

Smart Network Application (SNA) Right-Hand Information Panel View

Objective

The Smart Network Application (SNA) is a system that displays an overview of the network topology including detailed monitoring information for devices and traffic. SNA enables viewing and modifying of configurations globally on all supported devices in the network.

The area to the right of the topology map of the SNA displays an information panel which displays attributes of the selected elements and enables performing actions on them.

This article explains the features and functions of the Right-Hand Information Panel of the SNA.

Applicable Devices

- Sx350 Series
- SG350X Series
- Sx550X Series

Note: Devices from the Sx250 Series can provide SNA information when they are connected to the network, but SNA cannot be launched from these devices.

Software Version

- 2.2.5.68

SNA Right-Hand Information Panel View

The right-hand information panel contains the following blocks:

- [Header Block](#)
- [Right-Hand Information Panel Cogwheel](#)
- [Basic Information Block](#)
- [Notifications Block](#)
- [Services Block](#)
- [Tags](#)
- [Statistics](#)



switche6fa9f
192.168.1.127



BASIC INFORMATION

[View all](#) ▶

Product Name: SG350X-48MP 48-Port
Gigabit PoE Stackable
Managed Switch

Host Name: switche6fa9f

IP: 192.168.1.127



MAC Address: 40:a6:e8:e6:f4:d3

Description: *Enter description, up to 80 characters...*

SNA Support: Full Support

NOTIFICATIONS

[Show Notifications](#)

%AAA-W-REJECT: New https connection for user cisco, source 192.168.1.138 destination 192.168.1.127 REJECTED
2016-Dec-14th 9:32:50 AM

%AAA-W-REJECT: New https connection for user cisco, source 192.168.1.138 destination 192.168.1.127 REJECTED
2016-Dec-14th 9:23:22 AM

%AAA-W-REJECT: New https connection for user cisco, source 192.168.1.138 destination 192.168.1.127 REJECTED
2016-Dec-14th 9:23:18 AM

SERVICES

[DNS Configuration](#) ▶

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[Power Management Policy](#) ▶

STATISTICS

[PoE Consumption \(Device\)](#) ▶

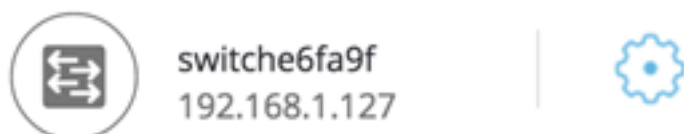
TAGS

Header Block

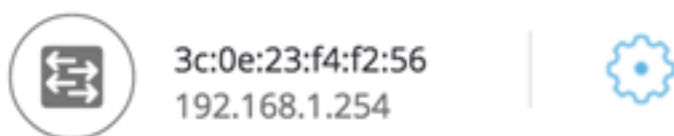
The header displays the icon for the selected element or elements, and if only one element is selected, the header displays its identifying information, as shown below:

- Devices — When you click on a device, the Header will provide information of the chosen device. The hierarchy of the identification methods is:
 - Host name
 - IP address
 - MAC address

The example below shows that the host name is switche6fa9f with an IPv4 address 192.168.1.127.



Note: If the host name, IP address, and MAC address of a device are known, the host name and the IP address are shown. If the host name or IP address is not known, the MAC address replaces the missing attribute similar to the sample image below.



- Interfaces — When you double-click on the device and choose an interface, the Header will provide information on the chosen interface such as the name of the interface and the strongest form of the device identification it belongs to: Host name|IP address — If the host name is unknown.MAC address — If both the host name and the IP address are unknown.



- Connections — When you click on the link of two or more devices, the Header will show this image:



When selecting multiple elements, the Header shows the number of elements selected, and if all selected elements are of the same type, the header also shows their type. In the example below, the type is not displayed because the types were not consistent.



Selecting a client group is a shortcut to selecting all members of the group. The header


shows the number and type of device in the group.

When selecting a client group together with other devices, the client groups counts as the number of devices that are contained in it. For example, when selecting a backbone device and a client group containing five clients the header shows six devices selected).

If notifications exist for the device, the number of notifications is displayed:



Right-Hand Information Panel Cogwheel

The following actions can be performed on the selected devices or connections. To perform these actions, click on the cogwheel icon  in the right-hand information panel.

- Manage Device — This option is only available for SNA and partial SNA switches, and only appears when a single device is selected. Selecting this action launches a web management session for the selected switch using the switch management application. You do not need to enter credentials to launch this session.
- Explore Device — This option is only available for SNA switches, and only appears when a single device is selected. Selecting this action opens the device explorer for the selected switch.
- Explore Connection — This option appears when a single connection is selected. Selecting this action opens the connection explorer for the selected connection.
- Explore Client Group — This option appears when a client group is selected. Selecting this action opens the client explorer, filtered by the type of device in the client group.
- Delete — This option only appears when all the selected devices are offline devices. Selecting this action deletes all the selected devices from the topology map.

Basic Information Block



switche6fa9f
192.168.1.127



BASIC INFORMATION

[View all ▶](#)

Product Name: SG350X-48MP 48-Port
Gigabit PoE Stackable
Managed Switch

Host Name: switche6fa9f

IP: 192.168.1.127

MAC Address: 40:a6:e8:e6:f4:d3

Description: *Enter description, up to 80 characters...*

SNA Support: Full Support

The Basic Information block displays attributes of the selected single element. The block is not displayed when more than one entity is selected.

Some of the information is shown at all times, and some is shown only if the View All button is clicked.

If no information is received on a certain parameter, that parameter is not displayed in the Basic Information section.

The following information is displayed for backbone devices:

Product Name	From the device description MIB. This field only appears when the device is a switch with partial or full SNA capabilities.	SG500-52P - 52-Port Gigabit PoE Stackable Managed Switch
Host Name	String of maximum 58 characters	RND_1
IP Address	Displays the IP address used by SNA to connect to the device. Additional advertised existing addresses (IPv4 and IPv6) can be seen by pressing the icon next to the label.	IPv4: 192.168.1.55 IPv6: 923:a8bc::234
MAC Address	The base MAC address of the device.	00:00:b0:83:1f:ac
Description	Editable field of up to 80 characters. Saved on SNA Storage.	
SNA	Possible values:	

Support	<ul style="list-style-type: none"> • Full Support for SNA devices • Partial Support for Managed devices • No SNA support for unmanaged devices • This parameter appears only for switches 	
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Below are the parameters that only appear when **View All** is clicked. This option is only available if the device is a switch with partial or full SNA capabilities.

Existing VLANs	A list of the VLANs created on the device. Dashed lines are used to join consecutive VLANs.	1, 6, 13-19, 1054, 2012-2100, 4094
Active Firmware Version	The version number of the active firmware	2.2.0.53
System Uptime	The time in days, hours, minutes, and seconds since the device was booted up.	
System Local Time	The local time on the device in the format of active language file.	English language file example: 2015-Nov-04 17:17:53
Number of Units	Only appears on stackable devices.	2
PoE Power on unit # / Available PoE Power	Displayed only on PoE-capable devices. Displays the available power used out of the maximum power supply. If the device is a stacked device, a field appears for each PoE-capable unit in the stack with the unit ID. If the device is standalone or a single unit, the label of the field does not mention the unit ID. This means that a maximum of eight fields may appear here.	15.22W/18.0 W

The following information is displayed for offline backbone devices under Last Known Information:

Product Name	Taken from the device description MIB. This field only appears when the device is a switch with partial or full SNA capabilities.	SG500-52P - 52-Port Gigabit PoE Stackable Managed Switch
Host Name	String of up to 58 characters	RND_1
IP	Displays the last IP address used	192.168.1.55

Address	to connect to the device when last seen.	
MAC Address	The base MAC address of the device	00:00:b0:83:1f:ac
Description	Editable field of a maximum of 80 characters.	
Last Seen	The date and time the device was last seen by SNA in the format of the active language file.	English language file example: 2015-Nov-04 17:17:53

The following information is displayed for a client (end point device, such as a computer):

Host Name	String of a maximum of 58 characters	RND_1
IP Address	Shows the IP address used by SNA to connect to the device. Additional advertised addresses (IPv4 and IPv6) can be seen by clicking an icon next to the label.	IPv4: 192.168.1.55 IPv6: 923:a8bc::234
MAC Address	The base MAC address of the device	00:00:b0:83:1f:ac
Device Type	The type of client device	Phone Host Unknown
Connected Interface	The interface through which the device is reached on the closest switch	GE1/14

The following parameters only appear when **View All** is clicked:

Connection Speed		100 M 10 G
VLAN Membership	Shows the active VLANs of which the connected interface is a member. Dashes are used to join consecutive VLANs.	1, 6, 13-19, 1054, 2012- 2100, 4094
Port Utilization % (Tx/Rx)	Based on the information from the connected port.	80/42
PoE Power Consumption	Appears only if the client is connected to a PoE port.	8900 mW

The following information is displayed for a client group:

Host	This is the host name of the client	RND_1

Name	group's parent device. This parameter and all other information on the parent device appears under a Connected to header. String of a maximum of 58 characters	
IP Address of parent device	Displays the IP address used by SNA to connect to the parent device. Additional advertised addresses (IPv4 and IPv6) can be seen by pressing an icon next to the label.	IPv4: 192.168.1.55 IPv6: 923:a8bc::234
MAC Address of parent device	The base MAC address of the parent device.	00:00:b0:83:1f:ac
Connected Through Cloud	This label appears if the client group is connected to the network through a cloud. The label replaces the host name, IP address and MAC address.	

The following information is displayed for Interfaces:

Interface Name		GE1/14 LAG12
Interface Type	Displayed only for ports.	Copper-1G
Status	The operational status of the interface.	Up Down Down (ACL)
Below are the parameters that only appear when View all is clicked.		
Interface Description	Uses the ifAlias MIB value of the interface. String with a maximum of 64 characters.	"WS 28"
Operational Speed		100 M 10 G
LAG Membership	Displayed only for ports. Can be None or the LAG name.	LAG15
Member Ports	Appears only for LAGs and displays a list of the interfaces that are active members in the LAG. Consecutive ranges of interfaces are joined by dashes.	GE1/4, GE1/6, XG2/4-8
VLAN Membership	Shows the active VLANs the interface is a member in. Dashed lines are used to join consecutive VLANs.	1, 6, 13-19, 1054, 2012-2100, 4094
Port Utilization %	Appears only for ports.	80/42

(Tx/Rx)		
LAG Type	Appears only for LAGs. Possible values are Standard or LACP.	
Switchboard Mode	Possible values: <ul style="list-style-type: none"> • Access • Trunk • General • Customer • Private – Host • Private – Promiscuous 	
PoE Power Consumption	Appears only for PoE-capable ports.	8900 MW
Spanning Tree State	Displays the interface STP-state.	Blocking Forwarding Disabled
Number of Links	The total number of links between the devices, including links contained in LAGs.	6
Number of LAGs	The number of LAGs in the connection. Displayed only if there is at least one LAG in the connection.	1

Note: The Basic Information section is not displayed when selecting clients or layer 2 clouds.

Notifications Block

The notification block displays the latest notifications or System Logs (SYSLOGs) recorded on the selected device.

NOTIFICATIONS

[Show Notifications](#)

%AAA-W-REJECT: New https connection for user cisco, source 192.168.1.138 destination 192.168.1.127 REJECTED
2016-Dec-14th 9:32:50 AM

%AAA-W-REJECT: New https connection for user cisco, source 192.168.1.138 destination 192.168.1.127 REJECTED
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%AAA-W-REJECT: New https connection for user cisco, source 192.168.1.138 destination 192.168.1.127 REJECTED
2016-Dec-14th 9:23:18 AM

The notifications section only appears when selecting a single SNA device. When you click

on the Show Notifications link, the Notifications page will display.

Services Block

This section of the information panel displays available services for the current selection of elements. Only services that are relevant for all selected elements are displayed. This section is not displayed if elements, which do not support services, are a part of the selection, or when devices and interfaces are selected together.

SERVICES

[DNS Configuration](#) ▶

[Syslog](#) ▶

[Time Settings](#) ▶

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For more information about Services, click [here](#).

Tags

Tags are used to identify elements in the topology by attributes. The Tag block of the right-hand information displays all the tags assigned to the element, either automatically or by the user. You can also manage the tags of the selected elements from this part of the panel.

TAGS

[ADD +](#)

[PoE PSE](#) [SNA](#) [Switch](#)

For more information about Tags, click [here](#).

Statistics

When viewing an SNA-capable device, or the interfaces on an SNA-capable device, you can select to view historical statistics information on that interface or device.

STATISTICS

[PoE Consumption \(Device\)](#) ▶

The Statistics view is accessed from the right-hand information panel.

To view historical statistics on an interface or device, choose a specific parameter to view from a list of available parameters, according to the parameters supported by the embedded counters history feature. You can then view the status of this parameter on the selected interface for the previous year.

The following graphs can be viewed:

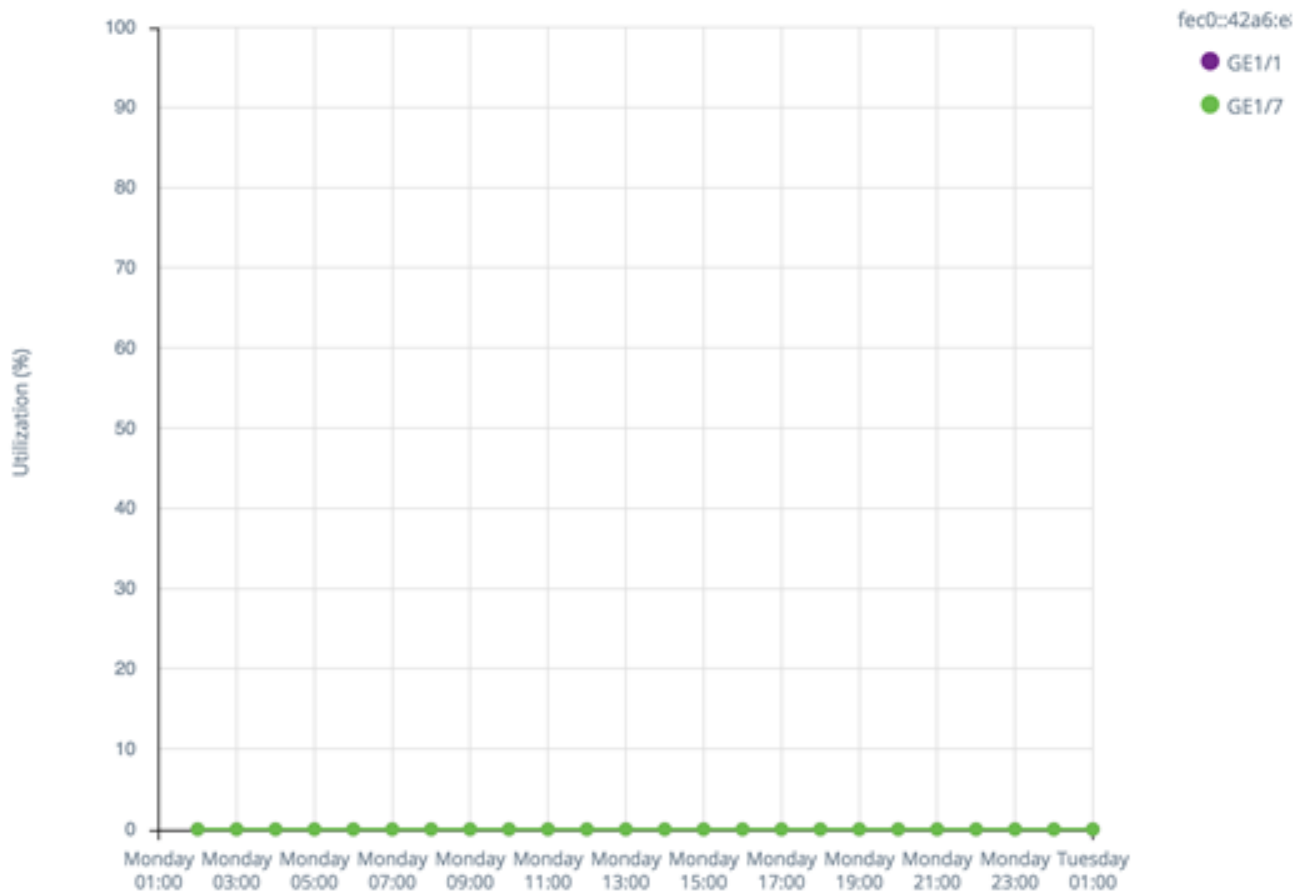
- [Port Utilization Graph](#)
- [PoE Consumption Graph \(Port\)](#)
- [PoE Consumption Graph \(Device\)](#)
- [Traffic Graph \(Bytes\)](#)
- [Traffic Graph \(Packets\)](#)

Port Utilization Graph

This graph is a port-level graph that shows the port utilization percentage of the port over time. It is available for all ports of devices with full SNA support. You can select a number of ports to run a side-by-side comparison.

Port Utilization

5 MINUTES 1 HOUR **1 DAY** 1 WEEK 3 MONTHS



The data is shown as a percentage (0-100) with number and frequency of samples depending on the displayed time scale:

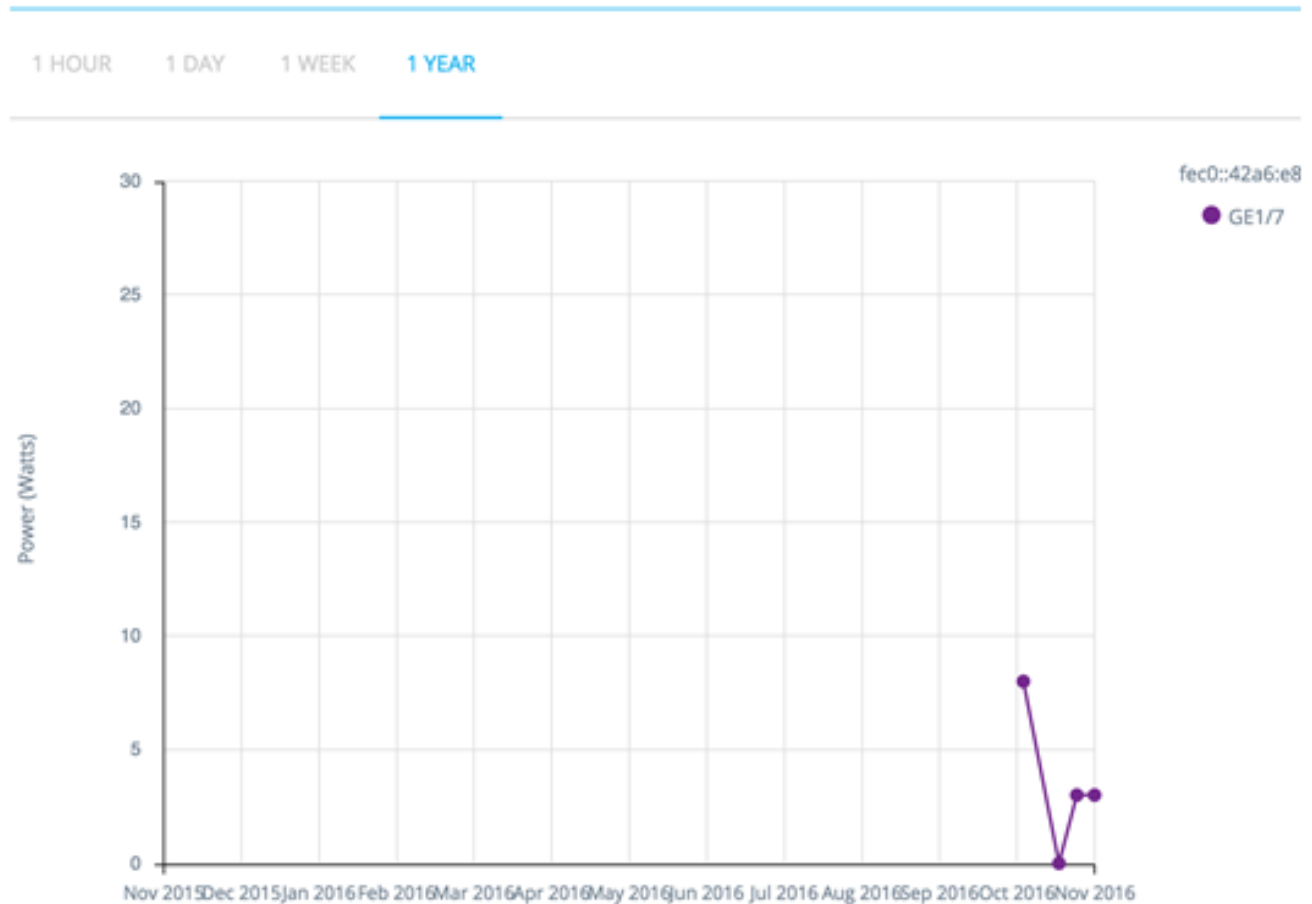
- Last five minutes — 20 samples (one every 15 seconds).

- Last hour — 60 samples (one every minute)
- Last day — 24 samples (one every hour)
- Last week — 7 samples (one every day)
- Last 3 months — 12 samples (one every week)

PoE Consumption Graph (Port)

This graph is a port-level graph that shows the PoE utilization of the port over time. It is available for all PoE ports of devices with full SNA support.

PoE Consumption (Port)



You can select a number of ports to run a side-by-side comparison.

The data is shown as a number of watts (0 - 30/60 depending on whether the port has PoE+ capability) with number and frequency of samples depending on the displayed time scale:

- Last hour — 60 samples (one every minute)
- Last day — 24 samples (one every hour)
- Last week — 7 samples (one every day)
- Last year — 52 samples (one every week)

PoE Consumption Graph (Device)

This graph is a device-level graph that shows the PoE utilization of the device over time. The graph is available for all PoE devices with full SNA support. The graph is represented per unit, and you can select a number of units (from a single or multiple stacks) to view simultaneously.

PoE Consumption (Device)

1 HOUR 1 DAY 1 WEEK **1 YEAR**



The data is shown as a number of watts (0 being the PoE capacity of the selected unit with the highest capacity) with numbers and frequency of samples depending on the displayed time scale:

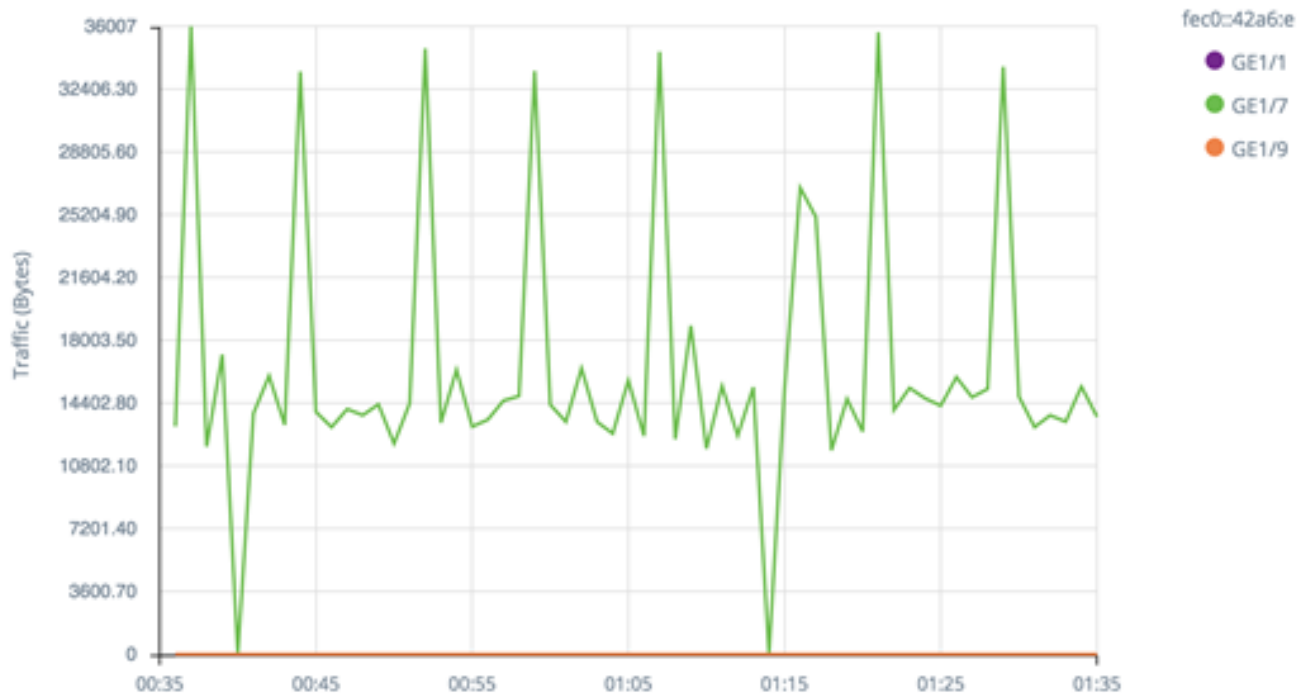
- Last hour — 60 samples (one every minute)
- Last day — 24 samples (one every hour)
- Last week — 7 samples (one every day)
- Last year — 52 samples (one every week)

[Traffic Graph \(Bytes\)](#)

This graph is an interface-level graph that shows the total traffic on an interface in bytes over time. The graph is available for all interfaces of devices with full SNA support and has separate lines for Tx and for Rx traffic. You can select a number of ports and types of traffic to run a side-by-side comparison.

Traffic (Bytes)

5 MINUTES 1 HOUR 1 DAY



The data is shown as a number of octets (0 - highest sample in selected interfaces/time period) with number and frequency of samples depending on the displayed time scale:

- Last five minutes — 20 samples (one every 15 seconds).
- Last hour — 60 samples (one every minute)
- Last day — 24 samples (one every hour)
- Last week — 7 samples (one every day)
- Last 3 months — 12 samples (one every week)

Traffic Graph (Packets)

This graph is an interface-level graph that shows the total traffic on an interface in packets over time. The graph is available for all interfaces (ports or LAGs) of devices with full SNA support.

The data in both versions is shown as a number of packets (0 being the highest value in sampled range) with number and frequency of samples depending on the displayed time scale:

- Last five minutes — 20 samples (one every 15 seconds)
- Last hour — 60 samples (one every minute)
- Last day — 24 samples (one every hour)
- Last week — 7 samples (one every day)
- Last 3 months — 12 samples (one every week)