



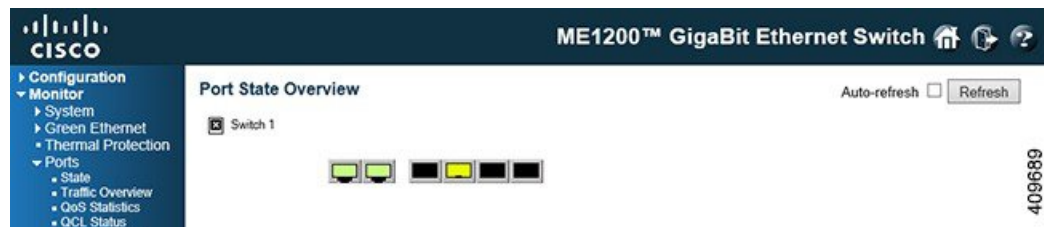
Monitoring Ports

The Ports feature available on the ME 1200 Web GUI allows you to monitor the various port parameters on the ME 1200 switch.

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Port State

This option provides an overview of the current switch port states. The port states are illustrated as follows:



- **RJ45 Ports**
- **SFP Ports**
- **State**
 - *Disabled*
 - *Down*
 - *Link*

Related Topics

[Configuring Ports](#)

Port Statistics Overview

This option provides an overview of general traffic statistics for all switch ports.

Port	Packets		Bytes		Errors		Drops		Filtered
	Received	Transmitted	Received	Transmitted	Received	Transmitted	Received	Transmitted	Received
1	48717	40964	3679737	5259788	0	0	0	0	48693
2	71587	206745	4581572	17303257	0	0	0	0	71587
3	0	0	0	0	0	0	0	0	0
4	211253	4540	17841328	793903	0	0	0	0	41202
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0

The displayed counters are:

- **Port:** The logical port for the settings contained in the same row.
- **Packets:** The number of received and transmitted packets per port.
- **Bytes:** The number of received and transmitted bytes per port.
- **Errors:** The number of frames received in error and the number of incomplete transmissions per port.
- **Drops:** The number of frames discarded due to ingress or egress congestion.
- **Filtered:** The number of received frames filtered by the forwarding process.

Related Topics

[Configuring Ports](#)

QoS Statistics

This option provides statistics for the different queues for all switch ports.

Port	Q0		Q1		Q2		Q3		Q4		Q5		Q6		Q7		
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	
1	13236	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40974
2	1	168177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38696
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	170441	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4545
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

The displayed counters are:

- **Port:** The logical port for the settings contained in the same row.
- **Qn:** There are 8 QoS queues per port. Q0 is the lowest priority queue.
- **Rx/Tx:** The number of received and transmitted packets per queue

Related Topics

[Configuring Ports](#)

QCL Status

This option shows the QCL status by different QCL users. Each row describes the QCE that is defined.

User	QCE	Port	Frame Type	Action						Conflict
				CoS	DPL	DSCP	PCP	DEI	Policy	
No entries										

It is a conflict if a specific QCE is not applied to the hardware due to hardware limitations. The maximum number of QCEs is 1024 on each switch.

- **User:** Indicates the QCL user.
- **QCE:** Indicates the QCE id.
- **Port:** Indicates the list of ports configured with the QCE.
- **Frame Type:** Indicates the type of frame. Possible values are:
 - **Any:** Match any frame type.
 - **Ethernet:** Match EtherType frames.
 - **LLC:** Match (LLC) frames.
 - **SNAP:** Match (SNAP) frames.
 - **IPv4:** Match IPv4 frames.
 - **IPv6:** Match IPv6 frames.
- **Action:** Indicates the classification action taken on ingress frame if parameters configured are matched with the frame's content. Possible actions are:
 - **CoS:** Classify Class of Service.
 - **DPL:** Classify Drop Precedence Level.
 - **DSCP:** Classify DSCP value.
 - **PCP:** Classify PCP value.
 - **DEI:** Classify DEI value.

- **Policy:** Classify ACL Policy number.
- **Conflict:** Displays Conflict status of QCL entries. As H/W resources are shared by multiple applications. It may happen that resources required to add a QCE may not be available, in that case it shows conflict status as *Yes*, otherwise it is always *No*. Note that conflict can be resolved by releasing the H/W resources required to add QCL entry on pressing **Resolve Conflict** button.

Related Topics

[Configuring Ports](#)

Detailed Port Statistics

This option provides detailed traffic statistics for a specific switch port. Use the port select box to select which switch port details to display. The displayed counters are the totals for receive and transmit, the size counters for receive and transmit, and the error counters for receive and transmit.

Receive Total		Transmit Total	
Rx Packets	0	Tx Packets	0
Rx Octets	0	Tx Octets	0
Rx Unicast	0	Tx Unicast	0
Rx Multicast	0	Tx Multicast	0
Rx Broadcast	0	Tx Broadcast	0
Rx Pause	0	Tx Pause	0
Receive Size Counters		Transmit Size Counters	
Rx 64 Bytes	0	Tx 64 Bytes	0
Rx 65-127 Bytes	0	Tx 65-127 Bytes	0
Rx 128-255 Bytes	0	Tx 128-255 Bytes	0
Rx 256-511 Bytes	0	Tx 256-511 Bytes	0
Rx 512-1023 Bytes	0	Tx 512-1023 Bytes	0
Rx 1024-1526 Bytes	0	Tx 1024-1526 Bytes	0
Rx 1527 Bytes	0	Tx 1527 Bytes	0
Receive Queue Counters		Transmit Queue Counters	
Rx Q0	0	Tx Q0	0
Rx Q1	0	Tx Q1	0
Rx Q2	0	Tx Q2	0
Rx Q3	0	Tx Q3	0
Rx Q4	0	Tx Q4	0
Rx Q5	0	Tx Q5	0
Rx Q6	0	Tx Q6	0
Rx Q7	0	Tx Q7	0
Receive Error Counters		Transmit Error Counters	
Rx Drops	0	Tx Drops	0
Rx CRC/Alignment	0	Tx LateExc. Coll.	0
Rx Undersize	0		
Rx Oversize	0		
Rx Fragments	0		
Rx Jabber	0		
Rx Filtered	0		

Receive Total and Transmit Total

- **Rx and Tx Packets:** The number of received and transmitted (good and bad) packets.
- **Rx and Tx Octets:** The number of received and transmitted (good and bad) bytes. Includes FCS, but excludes framing bits.
- **Rx and Tx Unicast:** The number of received and transmitted (good and bad) unicast packets.
- **Rx and Tx Multicast:** The number of received and transmitted (good and bad) multicast packets.
- **Rx and Tx Broadcast:** The number of received and transmitted (good and bad) broadcast packets.
- **Rx and Tx Pause:** A count of the MAC Control frames received or transmitted on this port that have an opcode indicating a **PAUSE** operation.

Receive and Transmit Size Counters

The number of received and transmitted (good and bad) packets split into categories based on their respective frame sizes.

Receive and Transmit Queue Counters

The number of received and transmitted packets per input and output queue.

Receive Error Counters

- **Rx Drops:** The number of frames dropped due to lack of receive buffers or egress congestion.
- **Rx CRC/Alignment:** The number of frames received with CRC or alignment errors.
- **Rx Undersize:** The number of short 1 frames received with valid CRC.
- **Rx Oversize:** The number of long 2 frames received with valid CRC.
- **Rx Fragments:** The number of short 1 frames received with invalid CRC.
- **Rx Jabber:** The number of long 2 frames received with invalid CRC.
- **Rx Filtered:** The number of received frames filtered by the forwarding process.
 - Short frames are frames that are smaller than 64 bytes.
 - Long frames are frames that are longer than the configured maximum frame length for this port.

Transmit Error Counters

- **Tx Drops:** The number of frames dropped due to output buffer congestion.
- **Tx Late/Exc. Coll:** The number of frames dropped due to excessive or late collisions.

Related Topics

[Configuring Ports](#)

