary for the selected autonomous system. The NetFlow Autonomous System Summary provides both a chart of Total Bytes Transferred by the autonomous system and a Conversation Traffic History. For more information, see NetFlow Autonomous Systems View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    > Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Autonomous Systems Conversations

This resource provides a list of the most bandwidth-intensive autonomous systems conversations. Autonomous systems conversations are listed with the amount of data (kbps) transferred, in both bytes and packets, and the percentage of all traffic generated by the autonomous system over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the autonomous systems conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

Clicking a listed autonomous systems conversations or drilling down to relevant nodes and interfaces opens the NetFlow Autonomous Systems Conversations Summary for the selected conversation. The NetFlow Autonomous Systems Conversations Summary provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Autonomous System Conversations View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Total Bytes Transferred

This resource displays a chart that details the total number of bytes that are both transmitted and received over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Total Bytes Transferred (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the total bytes transferred by the viewed node or interface over the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing your Total Bytes Transferred resource to keep all changes.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    > Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Conversation Total Bytes Transferred

This resource displays a chart that details the total number of bytes that are both transmitted and received during conversations over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred during conversations utilizing the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing your Total Bytes Transferred resource to keep all changes.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

   Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Autonomous System Conversation Total Bytes Transferred

This resource displays a chart that details the total number of bytes that are both transmitted and received during autonomous system conversations over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred during autonomous system conversations utilizing the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing your Total Bytes Transferred resource to keep all changes.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Total Packets Transferred

This resource displays a chart that details the total number of packets that are transferred over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total packets transferred through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Total Packets Transferred (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the total packets transferred by the viewed node or interface over the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing your Total Packets Transferred resource to keep all changes.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

    Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Unique Visitors

This resource provides a chart reporting the number of unique IP addresses that have communicated over the network during a specified period of time.

When placed on the Node Details or Interface Details view, the resource provides a chart reporting the number of unique IP addresses that have communicated with the viewed node or interface.

A custom endpoint-centric version of this resource, called **Unique Visitors (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the unique IP addresses with which the viewed node or interface has communicated during the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period that is applied to all default view resources, however, resources that are added to customize a view may not be subject to this time period control.

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Unique Visitors resource.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- • a **2D Pie Chart** that presents a "flat" view of your data.

- • a **3D Pie Chart.**

- • an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Applications

This resource provides a view of the top XX applications responsible for monitored traffic on your network, ranked in order of traffic volume.

When placed on the Node Details or Interface Details view, this resource provides a view of the applications responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Applications (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of applications through which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The application name with its assigned port number in parentheses

- The amount of data, in both bytes and packets, flowing to the selected application through the viewed node

- The percentage of all traffic through the viewed node that can be attributed to use of the listed application.

Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces over which selected application traffic is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Applications

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.
- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.
- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.
- o **Line Chart** is a simple area chart created using lines to connect a series of data points.
- o **Spline** is a line chart that plots a fitted curve through each data point in a series.
- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.
- **Data Units** pull-down menu lets you display data using one of the following choices:
  - o **Rate Kbps) (default)**
  - o **% of total traffic**
  - o **Data transferred per time interval**
- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Conversations

This resource provides a list of the XX most bandwidth-consuming conversations conducted over your monitored network. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations initiated or terminated at the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic conducted over the selected Flow-enabled node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

The table below the chart provides the following information:

- Conversation endpoints with IP addresses in parentheses

- The amount of data, in both bytes and packets, flowing in the selected conversation through the viewed node or interface.

- The percentage of all traffic through the viewed node or interface that can be attributed to a particular conversation.

Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Conversations

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

     - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

     - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

     - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  - o **Rate Kbps) (default)**

  - o **% of total traffic**

  - o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Countries

This resource provides a view of the countries hosting endpoints that transmit the most data through the viewed node or interace over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Countries (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of countries to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

For each listed country, this resource provides the following information:

- The name of the country

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed country over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed country

Clicking **+** to expand a listed country provides a list of the nodes and their respective interfaces through which the selected country is currently passing data.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Countries

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

    a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

    b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

    o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

    o **Line Chart** is a simple area chart created using lines to connect a series of data points.

    o **Spline** is a line chart that plots a fitted curve through each data point in a series.

    o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

    o **Rate Kbps) (default)**

    o **% of total traffic**

    o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Sources by Country

This resource provides a view of the countries that serve as biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for sending most traffic to the viewed node or interface over the selected period of time.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed country

- The percentage of all traffic that is traceable to endpoints in the country

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Traffic Sources by Country

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  - o **Rate (Kbps) (default)**

  - o **% of total traffic**

  - o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Destinations by Domain

This resource provides a view of the domains that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains that receive the most traffic from the viewed node or interface over the selected period of time.

The table below the chart provides the following information for each domain:

- The name of the domain

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed domain

- The percentage of all traffic that is routed to endpoints within the listed domain

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Traffic Destinations by Domain

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Endpoints

This resource provides an at-a-glance chart view of the monitored endpoints that are producing the most traffic on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the endpoints responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Endpoints (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of endpoints to which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

For each listed endpoint, this resource provides the following information:

- The endpoint hostname or IP address

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed endpoint over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed endpoint

Note: Because there are always two endpoints for each communication packet processed through a network device, the total traffic counted for endpoints can seem double what it is.

Clicking an endpoint opens the NetFlow Endpoint view. For more information, see NetFlow Endpoints View.

Note: For Named Time Period and Relative Time Period, due to the way Orion NTA uses aggregated data to calculate the Top Talker statistics, you will always be presented with 2 minutes less data than the actual data shown in your setting. For example, if you set the interval to cover the last 5 minutes, you will see 5 minutes of data, but the last 2 minutes of actual data will not be reflected. This is because there is a 2 minute delay in loading data into the database.

Clicking **+** to expand a listed endpoint provides a list of the nodes and their respective interfaces over which traffic to or from the selected endpoint is currently flowing. Clicking any expanded nodes or interfaces opens the NetFlow Endpoint view presenting related statistics for each endpoint. For more information, see NetFlow Endpoints View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Endpoints

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Domains

This resource provides a view of the domains responsible for the most traffic through the viewed node over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Domains (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of domains to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Note: If you have enabled On Demand DNS resolution to enhance Orion NTA and database performance, you will not be able to view Top XX Domains information. For more information about DNS resolution options in Orion NTA see Configuring DNS Resolution. Assuming you are seeing Top XX Domains information, since packet flow for both IP Groups and Countries can include two domains within each communication packet processed through a network device, the total traffic m presented for top domains may appear as much as twice what it actually is.

The table below the chart provides the following information:

- The domain logo icon, if available, and name

- The amount of traffic, in both bytes and packets, transmitted by each domain through the viewed interface over the selected period of time

- The percentage of all traffic over the selected interface that is traceable to the listed domain.

Clicking **+** to expand a listed conversations provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Domains
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

   a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

   b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

      - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

      - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

      - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  - o **Rate Kbps) (default)**

  - o **% of total traffic**

  - o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Transmitters

This resource provides a list of the XX transmitters consuming the bandwidth over your monitored network. Transmitters are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the transmitters responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Transmitters (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of transmitters that initiated traffic to the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The name or IP address of the transmitting endpoint

- The amount of data, in both bytes and packets, routed through the viewed node transmitted by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is transmitted by the listed endpoint over the specified period of time

Clicking **+** to expand a listed transmitter provides a list of the nodes and their respective interfaces through which data is currently flowing from the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Transmitters

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.
- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.
- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.
- o **Line Chart** is a simple area chart created using lines to connect a series of data points.
- o **Spline** is a line chart that plots a fitted curve through each data point in a series.
- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:
  - o **Rate Kbps) (default)**
  - o **% of total traffic**
  - o **Data transferred per time interval**
- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Receivers

This resource provides a list of the XX receivers consuming the bandwidth over your monitored network. Receivers are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the receivers responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Receivers (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of receivers to which the selected node or interface initiated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The name or IP address of the receiving endpoint

- The amount of data, in both bytes and packets, routed through the viewed node received by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is received by the listed endpoint over the specified period of time

Clicking **+** to expand a listed receiver provides a list of the nodes and their respective interfaces through which data is currently being received by the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Receivers

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

   a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

   b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

      - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

      - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

      - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  - o **Rate Kbps) (default)**

  - o **% of total traffic**

  - o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

IP Address Groups

Orion NetFlow Traffic Analyzer allows you to establish IP address groups for selective monitoring of custom categories or segments of your network.

The following steps set ranges and descriptions for your network IP addresses so that you can better characterize and assess the NetFlow data that you receive.

If any one of the pre-existing ranges contains the addresses that you want Orion NetFlow Traffic Analyzer to monitor, check the range, and then click **Submit**.

If none of the pre-existing ranges contains the addresses that you want Orion NetFlow Traffic Analyzer to monitor, complete either of the following series of steps to define your IP address group:

- ***If you want to edit an existing group,*** check the group, click **Edit,** define the starting and ending IP addresses in its range, enter a description, and then click **Submit**.

- ***If you want to add a new group,*** click **Add New Group,** enter the **Start** and **End of IP address range**, enter a **Description**, and then click **Submit**.

If you want to delete an existing group, check the group range that you want to delete, and then click **Delete**.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: IP Address Groups

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. ***If you want to retain the global settings configured in NTA Settings,*** select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global time settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX IP Address Groups

This resource provides a view of the IP address groups responsible for the most traffic on your network.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups responsible for the most traffic through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a list of IP address groups by traffic initiated or terminated at the selected node or interface. To add a resource of this type, see [Adding an Endpoint Centric Resource](#).

The table below the chart provides the following information:

- The IP address group range or name

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed IP address group over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed IP address group

Note: Because there can be two domains for each communication packet processed through a network device, the total traffic counted for IP Address Groups can seem as much as twice what it is.

Clicking any listed IP address group opens the NetFlow IP Address Group view that presents similar statistics for each IP address group. For more information, see [NetFlow IP Address Group View](#).

Clicking **+** to expand a listed IP address group provides a list of the nodes and their respective interfaces over which traffic associated with the selected IP address group is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow IP Address Group view presenting related statistics for each IP address group. For more information, see [NetFlow IP Address Group View](#).

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Sources by IP Address Groups

This resource provides a view of the IP address groups that serve as sources of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups that send the most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to all resources on the view. However, resources set for an individual time period using the edit page are not subject to this time period control.

The table below the chart provides the following information for each IP address group:

- The name of the IP address group

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed IP address group

- The percentage of all traffic that is routed from endpoints within the listed IP address group

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

* a **2D Pie Chart** that presents a "flat" view of your data.

* a **3D Pie Chart.**

* an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

* **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

* **% of interface speed** displays the percentage of interface speed consumed to transfer data.
  Note: This option only displays when you view ingress and egress data through a selected interface.

* **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

* **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Destinations by IP Address Groups

This resource provides a view of the domains that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups that receive the most traffic from the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each IP address group:

- The name of the IP Address Group

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed IP Address Group

- The percentage of all traffic that is routed to endpoints within the listed IP Address Group

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX IP Address Groups Conversations

This resource provides a list of the most bandwidth-intensive conversations associated with and IP Group. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets, and the percentage of total application traffic generated by the conversation over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations in which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic routed through the relevant monitored node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

This resource provides a view of the IP address groups' conversations responsible for the most traffic through the viewed node over the selected period of time.

The table below the chart provides the following information:

- The IP address group range or name

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed IP address group over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed IP address group

Note: Because there can be two domains for each communication packet processed through a network device, the total traffic counted for IP Address Groups can seem as much as twice what it is.

Clicking any listed IP address group opens the NetFlow IP Address Group view that presents similar statistics for each IP address group. For more information, see NetFlow IP Address Group View.

Clicking **+** to expand a listed IP address group provides a list of the nodes and their respective interfaces over which traffic associated with the selected IP address group is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow IP Address Group view presenting related statistics for each IP address group. For more information, see NetFlow IP Address Group View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX IP Address Groups

This resource provides a view of the IP address groups responsible for the most traffic on your network.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups responsible for the most traffic through the viewed node or interface over the selected period of time. For information about managing this group's settings, see IP Address Groups.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a list of IP address groups by traffic initiated or terminated at the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The IP address group range or name

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed IP address group over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed IP address group

Note: Because there can be two domains for each communication packet processed through a network device, the total traffic counted for IP Address Groups can seem as much as twice what it is.

Clicking any listed IP address group opens the NetFlow IP Address Group view that presents similar statistics for each IP address group. For more information, see NetFlow IP Address Group View.

Clicking **+** to expand a listed IP address group provides a list of the nodes and their respective interfaces over which traffic associated with the selected IP address group is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow IP Address Group view presenting related statistics for each IP address group. For more information, see NetFlow IP Address Group View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX IP Address Groups

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Destinations by IP Address Groups

This resource provides a view of the domains that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period. For information about managing this group's settings, see IP Address Groups.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups that receive the most traffic from the viewed node or interface over the selected period of time.

The table below the chart provides the following information for each IP address group:

*   The name of the IP Address Group

*   The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed IP Address Group

*   The percentage of all traffic that is routed to endpoints within the listed IP Address Group

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Top XX Traffic Destinations by IP Address Group

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

*   **Title** reflects the name of the resource page. You can edit this, if desired.

*   **Subtitle** is an optional field you can use to further define your resource.

*   **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

*   **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

*   **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

*   **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following options:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top *XX* resource.

Top XX Protocols

This resource provides an at-a-glance chart view of the protocols used most for traffic on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the protocols responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Protocols (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of protocols over which the selected node or interface initiated or terminated traffic. To add a resource of this type, [Adding an Endpoint Centric Resource](#).

The table below the chart provides the following information:

- The protocol type.

- The amount of data, in both bytes and packets, using the listed protocol as it is routed through the viewed node over the specified period of time.

- The percentage of all traffic through the viewed node that has been using each listed protocol over the specified period of time.

Clicking any listed protocol opens the NetFlow Protocol view that presents similar statistics for each protocol. For more information, see [NetFlow Protocol View](#).

Clicking **+** to expand a listed protocol provides a list of the nodes and their respective interfaces over which traffic associated with the selected protocol is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow Protocol view presenting related statistics for each protocol. For more information, see [NetFlow Protocol View](#).

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Protocols

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings*. If you want to retain the global settings configured in NTA Settings*, select this option.

- The **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- The **Time Period** is the collection interval for which to display data.

    a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

    b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

        - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

        - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

        - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following options:

  - o **Rate Kbps) (default)**

  - o **% of total traffic**

  - o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Types of Service

When placed on the Node Details or Interface Details view, this resource provides a view of the service types responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Types of Service (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of service types with which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The type of service

- The amount of traffic, in both bytes and packets, handled by the listed service through the viewed node over the selected period of time

- The percentage of all serviced traffic through the viewed node that is handled by the listed type of service

You can click each listed service type to open the NetFlow Types of Service Details view that presents similar statistics for each service type. Clicking a service type opens the NetFlow Type of Service view for the selected service type. For more information, see Configuring NetFlow Types of Service.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Types of Service

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings*. If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Autonomous Systems

This resource provides a list of the most bandwidth-intensive autonomous systems. Autonomous systems are listed with the amount of data (kbps) transferred, in both bytes and packets, and the percentage of all traffic generated by the autonomous system over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the autonomous systems responsible for the most traffic passing through the viewed node or interface over the selected period of time.

Clicking a listed autonomous system or drilling down to relevant nodes and interfaces opens the NetFlow Autonomous Systems Summary for the selected autonomous system. The NetFlow Autonomous System Summary provides both a chart of Total Bytes Transferred by the autonomous system and a Conversation Traffic History. For more information, see NetFlow Autonomous Systems View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Autonomous Systems

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. *If you want to retain the global settings configured in NTA Settings*, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

    a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

    b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following options:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Destinations by Country

This resource provides a view of the countries that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries that receive the most traffic from the viewed node or interface over the selected period of time. For information about managing this group's settings, see IP Address Groups.

The table below the chart provides the following information for each country:

* The name of the country

* The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed country

* The percentage of all traffic that is routed to endpoints within the listed country

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Top XX Traffic Destinations by Country

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

* **Title** reflects the name of the resource page. You can edit this, if desired.

* **Subtitle** is an optional field you can use to further define your resource.

* **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

* **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

* **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

* **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Sources by Domain

This resource provides a list of domains from which traffic running through the node is originating. Domains are listed in descending order by the number of packets and bytes and the overall percentage of traffic they are sending.

The table below the chart provides the following information:

- The name of the domain

- The amount of traffic, in both bytes and packets, sent from each domain through the viewed node over the selected period of time

- The percentage of all traffic over the selected node that is traceable to each listed domain

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Top XX Traffic Sources by Domain

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

    a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

    b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

    o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

    o **Line Chart** is a simple area chart created using lines to connect a series of data points.

    o **Spline** is a line chart that plots a fitted curve through each data point in a series.

    o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

    o **Rate Kbps) (default)**

    o **% of total traffic**

    o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX IP Address Groups by Conversations

This resource provides a list of the most bandwidth-intensive conversations associated with and IP Group. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets, and the percentage of total application traffic generated by the conversation over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations in which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic routed through the relevant monitored node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

This resource provides a view of the IP address groups' conversations responsible for the most traffic through the viewed node over the selected period of time.

Edit Resources: Top XX Address Groups by Conversations

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

- o **Rate Kbps) (default)**
- o **% of total traffic**
- o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Sources by IP Address Groups

This resource provides a view of the IP address groups that serve as sources of traffic on the network, ranked by percentage of the total traffic over the specified time period. For information about managing this group's settings, see IP Address Groups.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups that send the most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each address group:

- The name of the IP address group

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed IP address group

- The percentage of all traffic that is routed from endpoints within the listed IP address group

Edit Resources: Top XX Traffic Sources by IP Address Groups
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

    a. To retain the global settings configured in NTA Settings, make sure Use Time Period from current view is selected.

    b. To change the time period, ensure Use Time Period from current view is not selected and define one of the following:

        - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

        - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

        - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

    o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

    o **Line Chart** is a simple area chart created using lines to connect a series of data points.

    o **Spline** is a line chart that plots a fitted curve through each data point in a series.

    o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in one of the following ways:

- o   Rate Kbps) (default)

- o   % of total traffic

- o   Data transferred per time interval

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Total Transferred Bytes

This resource displays a chart that details the total number of bytes that are both transmitted and received over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Total Bytes Transferred (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the total bytes transferred by the viewed node or interface over the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Top XX Traffic Sources by IP Address Groups
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

    c. To retain the global settings configured in NTA Settings, make sure Use Time Period from current view is selected.

    d. To change the time period, ensure Use Time Period from current view is not selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:
  - **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.
  - **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.
  - **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.
  - **Line Chart** is a simple area chart created using lines to connect a series of data points.
  - **Spline** is a line chart that plots a fitted curve through each data point in a series.
  - **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in one of the following ways:
  - Rate Kbps) (default)
  - % of total traffic
  - Data transferred per time interval

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

CBQos Conversation Total Bytes Transferred

This resource displays a chart that details the total number of bytes that are both transmitted and received during conversations over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred during conversations utilizing the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Conversation Total Bytes Transferred

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- The **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure Use Time Period from current view is selected.

  b. To change the time period, ensure Use Time Period from current view is not selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  - **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  - **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  - **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  - **Line Chart** is a simple area chart created using lines to connect a series of data points.

  - **Spline** is a line chart that plots a fitted curve through each data point in a series.

  - **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in one of the following ways:

  - **Rate Kbps) (default)**

  - **% of total traffic**

  - **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Autonomous System Conversation Total Bytes Transferred

This resource displays a chart that details the total number of bytes that are both transmitted and received during autonomous system conversations over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred during autonomous system conversations utilizing the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Autonomous System Conversation Total Bytes Transferred

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

   a. To retain the global settings configured in NTA Settings, make sure Use Time Period from current view is selected.

   b. To change the time period, ensure Use Time Period from current view is not selected and define one of the following:

   - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

   - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

   - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

   o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

   o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

   o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

   o **Line Chart** is a simple area chart created using lines to connect a series of data points.

   o **Spline** is a line chart that plots a fitted curve through each data point in a series.

   o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in one of the following ways:

   o **Rate Kbps) (default)**

   o **% of total traffic**

   o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Total Transferred Packets

This resource displays a chart that details the total number of packets that are transferred over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total packets transferred through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Total Packets Transferred (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the total packets transferred by the viewed node or interface over the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Total Packets Transferred

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure Use Time Period from current view is selected.

b. To change the time period, ensure Use Time Period from current view is not selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in one of the following ways:

  o Rate Kbps) (default)

  o % of total traffic

  o Data transferred per time interval

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Unique Visitors

This resource provides a chart reporting the number of unique IP addresses that have communicated over the network during a specified period of time.

When placed on the Node Details or Interface Details view, the resource provides a chart reporting the number of unique IP addresses that have communicated with the viewed node or interface.

A custom endpoint-centric version of this resource, called Unique Visitors (Endpoint Centric), can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the unique IP addresses with which the viewed node or interface has communicated during the selected period of time. To add a resource of this type, see [Adding an Endpoint Centric Resource](#).

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Unique Visitors

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- The **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure Use Time Period from current view is selected.

b. To change the time period, ensure Use Time Period from current view is not selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data in one of the following ways:

  o Rate Kbps) (default)

  o % of total traffic

  o Data transferred per time interval

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

NetFlow Application View

The NetFlow Application view allows you to characterize the amount and type of traffic on your network that is using a selected application or port. The following resources are available by default in the NetFlow Application view:

- Application Details

- Top XX Applications

- Top XX Traffic Sources by Country

- Top XX Traffic Destinations by Country

- Top XX Transmitters

- Top XX Receivers

- Top XX Protocols

- Top XX Types of Service

- Total Bytes Transferred

- Total Packets Transferred

- Unique Visitors

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current application view.

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Application view. For more information about customizing views in the Orion Web Console, see see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*..

The **NetFlow Settings** link in the view header provides direct access to the NetFlow Traffic Analysis Settings view. For more information about NetFlow Settings, see NetFlow Traffic Analysis Settings.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing application data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected application traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Application Details

The Application Details resource provides a table containing the following information about the application and port that you are currently viewing:

- Application name

- Port used by the application

- Total amount of application traffic in the indicated period of time

- Total number of application traffic packets sent in the indicated period of time

Click **Edit** to modify the Application Details resource **Title** or to add a **Subtitle**, and then click **Submit** after configuring your Application Details resource.

Note: Changes to the Application Details **Title** or **Subtitle** apply to the Application Details resources on all NetFlow Application views for applications monitored by Orion NetFlow Traffic Analyzer.

Warning: Clearing the **Title** field does not restore the default title, "Application Details." Any changes you make to the **Title** cannot be reverted to the initial value of "Application Details" unless you enter "Application Details" again.

Top XX Applications

This resource provides a view of the top XX applications responsible for monitored traffic on your network, ranked in order of traffic volume.

When placed on the Node Details or Interface Details view, this resource provides a view of the applications responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Applications (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of applications through which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

If you are viewing the Top XX Applications resource on an Unmonitored traffic view, click **Monitor Port** to enable monitoring of the listed port. In the Monitor Application window, provide the **Port(s)** and corresponding **Protocol**, with an appropriate **Description**, and then click **Add Application** to enable monitoring.

The table below the chart provides the following information:

- The application name with its assigned port number in parentheses

- The amount of data, in both bytes and packets, flowing to the selected application through the viewed node

- The percentage of all traffic through the viewed node that can be attributed to use of the listed application.

Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces over which selected application traffic is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Conversations

This resource provides a list of the XX most bandwidth-consuming conversations conducted over your monitored network. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations initiated or terminated at the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic conducted over the selected Flow-enabled node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

The table below the chart provides the following information:

- The devices in conversation with assigned port numbers in parentheses

- The amount of data, in both bytes and packets, flowing in the selected conversation through the viewed node or interface.

- The percentage of all traffic through the viewed node or interface that can be attributed to a particular conversation.

Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Countries

This resource provides a view of the countries hosting endpoints that transmit the most data through the viewed node or interace over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Countries (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of countries to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

For each listed country, this resource provides the following information:

- The name of the country

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed country over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed country

Clicking **+** to expand a listed country provides a list of the nodes and their respective interfaces through which the selected country is currently passing data.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.
  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Sources by Country

This resource provides a view of the countries that serve as biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for sending most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed country

- The percentage of all traffic that is traceable to endpoints in the country

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

    If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

    o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

    o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

    o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

    o **Line Chart** is a simple area chart created using lines to connect a series of data points.

    o **Spline** is a line chart that plots a fitted curve through each data point in a series.

    o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Destinations by Country

This resource provides a view of the countries that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries that receive the most traffic from the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed country

- The percentage of all traffic that is routed to endpoints within the listed country

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

* a **2D Pie Chart** that presents a "flat" view of your data.

* a **3D Pie Chart.**

* an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

* **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

* **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

* **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

* **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Domains

This resource provides a view of the domains responsible for the most traffic through the viewed node over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Domains (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of domains to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Note: If you have enabled On Demand DNS resolution to enhance Orion NTA and database performance, you will not be able to view Top XX Domains information. For more information about DNS resolution options in Orion NTA see Configuring DNS Resolution. Assuming you are seeing Top XX Domains information, since packet flow for both IP Groups and Countries can include two domains within each communication packet processed through a network device, the total traffic m presented for top domains may appear as much as twice what it actually is.

The table below the chart provides the following information:

- The domain logo icon, if available, and name

- The amount of traffic, in both bytes and packets, transmitted by each domain through the viewed interface over the selected period of time

- The percentage of all traffic over the selected interface that is traceable to the listed domain.

Clicking **+** to expand a listed conversations provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top *XX* Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Sources by Domain

This resource provides a view of the domains that serve as the biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for sending most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each domain:

- The name of the domain

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed domain

- The percentage of all traffic that is traceable from endpoints in the domain

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top *XX* Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Destinations by Domain

This resource provides a view of the domains that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains that receive the most traffic from the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each domain:

- The name of the domain

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed domain

- The percentage of all traffic that is routed to endpoints within the listed domain

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.
  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Endpoints

This resource provides an at-a-glance chart view of the monitored endpoints that are producing the most traffic on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the endpoints responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top Endpoints (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of endpoints to which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

For each listed endpoint, this resource provides the following information:

- The endpoint hostname or IP address

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed endpoint over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed endpoint

Note: Because there are always two endpoints for each communication packet processed through a network device, the total traffic counted for endpoints can seem double what it is.

Clicking an endpoint opens the NetFlow Endpoint view. For more information, see NetFlow Endpoints View.

The control under the view title designates the time period that is applied to all default view resources. Resources that are added to customize a view may not be subject to this time period control.

Clicking the arrow next to the time period setting below the resource name (for example, 'NetFlow Endpoints Summary) allows you to set the time period in three ways:

- **Named Time Period**: Interval can be Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, or Today.

- **Relative Time Period**: Interval can be set in Minutes, Hours, Days, Months.

- **Absolute Time Period**: Interval can be set with a specific range of dates and times.

Note: Due to the way NTA uses aggregated data to calculate the Top Talker statistics, you will always be presented with 2 minutes of data less than your setting. For example, if you set the interval to cover the last 5 minutes, you will see only 3 minutes of data on the graph. A workaround is to adjust your time period at least 2 minutes beyond the point for which you want to view Top Talker data.

Clicking **+** to expand a listed endpoint provides a list of the nodes and their respective interfaces over which traffic to or from the selected endpoint is currently flowing. Clicking any expanded nodes or interfaces opens the NetFlow Endpoint view presenting related statistics for each endpoint. For more information, see NetFlow Endpoints View.

Clicking **+** to expand a listed country provides a list of the nodes and their respective interfaces through which the selected country is currently passing data.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

   Use Time Period from current view (default)

      Allows the resource to inherit the setting from the view on which it is placed.

   Named Time Period

      Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

Relative Time Period

Accepts any number of Minutes, Hours, Days, and Months.

Absolute Time Period

Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top *XX* Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top *XX* Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top *XX* Resource transferred over a specific period of time.

Top XX Transmitters

This resource provides a list of the XX transmitters consuming the bandwidth over your monitored network. Transmitters are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the transmitters responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Transmitters (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of transmitters that initiated traffic to the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The name or IP address of the transmitting endpoint

- The amount of data, in both bytes and packets, routed through the viewed node transmitted by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is transmitted by the listed endpoint over the specified period of time

Clicking **+** to expand a listed transmitter provides a list of the nodes and their respective interfaces through which data is currently flowing from the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top *XX* resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  - **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  - **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.
- o **Line Chart** is a simple area chart created using lines to connect a series of data points.
- o **Spline** is a line chart that plots a fitted curve through each data point in a series.
- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Receivers

This resource provides a list of the *XX* receivers consuming the bandwidth over your monitored network. Receivers are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the receivers responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Receivers (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of receivers to which the selected node or interface initiated traffic. To add a resource of this type, see [Adding an Endpoint Centric Resource](#).

The table below the chart provides the following information:

- The name or IP address of the receiving endpoint

- The amount of data, in both bytes and packets, routed through the viewed node received by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is received by the listed endpoint over the specified period of time

Clicking **+** to expand a listed receiver provides a list of the nodes and their respective interfaces through which data is currently being received by the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX IP Address Groups

 This resource provides a view of the IP address groups responsible for the most traffic on your network.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups responsible for the most traffic through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a list of IP address groups by traffic initiated or terminated at the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The IP address group range or name

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed IP address group over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed IP address group

Note: Because there can be two domains for each communication packet processed through a network device, the total traffic counted for IP Address Groups can seem as much as twice what it is.

Clicking any listed IP address group opens the NetFlow IP Address Group view that presents similar statistics for each IP address group. For more information, see NetFlow IP Address Group View.

Clicking **+** to expand a listed IP address group provides a list of the nodes and their respective interfaces over which traffic associated with the selected IP address group is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow IP Address Group view presenting related statistics for each IP address group. For more information, see NetFlow IP Address Group View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

- • a **2D Pie Chart** that presents a "flat" view of your data.

- • a **3D Pie Chart.**

- • an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

   Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Sources by IP Address Groups

This resource provides a view of the IP address groups that serve as sources of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups that send the most traffic to the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for IP address group:

- The name of the IP Address Group

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed IP address group

- The percentage of all traffic that is routed from endpoints within the listed IP address group

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Traffic Destinations by IP Address Groups

This resource provides a view of the domains that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the IP address groups that receive the most traffic from the viewed node or interface over the selected period of time.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

The table below the chart provides the following information for each IP address group:

- The name of the IP Address Group

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed IP Address Group

- The percentage of all traffic that is routed to endpoints within the listed IP Address Group

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

  If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top *XX* Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX IP Address Groups Conversations

This resource provides a list of the most bandwidth-intensive conversations associated with and IP Group. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets, and the percentage of total application traffic generated by the conversation over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations in which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic routed through the relevant monitored node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

This resource provides a view of the IP address groups' conversations responsible for the most traffic through the viewed node over the selected period of time.

The table below the chart provides the following information:

- The IP address group range or name

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed IP address group over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed IP address group

Note: Because there can be two domains for each communication packet processed through a network device, the total traffic counted for IP Address Groups can seem as much as twice what it is.

Clicking any listed IP address group opens the NetFlow IP Address Group view that presents similar statistics for each IP address group. For more information, see NetFlow IP Address Group View.

Clicking **+** to expand a listed IP address group provides a list of the nodes and their respective interfaces over which traffic associated with the selected IP address group is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow IP Address Group view presenting related statistics for each IP address group. For more information, see NetFlow IP Address Group View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Protocols

This resource provides an at-a-glance chart view of the protocols used most for traffic on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the protocols responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top Protocols (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of protocols over which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The protocol type

- The amount of data, in both bytes and packets, using the listed protocol as it is routed through the viewed node over the specified period of time

- The percentage of all traffic through the viewed node that has been using each listed protocol over the specified period of time

Clicking any listed protocol opens the NetFlow Protocol view that presents similar statistics for each protocol. For more information, see NetFlow Protocol View.

Clicking **+** to expand a listed protocol provides a list of the nodes and their respective interfaces over which traffic associated with the selected protocol is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow Protocol view presenting related statistics for each protocol. For more information, see NetFlow Protocol View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Types of Service

This resource provides a view of the most active services on your monitored network.

When placed on the Node Details or Interface Details view, this resource provides a view of the service types responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top Types of Service (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of service types with which the selected node or interface initiated or terminated traffic. To add a resource of this type, see [Adding an Endpoint Centric Resource](#).

The table below the chart provides the following information:

- The type of service

- The amount of traffic, in both bytes and packets, handled by the listed service through the viewed node over the selected period of time

- The percentage of all serviced traffic through the viewed node that is handled by the listed type of service

You can click each listed service type to open the NetFlow Types of Service Details view that presents similar statistics for each service type. Clicking a service type opens the NetFlow Type of Service view for the selected service type.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

      Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

      Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

      Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

      Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Autonomous Systems

 This resource provides a list of the most bandwidth-intensive autonomous systems. Autonomous systems are listed with the amount of data (kbps) transferred, in both bytes and packets, and the percentage of all traffic generated by the autonomous system over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the autonomous systems responsible for the most traffic passing through the viewed node or interface over the selected period of time.

Clicking a listed autonomous system or drilling down to relevant nodes and interfaces opens the NetFlow Autonomous Systems Summary for the selected autonomous system. The NetFlow Autonomous System Summary provides both a chart of Total Bytes Transferred by the autonomous system and a Conversation Traffic History. For more information, see NetFlow Autonomous Systems View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- • a **2D Pie Chart** that presents a "flat" view of your data.

- • a **3D Pie Chart.**

- • an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top *XX* Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Autonomous Systems Conversations

This resource provides a list of the most bandwidth-intensive autonomous systems conversations. Autonomous systems conversations are listed with the amount of data (kbps) transferred, in both bytes and packets, and the percentage of all traffic generated by the autonomous system over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the autonomous systems conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

Clicking a listed autonomous systems conversations or drilling down to relevant nodes and interfaces opens the NetFlow Autonomous Systems Conversations Summary for the selected conversation. The NetFlow Autonomous Systems Conversations Summary provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Autonomous Systems View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    > Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Total Bytes Transferred

This resource displays a chart that details the total number of bytes that are both transmitted and received over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total bytes transferred through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Total Bytes Transferred (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the total bytes transferred by the viewed node or interface over the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing your Total Bytes Transferred resource to keep all changes.

General Settings

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

    Use Time Period from current view (default)

    Allows the resource to inherit the setting from the view on which it is placed.

    Named Time Period

    Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    Relative Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

    Absolute Time Period

    Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top XX resource with any of the following chart types:

- a **2D Pie Chart** that presents a "flat" view of your data.

- a **3D Pie Chart.**

- an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top XX Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Total Packets Transferred

This resource displays a chart that details the total number of packets that are transferred over a specified period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the total packets transferred through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Total Bytes Transferred (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the total packets transferred by the viewed node or interface over the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Clicking **Edit** allows you to edit the resource Title and Subtitle. Click **Submit** after editing your Total Bytes Transferred resource to keep all changes.

General Settings
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o **Line Chart** is a simple area chart created using lines to connect a series of data points.

o **Spline** is a line chart that plots a fitted curve through each data point in a series.

o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top XX resource.

Session-Limited Settings

Top XX resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

• a **2D Pie Chart** that presents a "flat" view of your data.

• a **3D Pie Chart.**

• an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Unique Visitors

This resource provides a chart reporting the number of unique IP addresses that have communicated over the network during a specified period of time.

When placed on the Node Details or Interface Details view, the resource provides a chart reporting the number of unique IP addresses that have communicated with the viewed node or interface.

A custom endpoint-centric version of this resource, called **Unique Visitors (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a view of the unique IP addresses with which the viewed node or interface has communicated during the selected period of time. To add a resource of this type, see Adding an Endpoint Centric Resource.

The control under the view title designates the time period that is applied to all default view resources, however, resources that are added to customize a view may not be subject to this time period control.

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Unique Visitors resource.

General Settings
Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- The **Title** of the resource.

- The **Maximum Number of Items to Display** is the maximum number of items that you want the resource to display.

- The **Time Period** is the collection interval for which the resource to display data.

  Use Time Period from current view (default)

  > Allows the resource to inherit the setting from the view on which it is placed.

  Named Time Period

  > Offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

  Relative Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

  Absolute Time Period

  > Accepts any number of Minutes, Hours, Days, and Months.

- The **Resource Style** setting designates whether or not the resource displays charts and legends.

- The **Chart Style** includes options for area or 2D or 3D pie charts, or None.

If you select the **Area Chart** *style,* the following types of area charts are available for use in the selected resource:

o   **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

o   **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

o   **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

o   **Line Chart** is a simple area chart created using lines to connect a series of data points.

o   **Spline** is a line chart that plots a fitted curve through each data point in a series.

o   **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

Click **Submit** after configuring your Top *XX* resource.

Session-Limited Settings

Top *XX* resources also provide session-limited **Chart Type** and **Data Units** buttons that allow you to choose how the information for each listed item in the resource displays.

Note: Chart Type is always present, but you must first select **Chart Type > Area Chart** in order for **Data Units** to display.

Clicking **Chart Type** allows you to configure the Top *XX* resource with any of the following chart types:

•   a **2D Pie Chart** that presents a "flat" view of your data.

•   a **3D Pie Chart.**

•   an **Area Chart** that presents a historical view of your data as represented by areas calculated at past polling times.

Clicking **Data Units** allows you to select how traffic for each listed item is represented in the currently viewed Top *XX* Resource. The **Data Units** selection provides the following options:

- **Rate (Kbps)** displays the actual rate of data transfer for items listed in the Top XX Resource.

- **% of interface speed** displays the percentage of interface speed consumed to transfer data.

  Note: This option only displays when you view ingress and egress data through a selected interface.

- **% of total traffic** displays the percentage of the monitored traffic that the Top XX Resource transferred.

- **Data transferred per interval** displays the amount of bandwidth that the Top XX Resource transferred over a specific period of time.

Top XX Conversations

This resource provides a list of the XX most bandwidth-consuming conversations conducted over your monitored network. Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations initiated or terminated at the selected node or interface. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic conducted over the selected Flow-enabled node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

The table below the chart provides the following information:

- Endpoints of conversation with IP address in parentheses.

- The amount of data, in both bytes and packets, flowing in the selected conversation through the viewed node or interface.

- The percentage of all traffic through the viewed node or interface that can be attributed to a particular conversation.

- Clicking **+** to expand a listed application provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control..

Edit Resource: Top XX Conversations

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

    a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

    b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

        - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

        - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

        - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Sources by Country

This resource provides a view of the countries that serve as biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries responsible for sending most traffic to the viewed node or interface over the selected period of time.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed country

- The percentage of all traffic that is traceable to endpoints in the country

The control under the view title designates the time period that is applied to all resources on the view. However resources which have set their individual time period using edit page are not subject to this time period control.

Edit Resource: Top XX Traffic Sources by Country

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Sources by Domain

This resource provides a view of the domains that serve as biggest sources of traffic, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for sending most traffic to the viewed node or interface over the selected period of time.

The table below the chart provides the following information for each domain:

- The name of the domain

- The amount of traffic, in both bytes and packets, that is routed from endpoints within the listed domain

- The percentage of all traffic that is traceable from endpoints in the domain

- The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Traffic Sources by Domain

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Traffic Destinations by Country

This resource provides a view of the countries that serve as destinations of traffic on the network, ranked by percentage of the total traffic over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the countries that receive the most traffic from the viewed node or interface over the selected period of time.

The table below the chart provides the following information for each country:

- The name of the country

- The amount of traffic, in both bytes and packets, that is routed to endpoints within the listed country

- The percentage of all traffic that is routed to endpoints within the listed country

- The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Traffic Destinations by Country

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Domains

 This resource provides a view of the domains responsible for the most traffic through the viewed node over the selected period of time.

When placed on the Node Details or Interface Details view, this resource provides a view of the domains responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Domains (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of domains to and from which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Note: If you have enabled On Demand DNS resolution to enhance Orion NTA and database performance, you will not be able to view Top *XX* Domains information. For more information about DNS resolution options in Orion NTA see Configuring DNS Resolution. Assuming you are seeing Top XX Domains information, since packet flow for both IP Groups and Countries can include two domains within each communication packet processed through a network device, the total traffic m presented for top domains may appear as much as twice what it actually is.

The table below the chart provides the following information:

- The domain logo icon, if available, and name

- The amount of traffic, in both bytes and packets, transmitted by each domain through the viewed interface over the selected period of time

- The percentage of all traffic over the selected interface that is traceable to the listed domain.

Clicking **+** to expand a listed conversations provides a list of the nodes and their respective interfaces through which selected conversation is currently flowing.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Domains

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

  a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

  b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

    - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

    - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

    - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

- o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

- o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

- o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

- o **Line Chart** is a simple area chart created using lines to connect a series of data points.

- o **Spline** is a line chart that plots a fitted curve through each data point in a series.

- o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  - o **Rate Kbps) (default)**

  - o **% of total traffic**

  - o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Receivers

This resource provides a list of the *XX* receivers consuming the bandwidth over your monitored network. Receivers are listed with the amount of data transferred, in both bytes and packets

When placed on the Node Details or Interface Details view, this resource provides a view of the receivers responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX Receivers (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of receivers to which the selected node or interface initiated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

The table below the chart provides the following information:

- The name or IP address of the receiving endpoint

- The amount of data, in both bytes and packets, routed through the viewed node received by the listed endpoint over the specified period of time

- The percentage of all traffic routed through the viewed node that is received by the listed endpoint over the specified period of time

Clicking **+** to expand a listed receiver provides a list of the nodes and their respective interfaces through which data is currently being received by the endpoint.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resource: Top XX Receivers

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

   a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

   b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

      - **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

      - **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

      - **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

   o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

   o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

   o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

   o **Line Chart** is a simple area chart created using lines to connect a series of data points.

   o **Spline** is a line chart that plots a fitted curve through each data point in a series.

   o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

- o **Rate Kbps) (default)**
- o **% of total traffic**
- o **Data transferred per time interval**
- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Click **Submit** after configuring your Top XX resource.

Top XX IP Address Groups Conversations

This resource provides a view of the IP address groups' conversations responsible for the most traffic through the viewed node over the selected period of time. The resource provides a list of the most bandwidth-intensive conversations associated with an IP Group. For information about managing this group's settings, see IP Address Groups.

Conversations are listed with the amount of data transferred in the conversation, in both bytes and packets, and the percentage of total application traffic generated by the conversation over the specified time period

When placed on the Node Details or Interface Details view, this resource provides a view of the conversations responsible for the most traffic passing through the viewed node or interface over the selected period of time.

A custom endpoint-centric version of this resource, called **Top XX IP Address Groups Conversations (Endpoint Centric)**, can also be placed on the NetFlow Node Details or Interface Details view, providing a ranked list of conversations in which the selected node or interface initiated or terminated traffic. To add a resource of this type, see Adding an Endpoint Centric Resource.

Clicking a listed conversation or its corresponding conversation bubble icon opens the NetFlow Conversation view for conversation traffic routed through the relevant monitored node. The NetFlow Conversation view provides both a chart of Total Bytes Transferred in the conversation and a Conversation Traffic History. For more information, see NetFlow Conversation View.

The table below the chart provides the following information:

- The IP address group range or name

- The amount of data, in both bytes and packets, through the viewed node traceable to the listed IP address group over the selected period of time

- The percentage of all traffic over the viewed node that is traceable to the listed IP address group

Note: Because there can be two domains for each communication packet processed through a network device, the total traffic counted for IP Address Groups can seem to be as much as twice what it is.

Clicking any listed IP address group opens the NetFlow IP Address Group view that presents similar statistics for each IP address group. For more information, see NetFlow IP Address Group View.

Clicking **+** to expand a listed IP address group provides a list of the nodes and their respective interfaces over which traffic associated with the selected IP address group is currently carried. Clicking any expanded nodes or interfaces opens the NetFlow IP Address Group view presenting related statistics for each IP address group. For more information, see NetFlow IP Address Group View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Top XX IP Address Groups Conversations

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

  o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

  o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

  o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

  o **Line Chart** is a simple area chart created using lines to connect a series of data points.

  o **Spline** is a line chart that plots a fitted curve through each data point in a series.

  o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

  o **Rate Kbps) (default)**

  o **% of total traffic**

  o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

Top XX Autonomous Systems

This resource provides a list of the most bandwidth-intensive autonomous systems. Autonomous systems are listed with the amount of data (kbps) transferred, in both bytes and packets, and the percentage of all traffic generated by the autonomous system over the specified time period.

When placed on the Node Details or Interface Details view, this resource provides a view of the autonomous systems responsible for the most traffic passing through the viewed node or interface over the selected period of time.

Clicking a listed autonomous system or drilling down to relevant nodes and interfaces opens the NetFlow Autonomous Systems Summary for the selected autonomous system. The NetFlow Autonomous System Summary provides both a chart of Total Bytes Transferred by the autonomous system and a Conversation Traffic History. For more information, see NetFlow Autonomous Systems View.

The control under the view title designates the time period applied to the view's resources. However, resources with their individual time periods set in their Edit pages are not subject to this time period control.

Edit Resources: Top XX Autonomous Systems

Clicking **Edit** in the resource header allows you to edit the following attributes of a Top XX resource:

- **Title** reflects the name of the resource page. You can edit this, if desired.

- **Subtitle** is an optional field you can use to further define your resource.

- **Data** lets you select either **Pie Chart** or **Area Chart**. Summary pages default to pie charts and detail pages default to area charts.

- **Use chart style default for view** enables you to keep or change your default NTA chart style settings. To retain the global settings configured in NTA Settings, select this option.

- **Maximum Number of Items to Display** is the maximum number of applications you want the resource to display.

- **Time Period** is the collection interval for which to display data.

a. To retain the global settings configured in NTA Settings, make sure **Use Time Period from current view** is selected.

b. To change the time period, ensure **Use Time Period from current view** is **not** selected and define one of the following:

- **Named Time Period** offers Last 15 Minutes, Last 30 Minutes, Last Hour, Last 2 Hours, Last 24 Hours, and Today.

- **Relative Time Period** accepts any number of Minutes, Hours, Days, and Months.

- **Absolute Time Period** accepts a range of any number of Minutes, Hours, Days, and Months.

- **Resource Style** setting designates whether or not a chart displays.

- **Flow Direction**. Ensure the Default view is selected to keep the flow settings configured in NTA Settings. To change from the NTA Settings default settings, choose **ingress**, **egress**, or **both**.

- *If you have selected* **Area Chart**, **Area Type** options display. Choose one of the following types of area charts:

   o **Stack Area** is an area chart where multiple series of data are stacked vertically. If there is only one series in your chart, the stacked area chart displays as a simple area chart.

   o **Stack Spline Area** is an area chart that stacks multiple series of data vertically and plots a fitted curve through each data point in the series.

   o **Stack Line** is an area chart in which lines stack cumulatively. As a result, lines do not intersect.

   o **Line Chart** is a simple area chart created using lines to connect a series of data points.

   o **Spline** is a line chart that plots a fitted curve through each data point in a series.

   o **Bar Chart** assigns each data point (for example, an endpoint in top conversations) its own column and plots maximums against the vertical scale.

- **Data Units** pull-down menu lets you display data using one of the following choices:

   o **Rate Kbps) (default)**

   o **% of total traffic**

   o **Data transferred per time interval**

- **Advanced** enables you to create a chart title and a chart subtitle.

Click **Submit** after configuring your Top XX resource.

NetFlow Conversation View

The following resources are available by default in the NetFlow Conversation view:

- Conversation Traffic History

- Total Bytes Transferred

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current conversation view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Conversation view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing conversation data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected conversation traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Click **Submit** after editing the resource to keep all changes.

Conversation Traffic History

Provides a table displaying the following information for the period of time specified below the view title:

- A **Date/Time** stamp for each exchange in the viewed conversation

- The protocol used for each exchange of the conversation

- Beneath the names or IP addresses of the conversation participants, the application or port used by the respective conversing endpoints with an arrow indicating the direction of traffic for each exchange of the conversation

- the amount of traffic communicated in bytes

- the number of packets communicated

Clicking a participant IP address or name opens the NetFlow Endpoint view. For more information, see NetFlow Endpoints View.

The control under the view title designates the time period that is applied to all default view resources.

Note: Resources that are added to customize a view may not be subject to this time period control.

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Conversation Traffic History resource.

NetFlow Country View

The following resources are available by default in the NetFlow Country view:

- Country Details

- Top XX Applications

- Top XX Conversations

- Top *XX* Countries

- Top XX Transmitters

- Top XX Receivers

- Top XX Protocols

- Total Bytes Transferred

- Total Packets Transferred

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current country view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Country view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing country data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected country traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Country Details

Provides the country name, country abbreviation, and the amount of data, in bytes and packets, transmitted through the selected country over the indicated period of time.

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Country Details resource.

NetFlow Domain View

The following resources are available by default in the NetFlow Domain view:

- Domain Details

- Top XX Applications

- Top XX Conversations

- Top XX Traffic Destinations by Country

- Top XX Traffic Sources by Domain

- Top XX Receivers

- Top XX Protocols

- Total Bytes Transferred

- Total Packets Transferred

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current domain view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Domain view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing domain data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected domain traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Domain Details

Provides the name of the domain and the amount of traffic routed to the domain through the selected device over the specified time period.

The control under the view title designates the time period that is applied to all default view resources.

Note: Resources that are added to customize a view may not be subject to this time period control.

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Domain Details resource.

Click **Submit** after configuring your Top *XX* Transmitters resource.

NetFlow Endpoints View

The following resources are available by default in the NetFlow Endpoint view:

- Endpoint Details
- Top XX Applications
- Top XX Conversations
- Top XX Traffic Sources by Country
- Top XX Traffic Destinations by Country
- Top XX Transmitters
- Top XX Receivers
- Top XX Protocols
- Top *XX* Types of Service
- Total Bytes Transferred
- Total Packets Transferred

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current endpoint view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Endpoint view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing endpoint data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected endpoint traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Endpoint Details

The Endpoint Details resource provides a table containing the following data about the viewed endpoint:

- IP Address

- Hostname

  Notes:

  o Clicking **Edit** allows you to change the friendly name of this endpoint for use in Orion. It will not, however, change the network identification of the viewed endpoint.

  o Clicking **Lookup** allows you to immediately resolve the endpoint hostname.

- IP Address Group, if defined

- Domain

- Country

- Total Traffic Transmitted, in bytes, over the time period indicated

- Total Traffic Received, in bytes, over the time period indicated

- Date-time stamp of the Traffic Last Transmitted from the selected endpoint

- Date-time stamp of the Traffic Last Received by the selected endpoint

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Endpoint Details resource.

Click **Submit** after configuring your Top *XX* Types of Service resource.

NetFlow Interface Details View

 The following resources are available by default in the NetFlow Interface Details view:

- Top XX Applications

- Top XX Conversations

- Top *XX* Countries

- Top XX Endpoints

- Top XX Domains

- Top XX Protocols

- Top XX Types of Service

- Top *XX* Autonomous Systems Conversations

- CBQoS Drops

- CBQoS Policy Details

- CBQoS Post-Policy Class Map

- CBQoS Pre-Policy Class Map

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current interface details view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Interface Details view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

Controls under the view title allow you to configure the following options:

- the time period applied to all default view resources

- the direction (**Ingress**, **Egress**, or **Both**) of the interface traffic presented on all default view resources.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Click **Submit** after configuring your Top XX Types of Service resource.

NetFlow IP Address Group View

The following resources are available by default in the NetFlow IP Address Group view:

•

IP Address Group Details

- Top XX Applications

- Top XX Conversations

- Top XX Traffic Sources by Country

- Top XX Traffic Destinations by Country

- Top XX Transmitters

- Top XX Receivers

- Top XX Traffic Sources by IP Address Groups

- Top XX Traffic Destinations by IP Address Groups

- Top XX Protocols

- Total Bytes Transferred

- Total Packets Transferred

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current IP address group view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow IP Address Group view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing IP address group data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected IP address group traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

IP Address Group Details

Provides the following data about the selected IP address group:

- **Group** name

- **Range** of IP addresses that is included in the group

- **Total Traffic** over a specified time period

To change the applied time period, change the global control using the clickable menu that is located under the view title.

Click **Edit** to customize the resource **Title** and **Subtitle**, and then click **Submit** after configuring your Endpoint Details resource.

NetFlow Node Details View

The following resources are available by default in the NetFlow Node Details view:

- Node Interfaces

- Top XX Applications

- Top XX Conversations

- Top XX Endpoints

- Top XX Domains

- Node Interfaces

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current node details view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Node Details view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

Note: Resources that are added to customize a view may not be subject to this time period control.

Node Interfaces

The Node Interfaces resource provides a list of the interfaces present on the viewed node.

The Node Interfaces table provides the following information for each listed interface:

- A status icon

- A device type icon

- The interface name

- The amount of data traffic, in both bytes and packets, transmitted into the viewed node on the selected interface over the selected period of time

- The amount of data traffic, in both bytes and packets, transmitted out of the viewed node on the selected interface over the selected period of time

Clicking **Edit** allows you to edit the Node Interfaces resource **Title** and **Subtitle**. Click **Submit** after configuring your Node Interfaces resource.

Note: Orion NetFlow Traffic Analyzer provides default values for both the Node Interfaces **Title** and **Subtitle**. If you edit either field on the Edit Node Interfaces view, you can restore the default values by clearing the respective fields, and then clicking **Submit**.

NetFlow Protocol View

 The following sections detail resources that are provided by default in the NetFlow Protocol view:

- Protocol Details

- Top XX Applications

- Top XX Conversations

- Top XX Traffic Sources by Country

- Top XX Traffic Destinations by Country

- Top XX Transmitters

- Top *XX* Receivers

- Top XX Types of Service

- Total Bytes Transferred

- Total Packets Transferred

- Unique Visitors

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current protocol view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Protocol view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

The control under the view title designates the time period that is applied to all default view resources.

If you are viewing IP address group data at the interface level, you also have the option to designate the direction (**Ingress**, **Egress**, or **Both**) of the selected IP address group traffic over the interface you are monitoring.

Note: Resources added to customize a view may not be subject to the time period and flow direction controls.

Protocol Details

 Provides the following data about the selected protocol:

- **Protocol** Name

- **Protocol Number**

- **Total Traffic** using the selected protocol over the indicated period of time

For a complete list of all currently recognized protocol names and numbers, see the IANA Assigned Internet Protocol Numbers list.

Click **Submit** after editing the resource to keep all changes.

NetFlow Types of Service View

The following sections detail resources that are available in the NetFlow Types of Service view:

- Type of Service Details

- Top XX Applications

- Top XX Conversations

- Top XX Traffic Sources by Country

- Top XX Traffic Destinations by Country

- Top XX Endpoints

- Top XX Domains

- Top XX Protocols

- Total Bytes Transferred

- Total Packets Transferred

The **Bookmark This Page** link in the view header allows you to immediately create a local browser bookmark for quick access to the current type of service view

Resources not present in the default view may be added by customizing the view. Click **Customize Page** to open the Customize NetFlow Types of Service view. For more information about customizing views in the Orion Web Console, see Editing Views in the *SolarWinds Orion Network Traffic Analyzer Administrator Guide*.

Select the time period for the resources of this view by clicking the list below the NetFlow Protocol title. This time period setting is global for the view.

Type of Service Details

Provides the name, or label, of the selected type of service and the total traffic using the selected service type over indicated time period.

NetFlow Autonomous Systems View

The linked topics detail resources that are available by default in this view as well as NetFlow Top XX resources that can be added by clicking **Customize Page**.

- Autonomous Systems Details

- Top XX Applications

- Top XX Conversations

- Top XX Endpoints

- Top XX Transmitters

- Top XX Receivers

- Top XX IP Address Groups

- Top XX Protocols

- Total Bytes Transferred

- Total Packets Transferred

Autonomous Systems Details

Provides the name, or label, of the selected autonomous systems conversation and the total traffic using the selected systems over indicated time period.

NetFlow Autonomous System Conversations View

The linked topics detail resources that are available by default in this view as well as NetFlow Top XX resources that can be added by clicking **Customize Page**.

- Top XX Applications

- Top XX Conversations

- Top *XX* Countries

- Top XX Traffic Sources by Country

- Top XX Traffic Destinations by Country

- Top XX Endpoints

- Top XX Domains

- Top XX Protocols

- Total Bytes Transferred

Autonomous Systems Conversations Details

Provides the name, or label, of the selected autonomous systems conversation and the total traffic using the selected systems over indicated time period.

Managing Autonomous Systems

You and add, edit, and delete an autonomous system network to and from those Orion NTA monitors.

To add an autonomous system network:

1. Click **NETFLOW** on the toolbar.
2. Click NetFlow Settings.
3. Click **Manage Autonomous Systems** under Autonomous Systems.
4. Click **Add Autonomous Systems** and enter appropriate values for these parameters:

   - Unique Autonomous System ID
   - Name of the Autonomous System
   - Country code
   - Organization
   - Date of Registration
   - Date of Last Update

5. Click **Save**.

To edit an autonomous system network:

1. Click **NETFLOW** on the toolbar.
2. Click NetFlow Settings.
3. Click **Manage Autonomous Systems** under Autonomous Systems.
4. Click **Add Autonomous Systems** and modify values as needed for these parameters:

- Unique Autonomous System ID
- Name of the Autonomous System
- Country code
- Organization
- Date of Registration
- Date of Last Update

5. Click **Save**.

To delete an autonomous system network:

1. Click **NETFLOW** on the toolbar.
2. Click NetFlow Settings.
3. Click **Manage Autonomous Systems** under Autonomous Systems.
4. Click **Delete** beside the relevant autonomous system(s).
5. Click **Save**.

Using Flow Navigator

The Flow Navigator resource allows you to create your own custom NetFlow views. The following sections provide specific information to aid the configuration of the following custom filtered traffic views using the Flow Navigator:

- Autonomous Systems Filtered View

- Autonomous System Conversations Filtered View

- Application Filtered View

- Country Filtered View

- Domain Filtered View

- Endpoint Filtered View

- IP Address Group Filtered View

- Protocol Filtered View

- Type of Service Filtered View

Clicking **Edit** allows you to edit the resource Title and Subtitle.

Autonomous Systems Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Autonomous Systems View to monitor autonomous system usage on your network. For more information, see NetFlow Autonomous Systems View.

The following procedure steps you through the configuration of your new filtered NetFlow Autonomous Systems View.

To configure an autonomous systems filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

a. *If you want a filtered view of autonomous system conversations across your network*, click **Summary**.

b. *If you want a filtered view of autonomous system conversations affecting the traffic passing through a specific node and interface*, click **Detail.**

- Select the **Node** for which you want to monitor network traffic attributed to the selected application.

- Select the **Interface** for which you want to monitor network traffic attributed to the selected application.

- Select the application or type a relevant port.

5. Select the **Time Period** over which you want to view autonomous system conversation traffic, using any of the following options:

- Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

- Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

  Note: The relative time period is measured with respect to the time at which the configured view is loaded.

- Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

  Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

- Select **Both** to include ingress and egress traffic in the calculations NTA makes.

- Select **Ingress** to include only ingress traffic in the calculations NTA makes.

- Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from applications, or to exclude traffic to and from them*, a click **+** next to **Applications**, and then complete the following steps:

a. *If you want to include traffic from specified applications,* select **Include**.

b. *If you want to exclude traffic from specified applications,* check **Exclude**.

c. Enter the name of an appropriate application.

    d. *If you want to include or exclude another application*, click **Add Filter** and enter the name of an the appropriate application.

8. *If you want to limit your view to only display network traffic to and from autonomous systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

    b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

    c. Enter the name of an appropriate automonous network.

    d. *If you want to include or exclude another autonomous system conversation*, click **Add Filter** and enter the name of an the appropriate conversation.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified conversations,* select **Include**.

    b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

    a. *If you want to include traffic from specified countries,* select **Include**.

    b. *If you want to exclude traffic from specified countries,* check **Exclude**.

    c. Enter an appropriate country.

    d. *If you want to include or exclude another country*, click **Add Filter** and enter the name of an appropriate country.

11. *If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them*, a click **+** next to **Domains**, and then complete the following steps:

    a. *If you want to include traffic from specified domains,* select **Include**.

    b. *If you want to exclude traffic from specified domains,* check **Exclude**.

    c. Enter an appropriate domain. .

    d. *If you want to include or exclude another domain*, click **Add Filter** and enter the name of an appropriate domain.

12. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **Endpoints**, and then complete the following steps:

    a. *If you want to include traffic from specified endpoints,* select **Include**.

    b. *If you want to exclude traffic from specified endpoints,* check **Exclude**.

    c. Enter an appropriate endpoint.

    d. *If you want to include or exclude another endpoint*, click **Add Filter** and enter the name of an appropriate endpoint.

13. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP Address Groups,* select **Include**.

    b. *If you want to exclude traffic from specified IP Address Groups,* check **Exclude**.

    c. Enter an appropriate IP Address Group.

    d. *If you want to include or exclude another IP Address Group*, click **Add Filter** and enter the name of an appropriate IP Address Group.

14. *If you want to limit your view to only display network traffic using specific protocols,* click **+** next to **Protocol**, and then complete the following steps:

    a. *If you want to include traffic from specified Protocol,* select **Include**.

    b. *If you want to exclude traffic from specified Protocol,* check **Exclude**.

    c. Select an appropriate *Protocol*.

    d. *If you want to include or exclude another Protocol*, click **Add Filter** and select an appropriate *Protocol*.

15. *If you want to limit your view to only display network traffic using specific service types,* click **+** next to **Types of Service**, and then complete the following steps:

  a. *If you want to include traffic from specified type of service,* select **Include**.

  b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

  c. Select an appropriate *type of service*.

  d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

16. When you have completed configuration of your filtered application view, click **SUBMIT.**

17. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Autonomous System Conversations Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Autonomous System Conversation View to monitor autonomous system conversation usage on your network.

For more information, see [NetFlow Autonomous System Conversations View](#).

The following procedure steps you through the configuration of your new filtered NetFlow Autonomous System Conversations View.

To configure an autonomous system conversation filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

a. *If you want a filtered view of autonomous system conversations across your network*, click **Summary**.

b. *If you want a filtered view of autonomous system conversations affecting the traffic passing through a specific node and interface*, click **Detail.**

- Select the **Node** for which you want to monitor network traffic attributed to the selected application.

- Select the **Interface** for which you want to monitor network traffic attributed to the selected application.

- Select the application or type a relevant port.

5. Select the **Time Period** over which you want to view autonomous system conversation traffic, using any of the following options:

- Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

- Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

  Note: The relative time period is measured with respect to the time at which the configured view is loaded.

- Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

  Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

- Select **Both** to include ingress and egress traffic in the calculations NTA makes.

- Select **Ingress** to include only ingress traffic in the calculations NTA makes.

- Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from applications, or to exclude traffic to and from them*, a click **+** next to **Applications**, and then complete the following steps:

a. *If you want to include traffic from specified applications,* select **Include**.

b. *If you want to exclude traffic from specified applications,* check **Exclude**.

c. Enter the name of an appropriate application.

    d. *If you want to include or exclude another application*, click **Add Filter** and enter the name of an the appropriate application.

8. *If you want to limit your view to only display network traffic to and from autonomous systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous System**, and then complete the following steps:

    a. *If you want to include traffic from specified autonomous systems,* select **Include**.

    b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

    c. Enter the name of an appropriate automonous network.

    d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate system.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified conversations,* select **Include**.

    b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

    a. *If you want to include traffic from specified countries,* select **Include**.

    b. *If you want to exclude traffic from specified countries,* check **Exclude**.

    c. Enter an appropriate country.

    d. *If you want to include or exclude another country*, click **Add Filter** and enter the name of an appropriate country.

11. *If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them*, a click **+** next to **Domains**, and then complete the following steps:

    a. *If you want to include traffic from specified domains,* select **Include**.

    b. *If you want to exclude traffic from specified domains,* check **Exclude**.

    c. Enter an appropriate domain. .

    d. *If you want to include or exclude another domain*, click **Add Filter**
       and enter the name of an appropriate domain.

12. *If you want to limit your view to only display network traffic related to*
   specific endpoints, or to exclude traffic to and from them, a click **+** next
   to **Endpoints**, and then complete the following steps:

    a. *If you want to include traffic from specified endpoints,* select
       Include.

    b. *If you want to exclude traffic from specified endpoints,* check
       Exclude.

    c. Enter an appropriate endpoint.

    d. *If you want to include or exclude another endpoint*, click **Add Filter**
       and enter the name of an appropriate endpoint.

13. *If you want to limit your view to only display network traffic related to*
   specific endpoints, or to exclude traffic to and from them, a click **+** next
   to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP Address Groups,*
       select **Include**.

    b. *If you want to exclude traffic from specified IP Address Groups,*
       check **Exclude**.

    c. Enter an appropriate IP Address Group.

    d. *If you want to include or exclude another IP Address Group*, click
       Add Filter and enter the name of an appropriate IP Address Group.

14. *If you want to limit your view to only display network traffic using*
   specific protocols, click **+** next to **Protocol**, and then complete the following
   steps:

    a. *If you want to include traffic from specified Protocol,* select **Include**.

    b. *If you want to exclude traffic from specified Protocol,* check
       Exclude.

    c. Select an appropriate *Protocol*.

    d. *If you want to include or exclude another Protocol*, click **Add Filter**
       and select an appropriate *Protocol*.

15. *If you want to limit your view to only display network traffic using*
   specific service types, click **+** next to **Types of Service**, and then complete
   the following steps:

   a. *If you want to include traffic from specified type of service,* select **Include**.

   b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

   c. Select an appropriate *type of service*.

   d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

16. When you have completed configuration of your filtered application view, click **SUBMIT.**

17. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Application Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Application View to monitor application usage on your network. For more information, see NetFlow Application View.

The following procedure steps you through the configuration of your new filtered NetFlow Application View.

To configure an application filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

    a. ***If you want a filtered view of applications across your network***, click **Summary**.

    b. ***If you want a filtered view of applications affecting the traffic passing through a specific node and interface**,* click **Detail.**

- Select the **Node** for which you want to monitor network traffic attributed to the selected application.

- Select the **Interface** for which you want to monitor network traffic attributed to the selected application.

- Select the application or type a relevant port.

5. Select the **Time Period** over which you want to view application traffic, using any of the following options:

- Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

- Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

  Note: The relative time period is measured with respect to the time at which the configured view is loaded.

- Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

  Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

- Select **Both** to include ingress and egress traffic in the calculations NTA makes.

- Select **Ingress** to include only ingress traffic in the calculations NTA makes.

- Select **Egress** to include only egress traffic in the calculations NTA makes.

7. ***If you want to limit your view to only display network traffic to and from autonomous systems, or to exclude traffic to and from them***, a click **+** next to **Autonomous Systems**, and then complete the following steps:

    a. ***If you want to include traffic from specified autonomous systems,*** select **Include**.

    b. ***If you want to exclude traffic from specified autonomous systems,*** check **Exclude**.

    c. Enter the name of an appropriate automonous network.

    d. ***If you want to include or exclude another autonomous network***, click **Add Filter** and enter the name of an the appropriate network.

8. ***If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them***, a click **+** next to **Conversations**, and then complete the following steps:

    a. ***If you want to include traffic from specified conversations,*** select **Include**.

    b. ***If you want to exclude traffic from specified conversations,*** check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. ***If you want to include or exclude another conversation***, click **Add Filter** and enter the names of the appropriate endpoints.

9. ***If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them***, a click **+** next to **Countries**, and then complete the following steps:

    a. ***If you want to include traffic from specified countries,*** select **Include**.

    b. ***If you want to exclude traffic from specified countries,*** check **Exclude**.

    c. Enter an appropriate country.

    d. ***If you want to include or exclude another country***, click **Add Filter** and enter the name of an appropriate country.

10. ***If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them***, a click **+** next to **Domains**, and then complete the following steps:

    a. ***If you want to include traffic from specified domains,*** select **Include**.

    b. ***If you want to exclude traffic from specified domains,*** check **Exclude**.

    c. Enter an appropriate domain. .

    d. ***If you want to include or exclude another domain***, click **Add Filter** and enter the name of an appropriate domain.

11. ***If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them***, a click **+** next to **Endpoints**, and then complete the following steps:

    a. ***If you want to include traffic from specified endpoints,*** select **Include**.

    b. ***If you want to exclude traffic from specified endpoints,*** check **Exclude**.

    c. Enter an appropriate endpoint.

    d. *If you want to include or exclude another endpoint*, click **Add Filter** and enter the name of an appropriate endpoint.

12. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP Address Groups,* select **Include**.

    b. *If you want to exclude traffic from specified IP Address Groups,* check **Exclude**.

    c. Enter an appropriate IP Address Group.

    d. *If you want to include or exclude another IP Address Group*, click **Add Filter** and enter the name of an appropriate IP Address Group.

13. *If you want to limit your view to only display network traffic using specific protocols,* click **+** next to **Protocol**, and then complete the following steps:

    a. *If you want to include traffic from specified Protocol,* select **Include**.

    b. *If you want to exclude traffic from specified Protocol,* check **Exclude**.

    c. Select an appropriate *Protocol*.

    d. *If you want to include or exclude another Protocol*, click **Add Filter** and select an appropriate *Protocol*.

14. *If you want to limit your view to only display network traffic using specific service types,* click **+** next to **Types of Service**, and then complete the following steps:

    a. *If you want to include traffic from specified type of service,* select **Include**.

    b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

    c. Select an appropriate *type of service*.

    d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

15. When you have completed configuration of your filtered application view, click **SUBMIT.**

16. ***If you want to save your custom view for future reference,*** click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Country Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Country View to monitor network traffic by country of origin or destination.

For more information about the NetFlow Country View, see [NetFlow Country View](#).

The following procedure steps you through the configuration of your new filtered NetFlow Country View.

To configure a country filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

5. Select the **Time Period** over which you want to view network traffic by country of origin or destination, using any of the following options:

    • Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

    • Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

      Note: The relative time period is measured with respect to the time at which the configured view is loaded.

    • Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

      Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

- Select **Both** to include ingress and egress traffic in the calculations NTA makes.

- Select **Ingress** to include only ingress traffic in the calculations NTA makes.

- Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic related to specific applications, or to exclude traffic to and from them*, a click **+** next to **Applications**, and then complete the following steps:

   a. *If you want to include traffic from specified applications,* select **Include**.

   b. *If you want to exclude traffic from specified applications,* check **Exclude**.

   c. Enter an appropriate country.

   d. *If you want to include or exclude another application*, click **Add Filter** and enter the name of an appropriate application.

8. *If you want to limit your view to only display network traffic to and from autonomous systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous Systems**, and then complete the following steps:

   a. *If you want to include traffic from specified autonomous systems,* select **Include**.

   b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

   c. Enter the name of an appropriate automonous network.

   d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate autonomous system.

9. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

   a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

   b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

   c. Enter an appropriate country.

    d. ***If you want to include or exclude another autonomous system conversation***, click **Add Filter** and enter the name of an appropriate country.

10. ***If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them***, a click **+** next to **Conversations**, and then complete the following steps:

    a. ***If you want to include traffic from specified conversations,*** select **Include**.

    b. ***If you want to exclude traffic from specified conversations,*** check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. ***If you want to include or exclude another conversation***, click **Add Filter** and enter the names of the appropriate endpoints.

11. ***If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them***, a click **+** next to **Domains**, and then complete the following steps:

    a. ***If you want to include traffic from specified domains,*** select **Include**.

    b. ***If you want to exclude traffic from specified domains,*** check **Exclude**.

    c. Enter an appropriate domain.

    d. ***If you want to include or exclude another domain***, click **Add Filter** and enter the name of an appropriate domain.

12. ***If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them***, a click **+** next to **Endpoints**, and then complete the following steps:

    a. ***If you want to include traffic from specified endpoints,*** select **Include**.

    b. ***If you want to exclude traffic from specified endpoints,*** check **Exclude**.

    c. Enter an appropriate endpoint.

    d. ***If you want to include or exclude another endpoint***, click **Add Filter** and enter the name of an appropriate endpoint.

13. ***If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them***, a click **+** next to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP Address Groups,* select **Include**.

    b. *If you want to exclude traffic from specified IP Address Groups,* check **Exclude**.

    c. Enter an appropriate IP Address Group.

    d. *If you want to include or exclude another IP Address Group*, click **Add Filter** and enter the name of an appropriate IP Address Group.

14. *If you want to limit your view to only display network traffic using specific protocols,* click **+** next to **Protocol**, and then complete the following steps:

    a. *If you want to include traffic from specified Protocol,* select **Include**.

    b. *If you want to exclude traffic from specified Protocol,* check **Exclude**.

    c. Select an appropriate *Protocol*.

    d. *If you want to include or exclude another Protocol*, click **Add Filter** and select an appropriate *Protocol*.

15. *If you want to limit your view to only display network traffic using specific service types,* click **+** next to **Types of Service**, and then complete the following steps:

    a. *If you want to include traffic from specified type of service,* select **Include**.

    b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

    c. Select an appropriate *type of service*.

    d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

16. When you have completed configuration of your filtered application view, click **SUBMIT.**

17. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Domain Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Domain View to monitor network traffic by domain of origin or destination. For more information about the NetFlow Domain View, see [NetFlow Domain View](#).

The following procedure steps you through the configuration of your new filtered NetFlow Domain View.

To configure a domain filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

5. Select the **Time Period** over which you want to view network traffic by country of origin or destination, using any of the following options:

   - Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

   - Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

     Note: The relative time period is measured with respect to the time at which the configured view is loaded.

   - Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

     Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

   - Select **Both** to include ingress and egress traffic in the calculations NTA makes.

   - Select **Ingress** to include only ingress traffic in the calculations NTA makes.

   - Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from autofocus systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous Systems**, and then complete the following steps:

    a. *If you want to include traffic from specified autonomous systems,* select **Include**.

    b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

    c. Enter the name of an appropriate automonous network.

    d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate autonomous system.

8. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

    b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

    c. Enter an appropriate country.

    d. *If you want to include or exclude another autonomous system conversation*, click **Add Filter** and enter the name of an appropriate country.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified conversations,* select **Include**.

    b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

    a. *If you want to include traffic from specified countries,* select **Include**.

    b. *If you want to exclude traffic from specified countries,* check **Exclude**.

    c. Select an appropriate country.

    d. *If you want to include or exclude another country*, click **Add Filter** and select the name of an appropriate country.

11. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **Endpoints**, and then complete the following steps:

    a. *If you want to include traffic from specified endpoints,* select **Include**.

    b. *If you want to exclude traffic from specified endpoints,* check **Exclude**.

    c. Enter an appropriate endpoint.

    d. *If you want to include or exclude another endpoint*, click **Add Filter** and enter the name of an appropriate endpoint.

12. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP Address Groups,* select **Include**.

    b. *If you want to exclude traffic from specified IP Address Groups,* check **Exclude**.

    c. Enter an appropriate IP Address Group.

    d. *If you want to include or exclude another IP Address Group*, click **Add Filter** and enter the name of an appropriate IP Address Group.

13. *If you want to limit your view to only display network traffic using specific protocols,* click **+** next to **Protocol**, and then complete the following steps:

    a. *If you want to include traffic from specified Protocol,* select **Include**.

    b. *If you want to exclude traffic from specified Protocol,* check **Exclude**.

    c. Select an appropriate *Protocol*.

    d. *If you want to include or exclude another Protocol*, click **Add Filter** and select an appropriate *Protocol*.

14. *If you want to limit your view to only display network traffic using specific service types,* click **+** next to **Types of Service**, and then complete the following steps:

    a. *If you want to include traffic from specified type of service,* select **Include**.

    b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

    c. Select an appropriate *type of service*.

    d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

15. When you have completed configuration of your filtered application view, click **SUBMIT.**

16. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Endpoint Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Endpoint View to monitor network traffic by endpoint of origin or destination.

For more information about the NetFlow Endpoint View, see NetFlow Endpoints View.

The following procedure steps you through the configuration of your new filtered NetFlow Endpoint View.

To configure an endpoint filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

5. Select the **Time Period** over which you want to view network traffic by country of origin or destination, using any of the following options:

    - Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

    - Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

      Note: The relative time period is measured with respect to the time at which the configured view is loaded.

    - Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

      Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

    - Select **Both** to include ingress and egress traffic in the calculations NTA makes.

    - Select **Ingress** to include only ingress traffic in the calculations NTA makes.

    - Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from autofocus systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous Systems**, and then complete the following steps:

    a. *If you want to include traffic from specified autonomous systems,* select **Include**.

    b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

    c. Enter the name of an appropriate automonous network.

    d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate autonomous system.

8. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

    b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

    c. Enter an appropriate country.

    d. *If you want to include or exclude another autonomous system conversation*, click **Add Filter** and enter the name of an appropriate country.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

    a. *If you want to include traffic from specified conversations,* select **Include**.

    b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

    a. *If you want to include traffic from specified countries,* select **Include**.

    b. *If you want to exclude traffic from specified countries,* check **Exclude**.

    c. Select an appropriate country.

    d. *If you want to include or exclude another country*, click **Add Filter** and select the name of an appropriate country.

11. *If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them*, a click **+** next to **Domains**, and then complete the following steps:

    a. *If you want to include traffic from specified domains,* select **Include**.

    b. *If you want to exclude traffic from specified domains,* check **Exclude**.

    c. Enter an appropriate domain.

    d. *If you want to include or exclude another domain*, click **Add Filter** and enter the name of an appropriate domain.

12. *If you want to limit your view to only display network traffic related to specific IP Address Groups, or to exclude traffic to and from them*, a click **+** next to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP Address Groups,* select **Include**.

    b. *If you want to exclude traffic from specified IP Address Groups,* check **Exclude**.

    c. Enter an appropriate IP Address Group.

    d. *If you want to include or exclude another IP Address Group*, click **Add Filter** and enter the name of an appropriate IP Address Group.

13. *If you want to limit your view to only display network traffic using specific protocols,* click **+** next to **Protocol**, and then complete the following steps:

    a. *If you want to include traffic from specified Protocol,* select **Include**.

    b. *If you want to exclude traffic from specified Protocol,* check **Exclude**.

    c. Select an appropriate *Protocol*.

    d. *If you want to include or exclude another Protocol*, click **Add Filter** and select an appropriate *Protocol*.

14. *If you want to limit your view to only display network traffic using specific service types,* click **+** next to **Types of Service**, and then complete the following steps:

    a. *If you want to include traffic from specified type of service,* select **Include**.

    b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

    c. Select an appropriate *type of service*.

    d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

15. When you have completed configuration of your filtered application view, click **SUBMIT.**

16. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

IP Address Group Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow IP Address Group view to monitor network traffic by IP address group of origin or destination.

For more information about the NetFlow IP Address Group view, see NetFlow IP Address Group View.

The following procedure steps you through the configuration of your new filtered NetFlow IP Address Group view.

To configure an IP address group filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

5. Select the **Time Period** over which you want to view network traffic by country of origin or destination, using any of the following options:

   - Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

   - Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

     Note: The relative time period is measured with respect to the time at which the configured view is loaded.

   - Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

     Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

   - Select **Both** to include ingress and egress traffic in the calculations NTA makes.

   - Select **Ingress** to include only ingress traffic in the calculations NTA makes.

   - Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from autofocus systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous Systems**, and then complete the following steps:

a. *If you want to include traffic from specified autonomous systems,* select **Include**.

b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

c. Enter the name of an appropriate automonous network.

d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate autonomous system.

8. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

c. Enter an appropriate country.

d. *If you want to include or exclude another autonomous system conversation*, click **Add Filter** and enter the name of an appropriate country.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

a. *If you want to include traffic from specified conversations,* select **Include**.

b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

c. Enter the endpoints involved in the conversation.

d. *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

a. *If you want to include traffic from specified countries,* select **Include**.

b. *If you want to exclude traffic from specified countries,* check **Exclude**.

c. Select an appropriate country.

    d. ***If you want to include or exclude another country***, click **Add Filter** and select the name of an appropriate country.

11. ***If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them***, a click **+** next to **Domains**, and then complete the following steps:

    a. ***If you want to include traffic from specified domains,*** select **Include**.

    b. ***If you want to exclude traffic from specified domains,*** check **Exclude**.

    c. Enter an appropriate domain.

    d. ***If you want to include or exclude another domain***, click **Add Filter** and enter the name of an appropriate domain.

12. ***If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them***, a click **+** next to **Endpoints**, and then complete the following steps:

    a. ***If you want to include traffic from specified Endpoints,*** select **Include**.

    b. ***If you want to exclude traffic from specified Endpoints,*** check **Exclude**.

    c. Enter an appropriate endpoint.

    d. ***If you want to include or exclude another endpoint***, click **Add Filter** and enter the name of an appropriate endpoint.

13. ***If you want to limit your view to only display network traffic using specific protocols,*** click **+** next to **Protocol**, and then complete the following steps:

    a. ***If you want to include traffic from specified Protocol,*** select **Include**.

    b. ***If you want to exclude traffic from specified Protocol,*** check **Exclude**.

    c. Select an appropriate ***Protocol***.

    d. ***If you want to include or exclude another Protocol***, click **Add Filter** and select an appropriate ***Protocol***.

14. ***If you want to limit your view to only display network traffic using specific service types,*** click **+** next to **Types of Service**, and then complete the following steps:

    a. ***If you want to include traffic from specified type of service,*** select **Include**.

    b. ***If you want to exclude traffic from specified type of service,*** check **Exclude**.

   c. Select an appropriate *type of service*.

   d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

15. When you have completed configuration of your filtered application view, click **SUBMIT.**

16. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Protocol Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Protocol View to monitor network traffic by protocol used on your network. For more information about the NetFlow Protocol View, see NetFlow Protocol View.

The following procedure steps you through the configuration of your new filtered NetFlow Protocol View.

To configure a protocol filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

5. Select the **Time Period** over which you want to view network traffic by country of origin or destination, using any of the following options:

- Select **Named Time Period**, and then select a predefined period from the Named Time Period menu.

- Select **Relative Time Period**, and then provide a number appropriate for the selected time units.

   Note: The relative time period is measured with respect to the time at which the configured view is loaded.

- Select **Absolute Time Period**, and then provide both the start time and the end time for the period over which you want to view monitoring data.

   Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

- Select **Both** to include ingress and egress traffic in the calculations NTA makes.

- Select **Ingress** to include only ingress traffic in the calculations NTA makes.

- Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from autofocus systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous Systems**, and then complete the following steps:

   a. *If you want to include traffic from specified autonomous systems,* select **Include**.

   b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

   c. Enter the name of an appropriate automonous network.

   d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate autonomous system.

8. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

   a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

   b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

   c. Enter an appropriate country.

   d. *If you want to include or exclude another autonomous system conversation*, click **Add Filter** and enter the name of an appropriate country.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

   a. *If you want to include traffic from specified conversations,* select **Include**.

   b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

   c. Enter the endpoints involved in the conversation.

    d.   *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

    a.   *If you want to include traffic from specified countries,* select **Include**.

    b.   *If you want to exclude traffic from specified countries,* check **Exclude**.

    c.   Select an appropriate country.

    d.   *If you want to include or exclude another country*, click **Add Filter** and select the name of an appropriate country.

11. *If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them*, a click **+** next to **Domains**, and then complete the following steps:

    a.   *If you want to include traffic from specified domains,* select **Include**.

    b.   *If you want to exclude traffic from specified domains,* check **Exclude**.

    c.   Enter an appropriate domain.

    d.   *If you want to include or exclude another domain*, click **Add Filter** and enter the name of an appropriate domain.

12. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **Endpoints**, and then complete the following steps:

    a.   *If you want to include traffic from specified Endpoints,* select **Include**.

    b.   *If you want to exclude traffic from specified Endpoints,* check **Exclude**.

    c.   Enter an appropriate endpoint.

    d.   *If you want to include or exclude another endpoint*, click **Add Filter** and enter the name of an appropriate endpoint.

13. *If you want to limit your view to only display network traffic using specific IP address groups,* click **+** next to **IP Address Groups**, and then complete the following steps:

    a.   *If you want to include traffic from specified IP address groups,* select **Include**.

    b.   *If you want to exclude traffic from specified IP address groups,* check **Exclude**.

    c. Select an appropriate *IP address group*.

    d. *If you want to include or exclude another IP address group*, click **Add Filter** and select an appropriate *IP address group*.

14. *If you want to limit your view to only display network traffic using specific service types,* click **+** next to **Types of Service**, and then complete the following steps:

    a. *If you want to include traffic from specified type of service,* select **Include**.

    b. *If you want to exclude traffic from specified type of service,* check **Exclude**.

    c. Select an appropriate *type of service*.

    d. *If you want to include or exclude another type of service*, click **Add Filter** and select an appropriate *type of service*.

15. When you have completed configuration of your filtered application view, click **SUBMIT.**

16. *If you want to save your custom view for future reference,* click to save click **SAVE FILTERED VIEW TO MENU BAR**.

Type of Service Filtered View

Using the Flow Navigator, you can configure your own custom NetFlow Types of Service View to monitor network traffic by associated service type.

The following procedure steps you through the configuration of your new filtered NetFlow Type of Service View.

To configure a service type filtered view using Flow Navigator:

1. Open the Orion Web Console in the SolarWinds program group.

2. Click **NETFLOW** on the tool bar.

3. Click **Flow Navigator** on the left edge of the summary view. (The Flow Navigator is available on any default NTA view.)

4. Select a view type.

5. Select the **Time Period** over which you want to view network traffic by
    country of origin or destination, using any of the following options:

    - Select **Named Time Period**, and then select a predefined period from
      the Named Time Period menu.

    - Select **Relative Time Period**, and then provide a number appropriate for
      the selected time units.

      Note: The relative time period is measured with respect to the time at
      which the configured view is loaded.

    - Select **Absolute Time Period**, and then provide both the start time and
      the end time for the period over which you want to view monitoring data.

      Note: Format start and end times as `MM/DD/YYYY HH:MM:SS AM/PM`.

6. Select a Flow Direction.

   - Select **Both** to include ingress and egress traffic in the calculations NTA makes.

   - Select **Ingress** to include only ingress traffic in the calculations NTA makes.

   - Select **Egress** to include only egress traffic in the calculations NTA makes.

7. *If you want to limit your view to only display network traffic to and from autofocus systems, or to exclude traffic to and from them*, a click **+** next to **Autonomous Systems**, and then complete the following steps:

   a. *If you want to include traffic from specified autonomous systems,* select **Include**.

   b. *If you want to exclude traffic from specified autonomous systems,* check **Exclude**.

   c. Enter the name of an appropriate automonous network.

   d. *If you want to include or exclude another autonomous system*, click **Add Filter** and enter the name of an the appropriate autonomous system.

8. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Autonomous System Conversations**, and then complete the following steps:

   a. *If you want to include traffic from specified autonomous system conversations,* select **Include**.

   b. *If you want to exclude traffic from specified autonomous system conversations,* check **Exclude**.

   c. Enter an appropriate country.

   d. *If you want to include or exclude another autonomous system conversation*, click **Add Filter** and enter the name of an appropriate country.

9. *If you want to limit your view to only display network traffic related to specific conversations, or to exclude traffic to and from them*, a click **+** next to **Conversations**, and then complete the following steps:

   a. *If you want to include traffic from specified conversations,* select **Include**.

   b. *If you want to exclude traffic from specified conversations,* check **Exclude**.

    c. Enter the endpoints involved in the conversation.

    d. *If you want to include or exclude another conversation*, click **Add Filter** and enter the names of the appropriate endpoints.

10. *If you want to limit your view to only display network traffic related to specific countries, or to exclude traffic to and from them*, a click **+** next to **Countries**, and then complete the following steps:

    a. *If you want to include traffic from specified countries,* select **Include**.

    b. *If you want to exclude traffic from specified countries,* check **Exclude**.

    c. Select an appropriate country.

    d. *If you want to include or exclude another country*, click **Add Filter** and select the name of an appropriate country.

11. *If you want to limit your view to only display network traffic related to specific domains, or to exclude traffic to and from them*, a click **+** next to **Domains**, and then complete the following steps:

    a. *If you want to include traffic from specified domains,* select **Include**.

    b. *If you want to exclude traffic from specified domains,* check **Exclude**.

    c. Enter an appropriate domain.

    d. *If you want to include or exclude another domain*, click **Add Filter** and enter the name of an appropriate domain.

12. *If you want to limit your view to only display network traffic related to specific endpoints, or to exclude traffic to and from them*, a click **+** next to **Endpoints**, and then complete the following steps:

    a. *If you want to include traffic from specified Endpoints,* select **Include**.

    b. *If you want to exclude traffic from specified Endpoints,* check **Exclude**.

    c. Enter an appropriate endpoint.

    d. *If you want to include or exclude another endpoint*, click **Add Filter** and enter the name of an appropriate endpoint.

13. *If you want to limit your view to only display network traffic using specific IP address groups,* click **+** next to **IP Address Groups**, and then complete the following steps:

    a. *If you want to include traffic from specified IP address groups,* select **Include**.

    b. *If you want to exclude traffic from specified IP address groups,* check **Exclude**.

    c. Select an appropriate *IP address group*.

    d. *If you want to include or exclude another IP address group*, click **Add Filter** and select an appropriate *IP address group*.

14. *If you want to limit your view to only display network traffic using specific protocols,* click **+** next to **Protocol**, and then complete the following steps:

    a. *If you want to include traffic from specified protocols,* select **Include**.

    b. *If you want to exclude traffic from specified protocols,* check **Exclude**.

    c. Select an appropriate *protocol*.

    d. *If you want to include or exclude another protocol*, click **Add Filter** and select an appropriate *protocol*.

15. When you have completed configuration of your filtered application view, click **SUBMIT.**

16. *If you want to save your custom view for future reference,* click to save click SAVE **FILTERED** VIEW TO MENU BAR.

NetFlow Traffic Analysis Settings

The following sections provide information about enabling NetFlow data collection and configuring NetFlow data management in Orion NetFlow Traffic Analyzer.

Adjusting Data Aggregation Settings

Aggregating NetFlow data in memory significantly reduces the I/O demands that Orion NTA makes on your Orion database, which can increase the performance of all SolarWinds applications that share the database. If Web Console resources are allowed to work directly against the Orion database in making and presenting their latest calculations without aggregation, Orion NTA would make big I/O demands on the Orion database. This would impact performance of both Orion NTA and Orion NPM.

By aggregating data before writing it to the Orion database, Orion NTA software expedites the presentation of summary statistics for three of the most important kinds of information about traffic on your network: Top XX Applications, Top XX Endpoints, Top XX Conversations.

Activating Aggregation

By aggregating data before writing it to the Orion database, Orion NTA software expedites the presentation of summary statistics for three of the most important kinds of information about traffic on your network: Top XX Applications, Top XX Endpoints, and Top XX Conversations.

To turn on data aggregation settings:

1. Click **Start > All Programs > SolarWinds Orion > NetFlow Traffic Analyzer > NetFlow Web Console**.

Error! Hyperlink reference not valid.2. Log in using a User ID with administrative privileges.

3. Click **Setting**s in the top right corner of the Web Console.

4. Click **NTA Settings** in the Settings grouping of the Orion Website Administration page.

5. Scroll to Database Settings and configure the Data Aggregation options as follows:

    a. Check **Enable aggregation of Top Talker Data**.

    b. Enter how many of the following Orion should aggregate NetFlow data for:

- Top Applications

- Top Endpoints

- Top Conversations

    c. Enter the number of hours Orion NTA should save aggregated NetFlow data in cache.

4. Click **Save**.

Optimizing Aggregation

Optimize aggregation by displaying the items you entered above when you activated aggregation. For example, if you entered 10 Top Conversations for which to aggregate data, you should display up to 10 Top Conversations. Displaying more conversations would require loading more data than is cached and would slow performance.

To set the optimal number of data elements:

1. Click **Edit** from a Top XX Applications, Endpoints, or Conversations pane.

2. On the Edit Resource page, enter the Maximum Number of Items to Display. This number should match the number you entered for this resource when you activated data aggregation in the procedure above.

3. Click **Submit**.

NetFlow Management

On new installations, the options provided in the NetFlow Management area of the NetFlow Traffic Analysis Settings view are enabled by default. The following options, when enabled, ensure that you are able see any and all Flow data available from Flow-enabled devices on your monitored network.

Notes:

Due to the volume of data involved in Flow monitoring, you may find it necessary to disable the inclusive monitoring options to save database space.

Only SNMP nodes—in essence, an interface on the node—can be added as a NetFlow Source.

Automatic Addition of NetFlow Resources

    By default, in the event that a Flow-enabled device in the Orion database is sending Flow data to the server hosting Orion NTA, the active, Flow-enabled

device is automatically added as a NetFlow Source. All recognized NetFlow Sources are listed in the NetFlow Sources resource on the NetFlow traffic Analysis Summary view. To disable this automatic feature, clear **Enable automatic addition of NetFlow sources**.

Unmonitored Port Data Retention

By default for new installations, Orion NTA retains all Flow data provided by NetFlow sources on your network, including Flow data for ports that you are not actively monitoring.

A benefit of having this data is that, should you see a significant percentage of unmonitored traffic in your Top XX Application resource, you can expand the tree to drill down into the interface level; by clicking the **Monitor Port** button, you can begin to track this traffic by port.

However, if you want to save space in your database by disabling this automatic feature and discard data from unmonitored ports, simply clear **Enable data retention for traffic on unmonitored ports**.

Monitoring Flows from Unmanaged Interfaces

By default for new installations, Orion NTA discards any flow packets where only one of the involved interfaces is managed by Orion Network Performance Monitor. If you want Orion NTA to monitor flow packets even if one of the involved interfaces is not managed by Orion NPM, check **Allow monitoring of flows from unmanaged packets**.

Monitor Flows from NPM Node's Alternative Address

Checking **Allow matching nodes by another IP Address** allows NTA to automatically associate a flow with an NPM node currently monitored through an address from which the received flow is not being transmitted.

Show unknown traffic events

Clicking this link navigates to a Last 200 Unknown Traffic Events page where you can view a list of traffic events involving flow data received from a currently unmanaged interface. You can use that page to add the relevant interface to NetFlow Sources.

Click the titles of any of the following NetFlow Traffic Analyzer Settings subsections to view additional Orion NTA configuration options:

- Application and Service Ports

- IP Address Groups

- Monitored Protocols

- NetFlow Sources

- NetFlow Collector Services

- NetFlow Types of Service

Application and Service Ports

Orion NTA allows you to directly specify the applications and ports you want to monitor. Additionally, you can specify protocol types on a per-application basis, giving you the ability to monitor multiple applications on the same port if each application uses a different protocol. You should review this list of ports and applications and check the ports and applications you want to monitor, adding any that you do not see but need to monitor.

By default, Orion NTA monitors a selection of recommended ports and applications. This selection includes the ports and applications used most typically on most networks.

To enable monitoring for all possible ports and applications, click **Enable All Monitoring** above the list of applications and ports.

Notes:

- The number of monitored applications directly affects the amount of NetFlow data stored in the database. The more applications and ports that are monitored, the more data is stored. For more information about addressing database size issues and data compression, see Configuring Database Settings in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

- Due to the potential volume of data from Flow-enabled network devices, Monitoring all ports and applications may severely affect the performance of both the Orion database and the Orion Web Console. If you are not initially sure what ports and applications you should monitor with Orion NTA, click **Monitor Recommended Ports** above the applications and ports list to monitor the most typical, high-traffic ports and applications.

To disable monitoring for all possible ports and applications, click **Disable All Monitoring** above the list of applications and ports.

To determine the current monitoring status of any port or application, enter a port number or application keyword in the Search field, and then click **Search** to generate a list of possible matching ports or applications.

If you want to monitor any application or port that is not currently monitored, click **Enable** at the right end of the port or application listing.

Note: Ensure that the port listed for the application you want to monitor corresponds to the port you are actually using for that application.

If you do not want to monitor any application or port that is currently monitored, click **Disable** at the right end of the port or application listing.

Note: Ensure that the port listed for the application you want to stop monitoring corresponds to the port you are actually using for that application.

If you do not see a port that you want to monitor, click **Add Application**, and then provide the port and description you need. For example, if you route all traffic for an internal content management system (CMS) over ports 4990-4995, complete the following steps to start monitoring CMS traffic on ports 4990-4995:

1. Click **Add Application**.

2. In the **Port(s)** field, type `4990-4995`.

3. In the **Description** field, type `CMS Traffic`.

4. Select **All** as the **Protocol**.

5. Click **Add Application**.

If an application you need to monitor has an incorrect port assignment, click **Delete** at the right end of the port or application listing. After deleting the port assignment, click **Add Application** to reassign the port to the appropriate application.

If you do not know an application port number, but you do know a keyword in its description, enter the keyword in the Search applications & ports field, and then click **Search** to generate a list of related applications with their port numbers.

IP Address Groups

Orion NetFlow Traffic Analyzer allows you to establish IP address groups for selective monitoring of custom categories or segments of your network. The following steps set ranges and descriptions for your network IP addresses so that you can better characterize and assess the NetFlow data that you receive.

If any one of the pre-existing ranges contains the addresses that you want Orion NetFlow Traffic Analyzer to monitor, check the range, and then click **Submit**.

If none of the pre-existing ranges contains the addresses that you want Orion NetFlow Traffic Analyzer to monitor, complete either of the following series of steps to define your IP address group:

- *If you want to edit an existing group,* check the group, click **Edit,** define the starting and ending IP addresses in its range, enter a description, and then click **Submit**.

- *If you want to add a new group,* click **Add New Group,** enter the **Start** and **End of IP address range**, enter a **Description**, and then click **Submit**.

If you want to delete an existing group, check the group range that you want to delete, and then click **Delete**.

Monitored Protocols

The types of transport protocols that Orion NetFlow Traffic Analyzer monitors may be configured from the Edit Transport Protocols to Monitor page. This page allows you to select precisely which protocols NetFlow Traffic Analyzer monitors. Selectively specifying monitored protocols can reduce the amount of NetFlow traffic that NetFlow Traffic Analyzer processes and improve overall performance.

To select protocols for monitoring, check the specific transport protocols you want Orion NTA to monitor, and then click **Submit**.

NetFlow Sources

Provides a list of active Flow- and CBQoS-enabled nodes and interfaces.

Clicking **+** expands the list of nodes and interfaces.

Clicking a node name opens the NetFlow Node Details view for the selected node. For more information, see NetFlow Node Details View.

Clicking an interface name opens the NetFlow Interface Details view. For more information, see NetFlow Interface Details View.

Note: If you are not seeing NetFlow sources, confirm that the following is true for your configuration:

- NetFlow devices must be configured to send NetFlow data to Orion NPM. Devices and the interfaces must be managed by Orion NPM before they can be recognized in NetFlow Traffic Analyzer. For more information about adding devices to Orion Network Performance Monitor, see Configuring NetFlow Traffic Analyzer in the *SolarWinds Orion NetFlow Traffic Analyzer Administrator Guide*.

- Confirm that the SolarWinds NetFlow Service has been started in the Windows Services listing.

The following steps will add interfaces to Orion NetFlow Traffic Analyzer for NetFlow monitoring.

To select interfaces for NetFlow monitoring:

1. Select the type of devices that you would like to show in the interface tree.

2. *If you know the name or a keyword in the name of the interface that you want to add*, enter it in the **Search** field and click **Search**.

3. Click **+** to expand monitored nodes.

4. Check nodes and interfaces for CBQoS and NetFlow monitoring.

   Note: Checking a node selects all interfaces on the selected node for monitoring.

5. Click **Submit**.

NetFlow Collector Services

Provides status information about the NetFlow collectors that are running Orion NetFlow Traffic Analyzer. The following information about the collectors and the ports on which they are listening for NetFlow data is provided in the table:

Status Icon

Displays collector status visually, where a green icon indicates that the collector can actively receive NetFlow data and a red icon indicates that the collector cannot actively receive NetFlow data.

Server Name

The network identification of the NetFlow collector.

Receiver Status

A verbal statement of collector status.

Collection Port

This is the port on which the NetFlow collector is listening for NetFlow data. The collection port is set during the installation and configuration of Orion NetFlow Traffic Analyzer. Designate additional collection ports by listing port numbers separated by commas.

Clicking **Delete** to the right of any listed collector ends traffic analysis on the selected collector.

NetFlow Types of Service

Orion NetFlow Traffic Analyzer recognizes the Differentiated Services model of packet delivery prioritization. All Flow-enabled devices may be configured to set a Type of Service byte, referred to as the Differentiated Service Code Point (DSCP), on all NetFlow packets that are sent.

The DSCP prioritizes NetFlow packet delivery over the Flow-enabled devices on your network by assigning each packet both a Differentiated Service class (1, 2, 3, or 4) and a packet-dropping precedence (low, medium, or high). NetFlow packets of the same class are grouped together.

Differentiated Services uses the DSCP to communicate per-hop behaviors (PHBs), including Assured Forwarding (AF) and Expedited Forwarding (EF), to the node services that a given packet encounters. PHBs are configured on individual devices when NetFlow is initially enabled. If a given node is overloaded with NetFlow traffic, node services will keep or drop NetFlow packets in accordance with the configured PHB that matches the DSCP in each NetFlow packet. For more information about Differentiated Services, see RFC 2474, RFC 2475, and RFC 3140.

The following procedures present Type of Service configuration options:

To edit an existing Type of Service:

1. Click **Edit** next to the Types of Service Name.
2. Edit the assigned name or its associated DiffServe Code Point.
3. Click **Update**.

Note: Individual DiffServ Code Points cannot share multiple Types of Service Names, and individual Types of Service Names cannot share multiple DiffServ Code Points.

To delete a DiffServ Code Point assignment:

1. Click **Delete** next to the DiffServ Code Point that you want to delete.
2. Click **Update**.

Top Talker Optimization

In many environments, a majority of network traffic may be attributed to conversations represented by a percentage of all possible monitored flows. Top Talker Optimization allows you to configure Orion NTA to only record those flows that represent conversations requiring the most bandwidth on your network. Recording only those flows representing the most bandwidth-intensive conversations can significantly improve database performance, reduce page load times, and increase reporting speed.

By default, on new installations, Orion NTA is configured to capture Flows representing the top 95% of total network traffic.

Most users upgrading from previous Orion NTA versions should see an improvement in performance after configuring Top Talker Optimization to capture only those Flows representing the top 95% of all network traffic. If you are monitoring a large number of NetFlow sources or interfaces, you may see more improved performance by setting this value lower than 95%.

Note: Enabling this option will result in the intentional loss of some data that might otherwise be recorded if this option is set to 100%. However, the data that is lost corresponds to the least bandwidth-intensive conversations. In most environments, these low bandwidth conversations would not have been displayed in most resources anyway.

To enable Top Talker Optimization, provide an appropriate percentage, and then click **Save** in the Top Talker Optimization section.

DNS and NetBIOS Resolution

To meet varied network requirements, Orion NTA provides options for both NetBIOS and DNS resolution of endpoint domain names. The following sections provide more information about each available type of domain name resolution.

Enabling NetBIOS Resolution

For networks where NetBIOS is the naming convention of preferred use, Orion NTA provides the option to resolve endpoint domain names using NetBIOS. The following procedure enables NetBIOS resolution in Orion NTA.

Note: Enabling NetBIOS resolution does not automatically disable DNS resolution of the same devices. For more information about configuring DNS resolution, see Configuring DNS Resolution.

To enable NetBIOS resolution:

1. Under the DNS and NetBIOS Resolution heading, check **Enable NetBIOS resolution of endpoints**.

2. Click **Save** in the DNS and NetBIOS Resolution section.

Configuring DNS Resolution

By default for new installations, Orion NTA resolves the domain names of all endpoints referenced in monitored Flows on demand. For most users, on demand DNS resolution optimizes overall performance. To meet your specific network monitoring needs, Orion NTA provides the following options for configuring DNS resolution:

- **Persistent** DNS resolution continuously resolves domain names for all devices involved in monitored Flows. For typically-sized networks, Orion NTA views may load more quickly as resolved domain names are retained, but database query times may increase as your Orion database is continuously queried.

  Note: Top Domains resources and Orion reports that include DNS names require persistent domain name resolution.

- **On Demand** DNS resolution is the default option for new installations, and it is intended to assist users with larger networks. With this option, an endpoint domain name is only resolved when information about it is actually requested from the Orion database. Database query times may be improved with this option as queries are limited, but the load time for some endpoint-related resources may increase as Orion NTA waits for domain name resolution.

  Warning: Top Domains resources and Orion reports that include DNS names require persistent domain name resolution, so they will not display DNS names if On Demand DNS resolution is enabled.

- Selecting **Disabled** turns DNS resolution off for the endpoints of flows monitored in Orion NTA. This is not generally recommended unless NetBIOS resolution already is enabled. For more information about enabling NetBIOS resolution, see Enabling NetBIOS Resolution.

  Warning: If DNS resolution is disabled, all DNS information will be deleted from the database to improve database performance,

Orion NTA also allows you to configure the interval between DNS lookups. Orion NTA performs regular DNS lookups on all monitored devices. By default, if the domain of a monitored device resolves successfully, Orion NTA will not attempt another DNS lookup on the same device for 7 days. If the domain name of a monitored device does not resolve successfully, by default, Orion will attempt to resolve the same device again in 2 days.

The following procedure configures all DNS resolution options in Orion NTA.

To configure DNS resolution:

1. Under the DNS and NetBIOS Resolution heading, configure the resolution options in the following procedure.

    a. Select the type of **DNS Resolution** you want Orion NTA to use.

    b. Provide the **Default number of days to wait until next DNS lookup**.

    Note: This value sets the interval on which endpoint domain names are refreshed in the Orion database if the persistent DNS resolution option is selected.

    c. Provide the **Default number of days to wait until next DNS lookup for unresolved IP addresses**.

    Note: This value sets the interval on which Orion NTA makes an attempt to resolve domain names for unresolved endpoints in the Orion database if the persistent DNS resolution option is selected.

2. Click **Save** in the DNS and NetBIOS Resolution section.

Configuring IP Address Processing

By default for new installations, Orion NTA conserves your processing and database resources by limiting the amount of time spent attempting to process the expired IP addresses of endpoints in monitored Flow conversations.

Note: By default on new installations, Orion NTA is configured to spend no more than 15 minutes attempting to process any expired IP addresses. To conserve your processing and database resources, SolarWinds recommends that you maintain some reasonable time limit.

To configure IP address processing:

1. *If you want to edit the processing time period,* select **Custom number of minutes** under the DNS and NetBIOS Resolution heading, and then provide an appropriate number of minutes.

2. *If you want to delete flow records corresponding to expired IP addresses as assigned IP addresses expire,* remove the processing time limit by selecting **Never stop processing expired IP addresses** under the DNS and NetBIOS Resolution heading,

Note: SolarWinds recommends against removing the time limit for processing expired IP addresses as continuously deleting expired IP addresses may negatively affect Orion NTA performance. By default, Orion NTA sets a maximum period of 15 minutes for processing expired IP addresses to ensure that excessive processing resources are not drawn away from monitoring your network.

3. Click **Save** in the DNS and NetBIOS Resolution section.

DNS Resolution Options

For some networks with a large number of endpoints, domain name resolution for endpoints can require significant processing resources. Database and web console performance may be improved by properly configuring DNS resolution within Orion NTA. The following options are available in Orion NTA for configuring DNS resolution:

- **Persistent** DNS resolution is the default option, and it should be optimal for most users. For typically-sized networks, Orion NTA views will generally load more quickly as resolved domain names are retained.

- **On Demand** DNS resolution is intended to assist users with larger networks. With this option, an endpoint domain name is only resolved when information about it is actually requested from the Orion database. Database query times may be improved with this option as queries are limited, but the load time for some endpoint-related resources may increase as Orion NTA waits for domain name resolution.

   Warning: Top Domains resources require persistent domain name resolution, and they will not display if on demand DNS resolution is enabled.

- Selecting **Disabled** turns DNS resolution off for the endpoints of flows monitored in Orion NTA. This is not generally recommended unless NetBIOS resolution already is enabled. For more information about enabling NetBIOS resolution, see DNS and NetBIOS Resolution..

   Warning: If DNS resolution is disabled, all DNS information will be deleted from the database to improve database performance,

Orion NTA also allows you to configure the interval between DNS lookups. For more information about configuring DNS lookup intervals, see Configuring DNS Resolution.

Enabling On Demand DNS Resolution

For some networks with a large number of endpoints, domain name resolution for endpoints can require significant processing resources. Database and web console performance may be improved by properly configuring DNS resolution within Orion NTA. The following options are available in Orion NTA for configuring DNS resolution:

Note: If a Top XX Domains resource is not currently showing data, On Demand DNS resolution is already enabled.

- **Persistent** DNS resolution is the default option, and it should be optimal for most users. For typically-sized networks, Orion NTA views will generally load more quickly as resolved domain names are retained. For more information about enabling Persistent DNS resolution, see Configuring DNS Resolution.

- **On Demand** DNS resolution is intended to assist users with larger networks. With this option, an endpoint domain name is only resolved when information about it is actually requested from the Orion database. Database query times may be improved with this option as queries are limited, but the load time for some endpoint-related resources may increase as Orion NTA waits for domain name resolution.

  Warning: Top Domains resources require persistent domain name resolution, and they will not display if on demand DNS resolution is enabled.

  For more information about enabling On Demand DNS resolution, see Configuring DNS Resolution.

- Selecting **Disabled** turns DNS resolution off for the endpoints of flows monitored in Orion NTA. This is not generally recommended unless NetBIOS resolution already is enabled. For more information about enabling NetBIOS resolution, see DNS and NetBIOS Resolution.

  Warning: If DNS resolution is disabled, all DNS information will be deleted from the database to improve database performance.

  For more information about enabling On Demand DNS resolution, see Configuring DNS Resolution.

Orion NTA also allows you to configure the interval between DNS lookups. For more information about configuring DNS lookup intervals, see Configuring DNS Resolution.

Database Settings

Due to the great volume of data that is produced by Flow-enabled devices, your database may very quickly become unmanageable unless you schedule regular database maintenance. Database maintenance includes the deletion of expired flows, meaning flows that have stopped providing current data, and the compression of Orion database and log files The following procedure enables you to schedule database maintenance in Orion NetFlow Traffic Analyzer:

To configure database settings, including database maintenance:

1. Confirm that **Enable Database Maintenance** is checked.

2. Provide a time when **database maintenance is executed**.

   Notes:

   - The database maintenance execution time should be well inside an established off-peak network usage window to minimize any potential disruption of required monitoring.

   - This field accepts times designated in either 24-hour (HH:MM) or standard (H:MM AM/PM or HH:MM AM/PM) formats.

3. Enter a number of minutes in the **Keep uncompressed data for** field to specify the period of time for which you want to keep real-time data as uncompressed records in your database.

    Notes:

    - You must keep uncompressed data for at least 15 minutes to ensure that at least 15 minutes of data can be collected and compressed before any of it is possibly deleted.

    - Consider collecting data for a day before adjusting these settings. After a day, you should have a good idea of the volume of data your network produces with NetFlow enabled.

4. Enter a number of days in the **Keep compressed data for** field to specify when you want to finally delete recorded data from your database.

5. Select the frequency with which you want to **Delete expired flow data**.

    Note: SolarWinds recommends deletion of expired flow data **once a day**.

6. Select the frequency with which you want to **Compress database and log files**.

    Note: SolarWinds recommends that you choose to compress database and log files **Once every ten days**.

7. If you want to enable Accelerated Search by Endpoint, check **Enable Accelerated Search by Endpoint**.

    Note: Enabling this feature may significantly impact overall Orion NTA performance. Although search results may be provided more quickly, both database access and web console performance may decrease considerably as a result of enabling this option.

8. Click **Enable aggregation of Top Talker data** to have Orion NTA to store this data in memory; and select the number of applications, endpoints, and conversations for which Orion NTA should aggregate data.

    By aggregating data before writing it to the Orion database, Orion NTA software expedites the presentation of summary statistics for three of the most important kinds of information about traffic on your network: Top XX Applications, Top XX Endpoints, Top XX Conversations.

    Aggregating NetFlow data in memory significantly reduces the I/O demands that Orion NTA makes on your Orion database, which can increase the performance of all SolarWinds applications that share the database. In other words, conversely, if its Web Console resources are allowed to work directly against the Orion database in making and presenting their latest calculations, Orion NTA would make big I/O demands on the Orion database, impacting performance of both Orion NTA and Orion NPM.

9. Click **Save** in the Database Settings section

For more information about the Database Maintenance application packaged with Orion NPM, see Running Database Maintenance in the *SolarWinds Orion Network Performance Monitor Administrator Guide*.

Charting and Graphing Settings

 The Charting and Graphing Settings section includes the following options for configuring Orion NTA charts and graphs.

Progressive Charting

The progressive charting option configures Orion NTA to draw charts incrementally, spreading the chart generation load over multiple database queries. For NetFlow installations monitoring and processing numerous data flows, progressive charting can minimize the amount of time you have to wait before actually seeing charted data.

Percentage Calculations for Top XX Resources

Orion NTA Top XX list resources may be configured to show any number of items, listed in either absolute or relative terms of overall traffic percentage. Absolute percentages are calculated for each item based on all monitored items. Relative percentages for each item are calculated in terms of the total number of items displayed in the selected resource.

For example, a given node (HOME) is communicating with other endpoints (1, 2, 3, and 4). The following table details the two percentage types calculated and displayed for both Top 4 Endpoints and Top 3 Endpoints resources.

Endpoint	Actual Amount of Traffic	% of Total Actual Traffic	Absolute Percentage		Relative Percentage	
			Top 4	Top 3	Top 4	Top 3
Hostname 1	4 MB	40%	40 %	40 %	4/8.5 MB = 47%	4/8 MB = 50%
Hostname 2	3 MB	30%	30 %	30 %	3/8.5 MB = 35.3%	3/8 MB = 37.5%
Hostname 3	1 MB	10%	10 %	10 %	1/8.5 MB = 11.7%	1/8 MB = 12.5%
Hostname 4	.5 MB	5%	5%	Not Shown	0.5/8.5 MB = 5.9%	Not Shown
Remaining Traffic in MB and %	1.5 MB	15%	15%	20%	Not Shown (Remaining Traffic shown only in Absolute values.)	Not Shown (Remaining Traffic shown only in Absolute values.)
Total Traffic Shown in	10 MB	100%	100%	100%	100%	100%

Endpoint	Actual Amount of Traffic	% of Total Actual Traffic	Absolute Percentage		Relative Percentage	
			Top 4	Top 3	Top 4	Top 3
Resource (in MB and %)			(10 MB includes remaining traffic)	(10 MB includes remaining traffic)	(8.5 MB includes just top 4 entries)	(8 MB includes just top 3 entries)

In the default Interactive view, pie charts are configured to show some, but not all traffic. The **Remaining traffic** row in the legend of Interactive charts show the rest of the data not included in the top XX items.

In Classic pie charts, **Other traffic** is a group of percentages below 3%. The legend below the Classic chart lists all top XX items.

Resource Default Time Period

By default, all resources in Orion NTA NODE DETAIL views present data for the last 15 minutes; and Orion SUMMARY views present data for the last 1 hour(s). While adjusting the respective settings affects the time period that is used for all resources by default, you can also configure time periods for any resource on an individual basis.

The default time period for search is Last 15 minutes.

Notes:

- The default time period for DETAIL views governs both all endpoint-centric resources and other resources placed on these views.

- High default resource time periods may significantly affect load times for Orion NTA views. For chart resources, progressive charting can spread the computational load of chart generation over multiple database queries.

Resource Default Chart Style

By default, all resources in Orion NTA DETAIL views present chart data in an Interactive Area Chart; and Orion SUMMARY views present chart data in an Interactive Pie Chart. You can also configure the chart style – Interactive, Classic, or Area, or Pie chart – for any resource on an individual basis.

Note: The default chart style for DETAIL views governs both all endpoint-centric resources and other resources placed on these views**.**

Resource Default Flow Direction

By default, all resources in Orion NTA NODE DETAIL and INTERFACE DETAIL views present data for Ingress of flows; and Orion SUMMARY views present data for both flow directions. You can also configure the flow direction for any resource on an individual basis.

Note: The default flow direction for SUMMARY views will govern both all endpoint-centric resources and other resources placed on these views**.**

Automatic Page Refresh

The refresh rate for Orion NTA views is configurable. To enable automatic page refresh for Orion NTA views, check **Enable automatic page refresh every** *X* **minutes**, and then provide the refresh interval in minutes.

Configuring Charting and Graphicing Settings

The following procedure configures charting and graphing settings.

To configure charting and graphing settings:

1. *If you want to enable progressive charting,* check **Enable Progressive Charting**.

   Note: No data is discarded. With Progressive Charting enabled, Orion NTA simply builds charts incrementally from selections of all monitored flow data.

2. Select the type of percentage you want to use in Top XX resources.

3. Designate an appropriate default resource time period.

   Note: High default resource time periods may significantly affect load times for Orion NTA views. For chart resources, progressive charting can spread the computational load of chart generation over multiple database queries.

4. *If you want to enable automatic page refresh,* check **Enable automatic page refresh…**, and then designate the interval between page refreshes.

5. Click **Save** in the Charting and Graphing Settings section.

Interactive Charts

Orion NTA's Interactive and Classic charts display NTA pie-chart summaries of resource-related data. Orion NTA area charts enable a more detailed view of resources in both Interactive and Classic views.

Interactive charts are the default for new and upgraded NTA installations. NTA software upgrades automatically change classic charts to interactive charts.

Interactive charts offer tooltips with current values, as well as the ability to disable data series and to zoom in on data. Interactive charts also have clickable features offering detailed resource information and editing capabilities. The number of data series you can display in Interactive charts is limited to 100, but the rest of the series is visible in a legend.

Note: Unlike Classic charts, Interactive charts do not support the fast-switch buttons and Cancel/Cancel all buttons displayed during progressive loading. Also unlike Classic pie charts, Interactive pie charts present data in a 2-D format only.

The Orion NTA Settings page enables you to switch all or some resources to Interactive or Classic charts. This capability allows you to view Interactive and Classic charts on the same page. To change from Interactive to Classic charts or from Classic charts back to Interactive charts, see Selecting Classic or Interactive Charts.
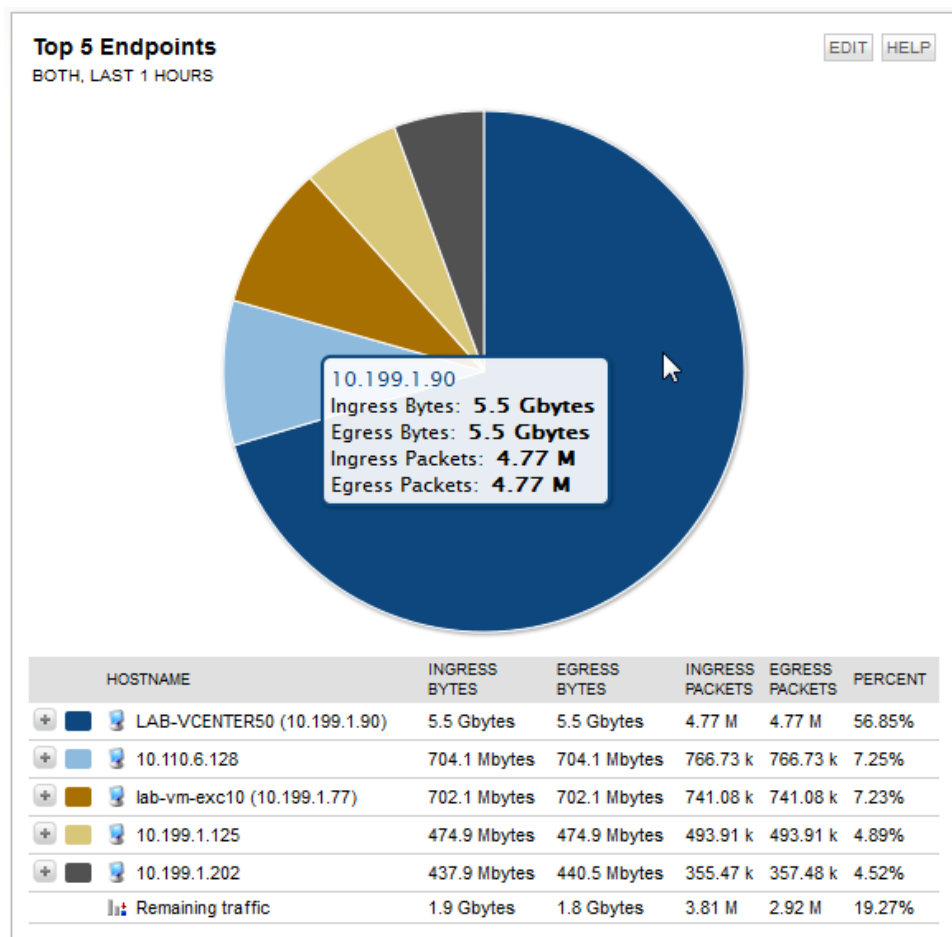
The following charts use absolute percentage calculations.

Pie Charts

With Interactive pie charts, Orion NTA gives each resource its own piece of pie, depending on your chart settings. If more resources exist than what is configured to display, Orion NTA creates a category in the pie chart's legend called **Remaining traffic**, which is not displayed in chart. If fewer resources exist than what the chart is configured to display, the chart shows only those resources that exist.

The following chart divides traffic among the top five top endpoints. The largest traffic flow is from LAB VCENTER50 (10.199.1.90) and is 56.85% of the total traffic flow. The next four highest endpoints' traffic flows are 7.25%, 7.23%, 4.89%, and 4.52% of the total traffic flow. Orion NTA labels all other endpoint flow traffic as Remaining traffic, which is 19.27% of the total traffic flow.

Top 5 Endpoints
BOTH, LAST 1 HOURS

EDIT HELP

10.199.1.90
Ingress Bytes: **5.5 Gbytes**
Egress Bytes: **5.5 Gbytes**
Ingress Packets: **4.77 M**
Egress Packets: **4.77 M**

	HOSTNAME	INGRESS BYTES	EGRESS BYTES	INGRESS PACKETS	EGRESS PACKETS	PERCENT
+	LAB-VCENTER50 (10.199.1.90)	5.5 Gbytes	5.5 Gbytes	4.77 M	4.77 M	56.85%
+	10.110.6.128	704.1 Mbytes	704.1 Mbytes	766.73 k	766.73 k	7.25%
+	lab-vm-exc10 (10.199.1.77)	702.1 Mbytes	702.1 Mbytes	741.08 k	741.08 k	7.23%
+	10.199.1.125	474.9 Mbytes	474.9 Mbytes	493.91 k	493.91 k	4.89%
+	10.199.1.202	437.9 Mbytes	440.5 Mbytes	355.47 k	357.48 k	4.52%
	Remaining traffic	1.9 Gbytes	1.8 Gbytes	3.81 M	2.92 M	19.27%

Mousing over the chart provides tool tips on the details for that portion of the chart. For example, the pie chart above shows tool tip details for LAB VCENTER50 (10.199.1.90).
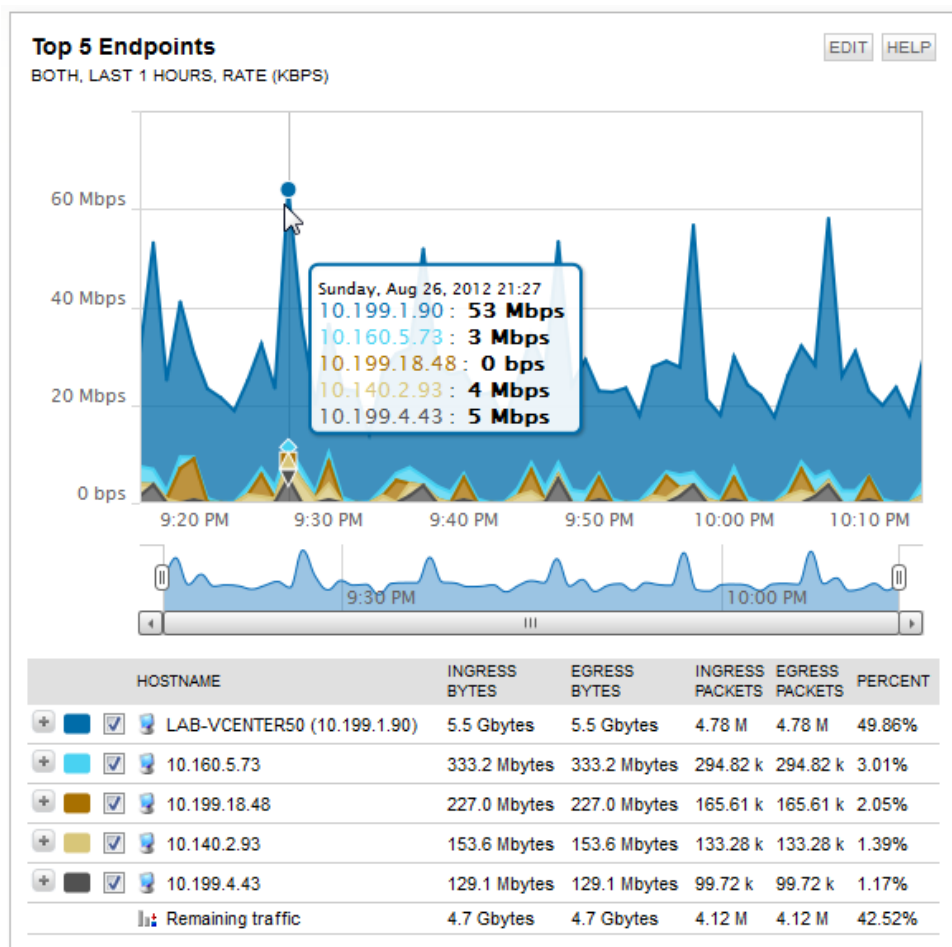
Area Charts

Area charts are the default charts for resource detail pages. They provide a more comprehensive view of traffic and bandwidth usage data than pie charts, so area charts always include a one-to-one relationship of table-to-chart information.

Interactive area charts are the default charts for all detail views and display resources within a defined traffic level and timeframe.

Like the Interactive pie charts, if more resources exist than what is configured to display, Orion NTA creates a category in the area chart's legend called **Remaining traffic**. If fewer resources exist than what the chart is configured to display, the chart shows only those resources that exist.

Point your mouse to a specific point on an Interactive area chart, and the chart displays the exact transmission details for that point in time. The detailed information displays within the chart and in a tool tip.


The Top 5 Endpoints s data shown the area chart tell us that at their highest traffic points, conversations involving the LAB-VCENTER50 (10.199.1.90) and 10.160.5.73 endpoints not only generated more traffic than the other top 3 endpoints, but they did so consistently across the displayed time intervals.

For an even more detailed look at resource use, move the slider tool (beneath the Interactive area chart) right or left to display an in-depth view of a selected portion of the area chart. This feature allows you to visually pinpoint and compare endpoint traffic flow data using an exact time.
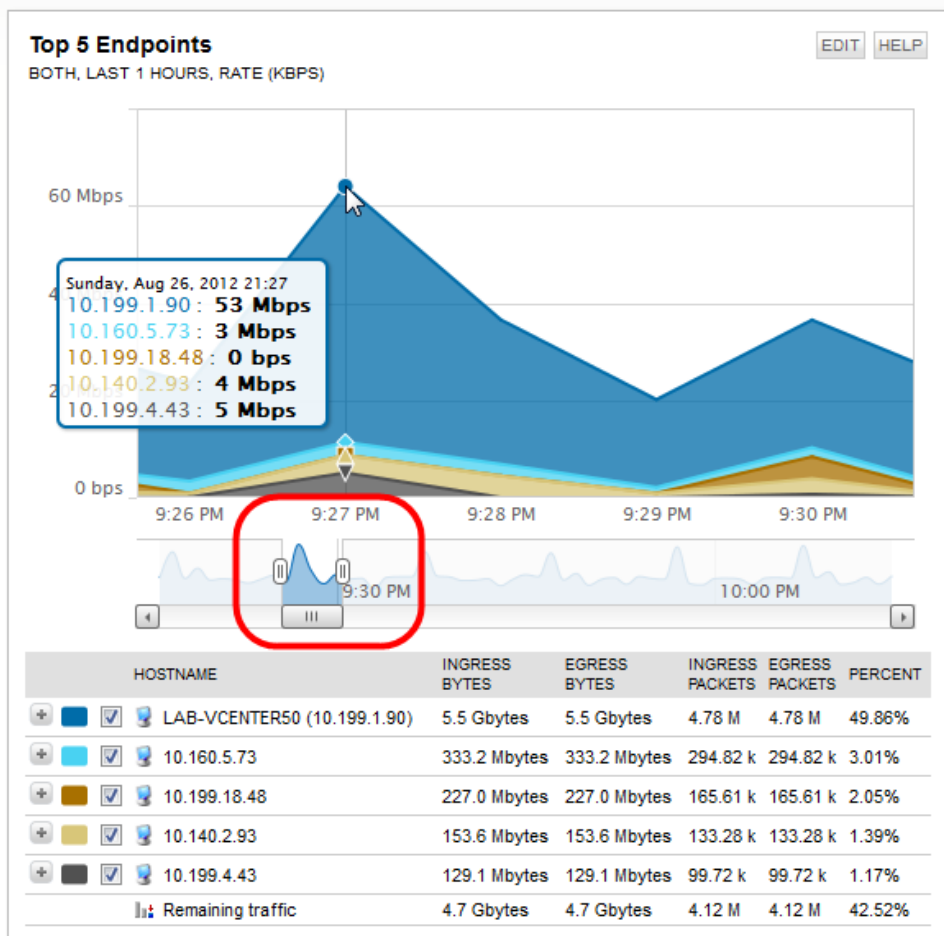
To display only certain endpoints out of those already selected for review, for example, the bottom two out of the top five, uncheck the top three endpoints.
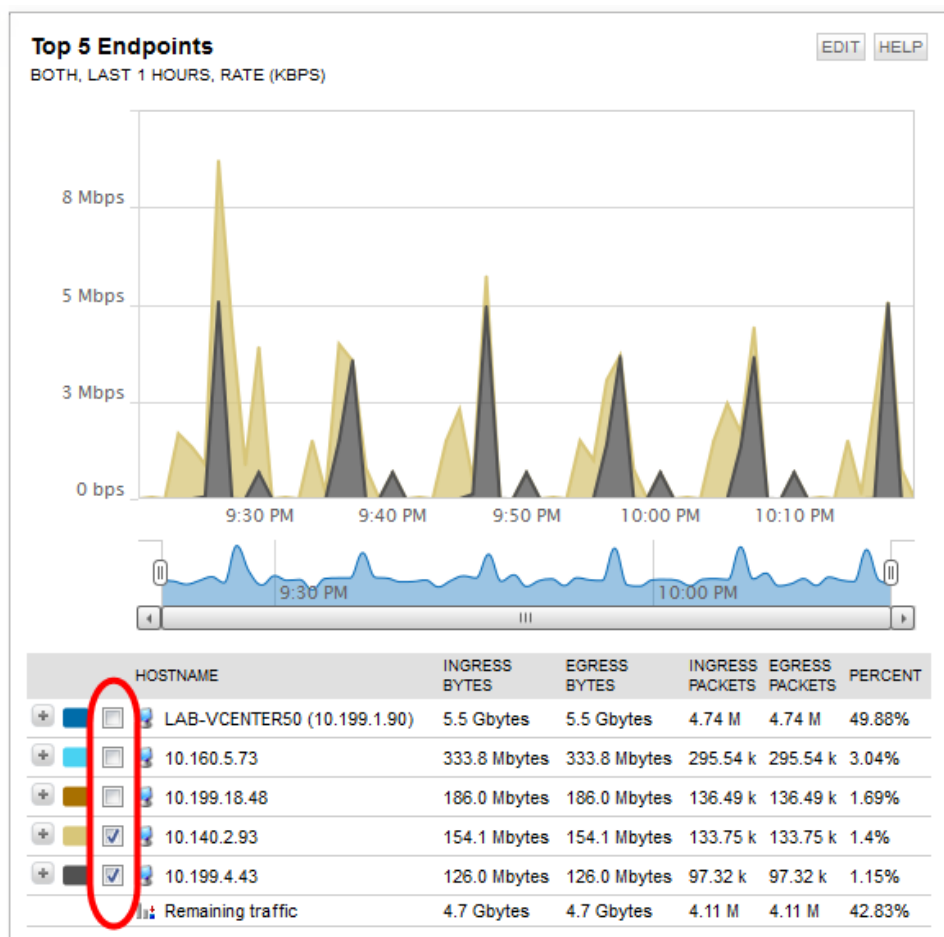
The top three endpoints still display in the legend, but do not display in the table, making for easy comparisons between the bottom two endpoints. You can also use the slider below the graph for a more detailed view of the endpoints, in the same way as described above.

Selecting Classic or Interactive Charts

Orion NTA charts default to Interactive Charts, which provide the following styles:

- 2-D pie chart

- Area chart (six styles: stack area, stack spline area, stack line, line, spline, bar)

Classic Charts have these styles are available:

- 2-D or 3-D pie chart

- Area chart (six styles: stack area, stack spline area, stack line, line, spline, bar)

To select a chart style:

1. Click **Customize Page**, in the top right corner of any Summary page. The Customization page displays.

2. To enable either or both the Classic or Interactive chart style:

    a. Click to open one or more of the following options and select the appropriate resource(s):

    o NetFlow Top Resources - Traffic Analyzer Resources suitable for all NetFlow views

    o NetFlow Top Resources (Classic Chart Style) - Traffic Analyzer Resources suitable for all NetFlow views

    o Network Wide Summary Charts - Charts Showing Statistics Across All Managed Devices

    o Network Wide Summary Charts (Classic Chart Style) - Charts Showing Statistics Across All Managed Devices

    o EnergyWise Charts - Charts for EnergyWise

    o EnergyWise Charts (Classic Chart Style) - Charts for EnergyWise

    o Multiple Series Charts (Classic Chart Style) - Multiple Objects Chart & Multiple Universal Device Pollers Chart for a Single Node or Summary Page

    Note: To enable display of resources in both chart styles, open both sets of resources and choose the appropriate individual resources.

3. Click **SUBMIT**.

4. To review how the chart styles look, click **PREVIEW**. To complete and apply chart style selection, click **DONE**.

Adding an Endpoint Centric Resource

An endpoint-centric resource is a special type of Top XX resource that you can place on either Node Details or Interface Details views.

To understand the difference between a Top XX resource and its endpoint-centric variant, consider this example: If you place Top XX Conversations on either the Node Details or Interface Details view, you will see data on conversations responsible for the most traffic passing through the selected node or interface over the set period of time; however, if you place Top XX Conversations (Endpoint Centric) on either of those views, you will see data on the conversations the selected node of interface originated or terminated.

You can use Customize Page to add an endpoint-centric resource to the Node Details or Interface Details view.

To add an endpoint-centric resource:

1. Open the Orion Web Console.

2. Click the node in All Nodes on the HOME page.

   If nodes on All Nodes are grouped, drill down as needed into the relevant group.

3. Click **Customize Page** on the Node Details view.

4. Click **+** over the column in which you want the new resource to be placed.

5. Click NetFlow Endpoint Centric Resources and check the appropriate resource.

6. Click **Submit**.

7. Use the arrow controls to move the resources listed in the column into the order you want displayed in the Orion Web Console.

8. Click **Done**.

Using Orion NTA Advanced Alerts

SolarWinds alerting software—part of all Orion products—can alert on polled, syslog, and trap data. Alerts are defined in terms of thresholds related to data in the Orion database. Scans in the form of SQL queries at set intervals detect recorded values that exceed thresholds, triggering an alert if relevant conditions pertain.

When an Orion alert is triggered, the software evaluates suppression criteria. If an alert is not qualified to be suppressed, the software executes a defined action. If no action is defined, the software merely displays the alert as an event on the web console.

Throughout this workflow timers are used to allow the software to do its work at each step and to ensure that the alerting workflow had appropriate redundancy for timely reporting of alerts.

For an excellent overview of alerting in Orion advanced alerts, see Understanding Orion Advanced Alerts. For all specific information on Orion basic and advanced alerts, including detailed instructions for creating and managing them with the Orion Alert Manager, see Creating and Managing Alerts in the *SolarWinds Orion Network Performance Monitor Administrator Guide.*

When you install SolarWinds Orion Network Traffic Analyzer, the software automatically creates in the Orion Alert Manager the following top talker and CBQoS alerts.

Top Talker Alerts

High Receive Percent Utilization with Top Talkers

> This alert indicates that the traffic received by the relevant interface exceeded the defined bandwidth usage threshold.

High Transmit Percent Utilization with Top Talkers

> This alert indicates that the traffic transmitted by the relevant interface exceeded the defined bandwidth usage threshold.

By default, when triggered, top talker alerts do two things: 1) write the bandwidth utilization event to the SolarWinds event log when the current percent utilization on the transmit side of an interface rises above specified value, and then again when the utilization drops back down below a specified value. 2) Initiate a web capture of the most current top talker information and then append and send that information in an email to the configured recipient.

CBQoS Alerts

The primary purpose of these CBQoS alerts is to help in monitoring the CBQoS setup on your devices.

Pre-Policy

CBQoS Pre-Policy writes to the SolarWinds event log when the amount of Pre-Policy traffic (in bytes) meets the conditions of your alert threshold setting.

Example of alert logged: CBQoS Pre-Policy traffic in class 'class-default (MCQTest)' with policy 'policy-default (MPQTest)' on interface 'FastEthernet0/0 · link to core' met the conditions of your alert threshold setting. Total Pre-Policy traffic in the past 15 minutes: 99999 Bytes

By default, we write to the Event Log. This alert also can be configured to send the information in an email to the configured recipient.

Post-Policy

CBQoS Post-Policy writes to the SolarWinds event log when the amount of Post-Policy traffic (in bytes) meets the conditions of your alert threshold setting.

Example of alert logged: CBQoS Post-Policy traffic in class 'class-default (MCQTest)' with policy 'policy-default (MPQTest)' on interface 'FastEthernet0/0 · link to core' met the conditions of your alert threshold setting. Total Post-Policy traffic in the past 15 minutes: 99999 Bytes

By default, we write to the Event Log. This alert also can be configured to send the information in an email to the configured recipient.

Drops

CBQoS Drops writes to the SolarWinds event log when, as a result of applying CBQoS policies to traffic on an interface.

Example of alert logged: CBQoS Drops met your alert threshold setting as a result of applying class map 'class-default (MCQTest)' and policy map 'policy-default (MPQTest)' on interface 'FastEthernet0/0 · link to core' . Total data dropped in last 15 minutes is: 00333 Bytes

By default, we write to the Event Log. This alert also can be configured to send the information in an email to the configured recipient.

The instructions in this section assume you are familiar with the Orion Alert Manager and already know how to setup an advanced alert.

For steps on creating an advanced alert see the sections on advanced alerts in Creating and Managing Alerts in the *SolarWinds Orion Network Performance Monitor Administrator Guide.*

To configure an NTA advanced alert:

1. Open the Orion Alert Manager in the Orion program group.

2. Navigate to the Manage Alerts resource (View > Configure Alerts).

3. Select the relevant top talker or CBQoS alert.

4. Click Edit.

a. On General, check **Enable** for this Alert and select an appropriate Alert Evaluation Frequency.

b. On Trigger Condition, define the conditions in which the software launches the alert.

   For top talker alerts, the default condition is the interface's transmit/receive utilization percentage exceeding 75.

   For the CBQoS alerts, the default condition is a match on the relevant **NTA CBQoS Class Map**. For example, for the Drops alert, the dropdown value of NTA CBQoS Class Map is 'Drops'. The default values for both **Class Name** and **Policy Name** is '*'. This does not mean that the alert triggers if there is a match on **any** class name or policy name that has been returned to Orion NTA from polled CBQoS devices; rather, it means that the alert triggers in this default configuration only when the value of Class Name or Policy Name is NULL. These trigger conditions for Class Name and Policy Name, in other words, render the predefined CBQoS alerts inoperable by default.

   To enable these alerts to trigger: you must click value field for Class Name and Policy Name to select a specifically named class or policy from a list that is pre-populated based on CBQoS polling results.

   You can adjust the number of seconds for which the match exists, essentially inserting a delay to allow the traffic to fluctuate without triggering the alert.

   You can adjust the default trigger conditions as needed or add conditions.

c. On Reset Condition, define the conditions in which the software resets the alert.

   For top talker alerts the default condition is the interface's transmit/receive utilization percentage going below 50. You can adjust this condition or add conditions.

   For the CBQoS alerts, the default condition is no match based on the NTA CBQoS Class Map type, Class Name value, and Policy name value. You can adjust the number of seconds for which the match fails to persist, essentially inserting a delay to allow the traffic to fluctuate without canceling the alert.

d. On Alert Suppression, define the conditions in which the software suppresses the alert.

   The default condition is no suppression.

e. On Time of Day, define the days and times during which the software actively evaluates the database for trigger conditions.

The default range is 24/7.

f. On Trigger Actions, create actions to execute when the software triggers the alert.

As discussed, the default action for all alerts is to write into the SolarWinds event log.

Notes: If there are endpoint-centric resources on the Interface Details page when it is captured for inclusion in top talker alert notification, the links to those resources will be non-functional in the email that the designated recipient receives; essentially, the information provided by default in the alert notification currently is not customizable.

On the **URL** tab, if you changed the default Orion login from 'Admin' with a blank password, then accordingly you will need to change the URL that the trigger action uses to send out the notification.

For example, if your new credentials were username 'NTA User' with password 'Bravo,' you would adjust the default URL so that:

${SQL:SELECT REPLACE(REPLACE(Macro, **'$$Password$$',
''),'$$User$$', 'Admin'**) FROM NetFlowAlertMacros WHERE
ID='InWebMailInterfaceDetailsLink'}

becomes:

${SQL:SELECT REPLACE(REPLACE(Macro, **'$$Password$$',
'Bravo'),'$$User$$', 'NTA User'**) FROM NetFlowAlertMacros WHERE
ID='InWebMailInterfaceDetailsLink'}

g. On Reset Conditions, define actions to execute when the software resets the alert. .

As discussed, the default reset action writes to the SolarWinds event log.

5. Click **OK** and then click **Done**.

Setting Up a NetFlow Collection

If you see a network device in your NetFlow Sources and you do not intend to collect NetFlow data from it, you can eliminate unnecessary traffic by turning off the export of data at the device.

 Follow the steps to setup a NetFlow collection or to troubleshoot any collection for a NetFlow source from which NTA has not yet received data.

To set up NetFlow collection for a network device, complete these two tasks:

- Configure your network devices to export NetFlow data for *each interface* for which you want to collect the data

  For this task, consult the appropriate example:

  o Cisco NetFlow Configuration

  o Extreme sFlow Configuration

  o Foundry sFlow Configuration

  o HP sFlow Configuration

  o Juniper J-Flow Configuration

  o Juniper sFlow Configuration

  For information on enabling NetFlow for Cisco Catalyst switches, consult this SolarWinds technical reference paper.

  For information on enabling NetFlow on Cisco ASA devices, consult this SolarWinds Knowledge Base article.

  If your network device is of a different vendor, consult that vendor's documentation.

- Verify that each interface for which you want to collect and view data is actively being monitored in Orion NPM

  For this task, for any interface that you need to add into Orion NPM, consult Network Discovery Using Sonar Wizard in the *SolarWinds Orion NPM Administrator Guide*.

  Note: Only SNMP capable nodes whose interfaces were discovered by Orion NPM can be added as NetFlow sources.

- Use a packet capture tool (for example, WireShark) on the relevant interface and port to verify that the device is in fact exporting data as expected.

Licensing Error

This error can occur when the NetFlowService is not running. You could also see this error if you are running an additional Orion web server and communication over TCP port 17777 is blocked or there is a timing (UTC) discrepancy between the web server and the NetFlowService.

Use the procedure appropriate to your setup.

Orion NTA and the Web Server (IIS) are Installed on the Same Server

Follow these steps if you are running the Orion web server (IIS) and Orion NTA on the same machine.

To troubleshoot:

1. Shutdown the Orion Web Console.

2. Restart the **NetFlowService** (Administrative Tools > Services).

3. Restart the Orion Web Console.

4. Start the Orion License Manager (SolarWinds > SolarWinds License Manager).

5. Contact SolarWinds Technical Support (www.solarwinds.com/support) and let them know you have already followed these steps.

Orion NTA and the Web Server (IIS) are Installed on the Different Servers

Follow these steps if you are only receiving the licensing error on the additional Orion web server.

To troubleshoot:

1. Shutdown the Orion Web Console.

2. **If you are running Windows Firewall**, add an exception for TCP port 17777 (Control Panel > Windows Firewall > Exceptions) if one does not already exist.

3. Reload the Orion Web Console.

4. **If you see the same licensing error**, contact Orion Technical Support (www.solarwinds.com/support) and let them know that you have already followed these steps.

Resolving Unknown Traffic Events

This page provides a rolling window of the most recent 200 traffic events involving unknown flow sources.

Events are shown from the time of the last reset or the last restart of the NetFlow Service.

Click 'Refresh Events' to refresh the list along with the page. Unresolved events return to the list if they have not been successfully resolved. This allows you to test your efforts to resolve unresolved traffic items.

Click 'Clear Notifications' to hide unknown flow traffic events in the Unresolved Traffic Events list only; they continue to appear under NTA and NPM events. If the unknown flow traffic event is not resolved, it will reappear in the Unresolved Traffic Events list when another event occurs.

No Template Error

This error could mean that your device is not exporting a template with its version 9 flows. More likely, though, is that the default time-out for you device to send its flow template with version 9 flows is set high (e.g. 30 minutes).

Assuming your device exports the version 9 flow template every 30 minutes, and since Orion NTA only raises an event regarding the absence of a template every 15 minutes, you may for some time before NetFlow version 9 flow data is accurately displayed in the NetFlow Web Console.

So that your flow information remains as current as possible in the NTA display, SolarWinds recommends that you configure your devices to export the template for v9 flows every 1 minute.

NetFlow Unmanageable Sources

When Orion NTA receives a data flow from an unmanageable interface, the event displays in Orion NTA's Traffic Analyzer pane. The following event is an example of an unmanageable interface.

| 5/30/2012 6:42 AM | ⚠ | NetFlow Receiver Service [LAB-NTA-04] is receiving flow data from unmanaged interface '#60' on lab-nta-04 and it does not support SNMP. Click the **"Add this interface"** to manage interface and process its flow data. |

Though this interface does not support SNMP, by adding it to NPM, you enable the NetFlow Receiver Service to process the flow data it exports to Orion NTA. If you do not add this interface, Orion NTA will drop the data flow.

To add the unmanageable interface:

1. Click **Add this interface** in the unmanaged event. The following dialog displays, with the interface name in the Interface Name field.

2. *If you wish to edit the interface name,* create and enter a name for the interface in the Interface Name field.

3. Refer to your device administration documentation for the correct interface speed, enter the interface speed into the Interface Speed field, select the speed type from the pull-down menu, and then click **SUBMIT**. The interface has been added to Orion NPM and can be viewed in Orion NPM's Node Management page.

After the unmanageable interface has been configured, it looks like any standard interface in Orion NPM and Orion NTA can recognize the interface. Now Orion NTA can manage the unmanageable interface the same as a manageable interface and does one of the following:

- If Orion NTA has been configured to automatically add NetFlow sources, it automatically adds the NetFlow source. Orion NTA displays an event that says the source has been automatically added to Orion NTA. The source is visible in Orion NTA in the NetFlow Sources pane.

- If Orion NTA has not been configured to automatically add NetFlow sources, it does not add the NetFlow source. Orion NTA displays an event about a flow from an interface not in NetFlow sources. The source is not visible in Orion NTA in the NetFlow Sources pane. In this instance, unmanageable interfaces can be added manually so they can be monitored in Orion NTA.

Note: Unmanageable interfaces do not have information about interface utilization, because Orion NPM does not poll them. Orion NTA is unable to show these interfaces in the Top XX NetFlow Sources by % Utilization pane. These interfaces do not trigger NetFlow alerts based on utilization for the same reason.

Unmanageable Interface Speed

You must enter the speed for unmanageable interfaces. Unlike managed interfaces that Orion NPM recognizes, Orion NPM cannot get this information from unmanageable interfaces, which it does not recognize. Your device administration guide or your Internet provider can provide you more information on determining an unmanageable interface's speed.

Orion NTA uses the unmanaged interface speed to determine the percentage of resource utilization, as seen below.

Entering an accurate interface speed ensures the correct display of Orion NTA resources. With this information, you can determine the most efficient use of resources. If needed, you can override an interface speed value on Orion NPM's Interface edit page.