

11. Monitoring

Utilization
Statistics
Mirror Settings
Device Environment

Utilization

Port Utilization

This window is used to display the percentage of the total available bandwidth being used on the port. To view the following window, click **Monitoring > Utilization > Port Utilization**, as show below:

Port	TX (packets/sec)	RX (packets/sec)	Utilization
eth1/0/1	25	17	1
eth1/0/2	0	0	0
eth1/0/3	0	0	0
eth1/0/4	0	0	0
eth1/0/5	0	0	0
eth1/0/6	0	0	0
eth1/0/7	0	0	0
eth1/0/8	0	0	0
eth1/0/9	0	0	0
eth1/0/10	0	0	0
eth1/0/11	0	0	0
eth1/0/12	0	0	0
eth1/0/13	0	0	0
eth1/0/14	0	0	0
eth1/0/15	0	0	0
eth1/0/16	0	0	0
eth1/0/17	0	0	0
eth1/0/18	0	0	0
eth1/0/19	0	0	0
eth1/0/20	0	0	0
eth1/0/21	0	0	0
eth1/0/22	0	0	0
eth1/0/23	0	0	0
eth1/0/24	0	0	0
eth1/0/25	0	0	0
eth1/0/26	0	0	0

Figure 11-1 Port Utilization window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.

Click the **Find** button to locate a specific entry based on the information entered.

Click the **Refresh** button to refresh the display table.

Statistics

Port

This window is used to display the packet statistics of ports.

To view the following window, click **Monitoring > Statistics > Port**, as show below:

Port	RX				TX				Show Detail
	Rate		Total		Rate		Total		
	bytes/sec	packets/sec	bytes	packets	bytes/sec	packets/sec	bytes	packets	
eth1/0/1	7273	38	5071264	27919	59725	63	15901578	26588	Show Detail
eth1/0/2	0	0	0	0	0	0	0	0	Show Detail
eth1/0/3	0	0	0	0	0	0	0	0	Show Detail
eth1/0/4	0	0	0	0	0	0	0	0	Show Detail
eth1/0/5	0	0	0	0	0	0	0	0	Show Detail
eth1/0/6	0	0	0	0	0	0	0	0	Show Detail
eth1/0/7	0	0	0	0	0	0	0	0	Show Detail
eth1/0/8	0	0	0	0	0	0	0	0	Show Detail
eth1/0/9	0	0	0	0	0	0	0	0	Show Detail
eth1/0/10	0	0	0	0	0	0	0	0	Show Detail
eth1/0/11	0	0	0	0	0	0	0	0	Show Detail
eth1/0/12	0	0	0	0	0	0	0	0	Show Detail
eth1/0/13	0	0	0	0	0	0	0	0	Show Detail
eth1/0/14	0	0	0	0	0	0	0	0	Show Detail
eth1/0/15	0	0	0	0	0	0	0	0	Show Detail

Figure 11-2 Port window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.

Click the **Find** button to locate a specific entry based on the information entered.

Click the **Refresh** button to refresh the display table.

Click the **Show Detail** button to see the detail information of the specific port.

After clicking the **Show Detail** button, the following page will appear.

eth1/0/1	
RX rate	5282 bytes/sec
TX rate	27337 bytes/sec
RX bytes	5097652
TX bytes	15964669
RX rate	20 packets/sec
TX rate	29 packets/sec
RX packets	28066
TX packets	26702
RX multicast	583
RX broadcast	220
RX CRC error	0
RX undersize	0
RX oversize	0
RX fragment	0
RX jabber	0
RX dropped Pkts	799
RX MTU exceeded	0
TX CRC error	0
TX excessive deferral	0
TX single collision	0
TX excessive collision	0
TX late collision	0
TX collision	0

Figure 11-3 Port Detail window

Click the **Back** button to return to the previous window.

Click the **Refresh** button to refresh the display table.

Port Counters

This window is used to display port counter statistics.

To view the following window, click **Monitoring > Statistics > Port Counters**, as show below:

Port Counters

Unit: From Port: To Port:

Port	InOctets	InUcastPkts	InMcastPkts	InBcastPkts	OutOctets	OutUcastPkts	OutMcastPkts	OutBcastPkts	
eth1/0/1	5127927	27423	591	226	16071916	26145	0	723	Show Errors
eth1/0/2	0	0	0	0	0	0	0	0	Show Errors
eth1/0/3	0	0	0	0	0	0	0	0	Show Errors
eth1/0/4	0	0	0	0	0	0	0	0	Show Errors
eth1/0/5	0	0	0	0	0	0	0	0	Show Errors
eth1/0/6	0	0	0	0	0	0	0	0	Show Errors
eth1/0/7	0	0	0	0	0	0	0	0	Show Errors
eth1/0/8	0	0	0	0	0	0	0	0	Show Errors
eth1/0/9	0	0	0	0	0	0	0	0	Show Errors
eth1/0/10	0	0	0	0	0	0	0	0	Show Errors
eth1/0/11	0	0	0	0	0	0	0	0	Show Errors
eth1/0/12	0	0	0	0	0	0	0	0	Show Errors
eth1/0/13	0	0	0	0	0	0	0	0	Show Errors
eth1/0/14	0	0	0	0	0	0	0	0	Show Errors
eth1/0/15	0	0	0	0	0	0	0	0	Show Errors
eth1/0/16	0	0	0	0	0	0	0	0	Show Errors
eth1/0/17	0	0	0	0	0	0	0	0	Show Errors
eth1/0/18	0	0	0	0	0	0	0	0	Show Errors
eth1/0/19	0	0	0	0	0	0	0	0	Show Errors
eth1/0/20	0	0	0	0	0	0	0	0	Show Errors
eth1/0/21	0	0	0	0	0	0	0	0	Show Errors
eth1/0/22	0	0	0	0	0	0	0	0	Show Errors
eth1/0/23	0	0	0	0	0	0	0	0	Show Errors
eth1/0/24	0	0	0	0	0	0	0	0	Show Errors
eth1/0/25	0	0	0	0	0	0	0	0	Show Errors
eth1/0/26	0	0	0	0	0	0	0	0	Show Errors

Figure 11-4 Port Counters window

The fields that can be configured are described below:

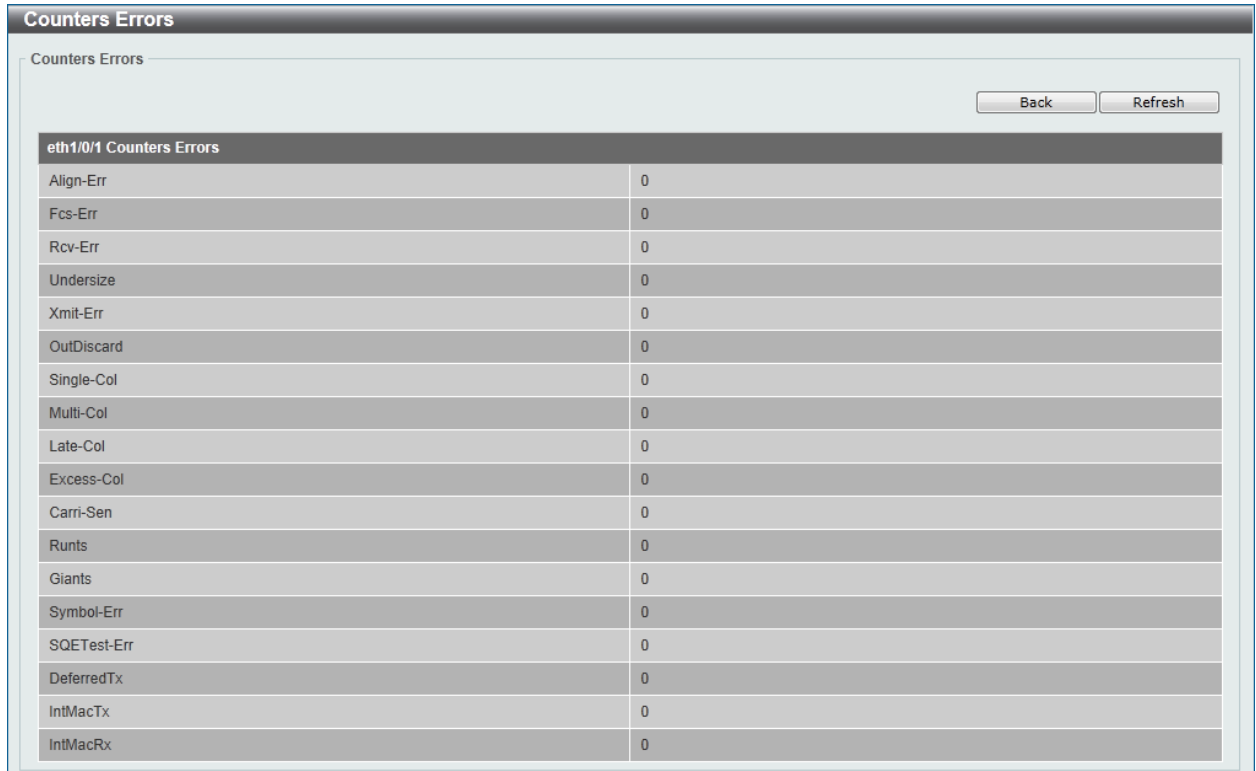
Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.

Click the **Find** button to locate a specific entry based on the information entered.

Click the **Refresh** button to refresh the display table.

Click the **Show Errors** button to see all error counters of the specific port.

After clicking the **Show Errors** button, the following page will appear.



eth1/0/1 Counters Errors	
Align-Err	0
Fcs-Err	0
Rcv-Err	0
Undersize	0
Xmit-Err	0
OutDiscard	0
Single-Col	0
Multi-Col	0
Late-Col	0
Excess-Col	0
Carri-Sen	0
Runts	0
Giants	0
Symbol-Err	0
SQETest-Err	0
DeferredTx	0
IntMacTx	0
IntMacRx	0

Figure 11-5 Counters Errors window

Click the **Back** button to return to the previous window.

Click the **Refresh** button to refresh the display table.

Counters

This window is used to display all port counters, and clear the port counters of the specified or all ports.

To view the following window, click **Monitoring > Statistics > Counters**, as show below:

Port	linkChange	
eth1/0/1	1	Show Detail
eth1/0/2	0	Show Detail
eth1/0/3	0	Show Detail
eth1/0/4	0	Show Detail
eth1/0/5	0	Show Detail
eth1/0/6	0	Show Detail
eth1/0/7	0	Show Detail
eth1/0/8	0	Show Detail
eth1/0/9	0	Show Detail
eth1/0/10	0	Show Detail
eth1/0/11	0	Show Detail
eth1/0/12	0	Show Detail
eth1/0/13	0	Show Detail
eth1/0/14	0	Show Detail
eth1/0/15	0	Show Detail

Figure 11-6 Counters window

The fields that can be configured are described below:

Parameter	Description
Unit	Select the switch unit that will be used for this configuration here.
From Port / To Port	Select the appropriate port range used for the configuration here.

Click the **Find** button to locate a specific entry based on the information entered.

Click the **Refresh** button to refresh the display table.

Click the **Clear** button to clear all the information for the specific ports.

Click the **Clear All** button to clear all the information in this table.

Click the **Show Detail** button to see the detail information of the specific port.

After clicking the **Show Detail** button, the following page will appear.

eth1/0/1 Counters	
rxHCTotalPkts	28785
txHCTotalPkts	27378
rxHCUnicastPkts	27938
txHCUnicastPkts	26643
rxHCMulticastPkts	606
txHCMulticastPkts	0
rxHCBroadcastPkts	241
txHCBroadcastPkts	735
rxHCOctets	5225015
txHCOctets	16399905
rxHCPkt64Octets	19339
rxHCPkt65to127Octets	540
rxHCPkt128to255Octets	363
rxHCPkt256to511Octets	7555
rxHCPkt512to1023Octets	988
rxHCPkt1024to1518Octets	0
rxHCPkt1519to1522Octets	0
rxHCPkt1519to2047Octets	0
rxHCPkt2048to4095Octets	0
rxHCPkt4096to9216Octets	0
txHCPkt64Octets	1551
txHCPkt65to127Octets	916
txHCPkt128to255Octets	11514
txHCPkt256to511Octets	2262

Figure 11-7 Port Counters Detail window

Click the **Back** button to return to the previous window.

Click the **Refresh** button to refresh the display table.

Mirror Settings

This window is used to view and configure the mirror feature's settings. The Switch allows users to copy frames transmitted and received on a port and redirect the copies to another port. Attach a monitoring device to the mirroring port, such as a sniffer or an RMON probe, to view details about the packets passing through the first port. This is useful for network monitoring and troubleshooting purposes.

To view the following window, click **Monitoring > Mirror Settings**, as shown below:

Mirror Settings

Mirror Settings

Session Number: 1

Destination: Port, Unit: 1, Port: eth1/0/1

Source: Port, Unit: 1, From Port: eth1/0/1, To Port: eth1/0/1, Frame Type: Both

Mirror Session Table

All Session, 1

Session Number	Session Type	Source			Destination port	
		Ports				Flow(ACL Name)
		Both	RX	TX		

Figure 11-8 Mirror Settings window

The fields that can be configured for **Mirror Settings** are described below:

Parameter	Description
Session Number	Select the mirror session number for this entry here. This number is between 1 and 4.
Destination	<p>Tick the checkbox, next to the Destination option, to configure the destination for this port mirror entry.</p> <p>In the first drop-down menu select the destination type option. Option to choose from is Port.</p> <p>After selecting the Port option, select the destination unit and port number from the second and third drop-down menu.</p>
Source	<p>Tick the checkbox, next to the Source option, to configure the source for this port mirror entry.</p> <p>In the first drop-down menu select the source type option. Options to choose from are Port, and ACL.</p> <p>After selecting the Port option, select the From Port number and the To Port number from the second and third drop-down menus. Lastly select the Frame Type option from the fourth drop-down menu. Options to choose from as the Frame Type are Both, RX, and TX. When selecting Both, traffic in both the incoming and outgoing directions will be mirrored. When selecting RX, traffic in only the incoming direction will be mirrored. When selecting TX, traffic in only the outgoing direction will be mirrored.</p> <p>After selecting the ACL option, enter the ACL profile name in the space provided.</p>

Click the **Add** button to add the newly configured mirror entry based on the information entered.

Click the **Delete** button to delete an existing mirror entry based on the information entered.

The fields that can be configured for **Mirror Session Table** are described below:

Parameter	Description
Mirror Session Type	Select the mirror session type of information that will be displayed from the drop-down menu. Options to choose from are All Session , and

Session Number.

After selecting the **Session Number** option, select the session number from the second drop-down menu. This number is from 1 to 4.

Click the **Find** button to locate a specific entry based on the information entered.

Device Environment

The device environment feature displays the Switch internal temperature status.

To view the following window, click **Monitoring > Device Environment**, as shown below:

Device Environment		
Detail Temperature Status		
Unit	Temperature Descr/ID	Current/Threshold Range
1	Central Temperature /1	27C/11~79C
Status code: * temperature is out of threshold range		
Detail Fan Status		
Items	Status	
Unit	1	
Right Fan 1	(OK)	
Right Fan 2	(OK)	
Detail Power Status		
Unit	Power Module	Power Status
1	Power 1	In-operation

Figure 11-9 Device Environment window