

Configuration Guide

Monitoring Traffic

T Series Product

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1 Traffic Monitor

With Traffic Monitor function, you can monitor the traffic on the switch, including:

- Traffic Summary
- Traffic Statistics in Detail

1.1 Using the GUI

1.1.1 Viewing the Traffic Summary

Choose the menu **Switching > Traffic Monitor > Traffic Summary** to load the following page.

Figure 1-1 Traffic Summary

Auto Refresh						
Auto Refresh:	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable				
Refresh Rate:	<input type="text" value="10"/>	sec (3-300)				
<input type="button" value="Apply"/>						
Traffic Summary						
UNIT:	<input type="text" value="1"/>	LAGS				
Select	Port	Packets Rx	Packets Tx	Octets Rx	Octets Tx	Statistics
<input type="checkbox"/>	1/0/1	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/2	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/3	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/4	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/5	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/6	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/7	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/8	6	29	484	2,603	Statistics
<input type="checkbox"/>	1/0/9	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/10	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/11	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/12	938,282	23,091	217,247,538	14,778,507	Statistics
<input type="checkbox"/>	1/0/13	0	0	0	0	Statistics
<input type="checkbox"/>	1/0/14	50	243	3,622	44,624	Statistics
<input type="checkbox"/>	1/0/15	0	0	0	0	Statistics
<input type="button" value="All"/> <input type="button" value="Refresh"/> <input type="button" value="Clear"/> <input type="button" value="Help"/>						

Follow these steps to view the traffic summary of each port:

- 1) To get the real-time traffic summary, enable auto refresh in the **Auto Refresh** section, or click **Refresh** at the bottom of the page.

Auto Refresh: With this option enabled, the switch refreshes the web timely.

Refresh Rate: Specify the refresh interval in seconds.

- 2) In the **Traffic Summary** section, click **1** to show the information of the physical ports, and click **LAGS** to show the information of the LAGs.

Packets Rx:	Displays the number of packets received on the port. Error packets are not counted in.
Packets Tx:	Displays the number of packets transmitted on the port. Error packets are not counted in.
Octets Rx:	Displays the number of octets received on the port. Error octets are counted in.
Octets Tx:	Displays the number of octets transmitted on the port. Error octets are counted in.
Statistics:	Click this button to view the detailed traffic statistics of the port.

1.1.2 Viewing the Traffic Statistics in Detail

Choose the menu **Switching > Traffic Monitor > Traffic Statistics** to load the following page.

Figure 1-2 Traffic Statistics

Auto Refresh

Auto Refresh: Enable Disable Apply

Refresh Rate: sec (3-300)

Port Select

Port Select

UNIT: LAGS

Unselected Port(s)
 Selected Port(s)
 Not Available for Selection

Statistics		
	Received	Sent
Broadcast	401,633	Broadcast 2,592
Multicast	517,435	Multicast 2,727
Unicast	19,214	Unicast 17,772
Jumbo	0	Jumbo 0
Alignment Errors	0	Collisions 0
UndersizePkts	0	
Pkts64Octets	125,718	
Pkts65to127Octets	201,096	
Pkts128to255Octets	305,043	
Pkts256to511Octets	251,009	
Pkts512to1023Octets	55,416	
Pkts1024to1518Octets	0	

Follow these steps to view the traffic statistics in detail:

- 1) To get the real-time traffic statistics, enable auto refresh in the **Auto Refresh** section, or click **Refresh** at the bottom of the page.

Auto Refresh:	With this option enabled, the switch refreshes the web timely.
Refresh Rate:	Specify the refresh interval in seconds.

- 2) In **Port Select**, select a port or LAG, and click **Apply**.
- 3) In the **Statistics** section, view the detailed information of the selected port or LAG.

Received:	<p>Displays the detailed information of received packets.</p> <p>Broadcast: Displays the number of valid broadcast packets received on the port. Error frames are not counted in.</p> <p>Multicast: Displays the number of valid multicast packets received on the port. Error frames are not counted in.</p> <p>Unicast: Displays the number of valid unicast packets received on the port. Error frames are not counted in.</p> <p>Jumbo: Displays the number of valid jumbo packets received on the port. Error frames are not counted in.</p> <p>Alignment Errors: Displays the number of the received packets that have a Frame Check Sequence (FCS) with a non-integral octet (Alignment Error). The size of the packet is between 64 bytes and 1518 bytes.</p> <p>UndersizePkts: Displays the number of the received packets (excluding error packets) that are less than 64 bytes long.</p> <p>Pkts64Octets: Displays the number of the received packets (including error packets) that are 64 bytes long.</p> <p>Pkts65to127Octets: Displays the number of the received packets (including error packets) that are between 65 and 127 bytes long.</p> <p>Pkts128to255Octets: Displays the number of the received packets (including error packets) that are between 128 and 255 bytes long.</p> <p>Pkts256to511Octets: Displays the number of the received packets (including error packets) that are between 256 and 511 bytes long.</p> <p>Pkts512to1023Octets: Displays the number of the received packets (including error packets) that are between 512 and 1023 bytes long.</p> <p>PktsOver1023Octets: Displays the number of the received packets (including error packets) that are over 1023 bytes.</p>
Sent:	<p>Displays the detailed information of sent packets.</p> <p>Broadcast: Displays the number of valid broadcast packets transmitted on the port. Error frames are not counted in.</p> <p>Multicast: Displays the number of valid multicast packets transmitted on the port. Error frames are not counted in.</p> <p>Unicast: Displays the number of valid unicast packets transmitted on the port. Error frames are not counted in.</p> <p>Jumbo: Displays the number of valid jumbo packets transmitted on the port. Error frames are not counted in.</p> <p>Collisions: Displays the number of collisions experienced by a half-duplex port during packet transmissions.</p>

1.2 Using the CLI

On privileged EXEC mode or any other configuration mode, you can use the following command to view the traffic information of each port or LAG:

show interface counters [fastEthernet port | gigabitEthernet port | ten-gigabitEthernet port | port-channel port-channel-id]

port: The port number.

port-channel-id: The group number of the LAG.

If you enter no port number or group number, the information of all ports and LAGs will be displayed.

The displaying information includes:

Broadcast: Displays the number of valid broadcast packets received and transmitted on the port. Error frames are not counted in.

Multicast: Displays the number of valid multicast packets received and transmitted on the port. Error frames are not counted in.

Unicast: Displays the number of valid unicast packets received and transmitted on the port. Error frames are not counted in.

Jumbo: Displays the number of valid jumbo packets received and transmitted on the port. Error frames are not counted in.

Alignment Errors: Displays the number of the received packets that have a Frame Check Sequence (FCS) with a non-integral octet (Alignment Error). The size of the packet is between 64 bytes and 1518 bytes.

UndersizePkts: Displays the number of the received packets (excluding error packets) that are less than 64 bytes long.

Pkts64Octets: Displays the number of the received packets (including error packets) that are 64 bytes long.

Pkts65to127Octets: Displays the number of the received packets (including error packets) that are between 65 and 127 bytes long.

Pkts128to255Octets: Displays the number of the received packets (including error packets) that are between 128 and 255 bytes long.

Pkts256to511Octets: Displays the number of the received packets (including error packets) that are between 256 and 511 bytes long.

Pkts512to1023Octets: Displays the number of the received packets (including error packets) that are between 512 and 1023 bytes long.

PktsOver1023Octets: Displays the number of the received packets (including error packets) that are over 1023 bytes.

Collisions: Displays the number of collisions experienced by a port during packet transmissions.

2 Appendix: Default Parameters

Table 2-1 Traffic Statistics Monitoring

Parameter	Default Setting
Traffic Summary	
Auto Refresh	Disable
Refresh Rate	10 seconds
Traffic Statistics	
Auto Refresh	Disable
Refresh Rate	10 seconds