

# **Monitoring Security**

The Security feature available on the ME 1200 Web GUI allows you to monitor the security configurations set for the ME 1200 switch.

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# **Access Management Statistics**

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This option provides statistics for access management as shown below:

uluili. cisco			1	/IE1200™ GigaBi	t Ethernet Switch	i ()	?
Configuration     Monitor	Access M	anagement Statisti	ics		Auto-refresh	Clear	]
System	Interface	Received Packets	Allowed Packets	Discarded Packets			
- Thermal Distantion	HTTP	0	0	0			
Dede	HTTPS	0	0	0			
Polis	SNMP	0	0	0			8
LINK OAM	TELNET	0	0	0			2
DHCP	SSH	0	0	0			6
Security     Access Management							40

Interface	The interface type through which the remote host can access the switch.
Received Packets	Number of received packets from the interface when access management mode is enabled.
Allowed Packets	Number of allowed packets from the interface when access management mode is enabled.
Discarded Packets	Number of discarded packets from the interface when access management mode is enabled.

**Related Topics** 

**Configuring Security** 

## Network

## **ACL Status**

This option shows the ACL status by different ACL users. Each row describes the ACE that is defined. It is a conflict if a specific ACE is not applied to the hardware due to hardware limitations. The maximum number of ACEs is 512 on each switch.

cisco					м	E1200	™ Gi	gaBit E	thernet	Switch	ሰ 🕞 🕫	
Configuration     Monitor	ACL S	tatus						c	combined	✓ Auto-refresh	Refresh	
System	User	ACE	Frame Type	Action	Rate Limiter	Mirror	CPU	Counter	Conflict			
Green Einemet	ptp	1	EType	Deny	Disabled	Disabled	Yes	0	No			
Dode	ptp	2	EType	Deny	Disabled	Disabled	Yes	0	No			
Poits	ptp	3	EType	Deny	Disabled	Disabled	Yes	0	No			
LINK OAM	ptp	4	EType	Deny	Disabled	Disabled	Yes	0	No			
DHCP	ptp	5	EType	Deny	Disabled	Disabled	Yes	0	No			+
- security	ptp	6	EType	Deny	Disabled	Disabled	Yes	0	No		č	5
<ul> <li>Access Management Statistics</li> </ul>	ptp	7	EType	Deny	Disabled	Disabled	Yes	0	No		20	ñ
<ul> <li>Network</li> <li>Port Security</li> </ul>											07	f

- User: Indicates the ACL user.
- ACE: Indicates the ACE ID on local switch.
- Frame Type: Indicates the frame type of the ACE. Possible values are:
  - Any: The ACE will match any frame type.
  - *EType*: The ACE will match Ethernet Type frames. Note that an Ethernet Type based ACE will not get matched by IP and ARP frames.
  - ARP: The ACE will match ARP/RARP frames.
  - IPv4: The ACE will match all IPv4 frames.
  - IPv4/ICMP: The ACE will match IPv4 frames with ICMP protocol.
  - IPv4/UDP: The ACE will match IPv4 frames with UDP protocol.
  - IPv4/TCP: The ACE will match IPv4 frames with TCP protocol.
  - IPv4/Other: The ACE will match IPv4 frames, which are not ICMP/UDP/TCP.
  - IPv6: The ACE will match all IPv6 standard frames.
- Action: Indicates the forwarding action of the ACE.
  - Permit: Frames matching the ACE may be forwarded and learned.
  - Deny: Frames matching the ACE are dropped.
  - Filter: Frames matching the ACE are filtered.

- **Rate Limiter**: Indicates the rate limiter number of the ACE. The allowed range is 1 to 16. When Disabled is displayed, the rate limiter operation is disabled.
- CPU: Forward packet that matched the specific ACE to CPU.
- Counter: The counter indicates the number of times the ACE was hit by a frame.
- **Conflict**: Indicates the hardware status of the specific ACE. The specific ACE is not applied to the hardware due to hardware limitations.

#### **Related Topics**

**Configuring Security** 

## Switch

## RMON

## **RMON Statistics Overview**

This option provides an overview of RMON Statistics entries. Each page shows up to 99 entries from the Statistics table, default being 20, selected through the **entries per page** input field. When first visited, the web page will show the first 20 entries from the beginning of the Statistics table. The first displayed will be the one with the lowest ID found in the Statistics table.

cisco	ME1200™ GigaBit Ethernet Switch 67 1											6	2							
Configuration     Monitor     System     Green Ethernet	RMC Start	ON Statist	ics Sta	tus Ove	rview Ath 20	entries	per page							Auto-rel	fresh (	R	fresh	<<	I	
Ports     Link OAM     DHCP	ID	Data Source (ifIndex)	Drop	Octets	Pkts	Broad- cast	Multi- cast	CRC Errors	Under- size	Over- size	Frag.	Jabb.	Coll.	64 Bytes	65 ~ 127	128 255	256 ~ 511	512 1023	1024 1588	14
<ul> <li>Security</li> <li>Access Management Statistics</li> <li>Network</li> </ul>	Nor	nore entries																		4097

The **Start from Control Index** allows the user to select the starting point in the Statistics table. Clicking the **Refresh** button will update the displayed table starting from that or the next closest Statistics table match.

The >> will use the last entry of the currently displayed entry as a basis for the next lookup. When the end is reached the text **No more entries** is shown in the displayed table. Use the |<< button to start over.

The displayed counters are:

- ID: Indicates the index of Statistics entry.
- Data Source(ifIndex): The port ID which wants to be monitored.
- Drop: The total number of events in which packets were dropped by the probe due to lack of resources.
- Octets: The total number of octets of data (including those in bad packets) received on the network.
- **Pkts**: The total number of packets (including bad packets, broadcast packets, and multicast packets) received.

- Broad-cast: The total number of good packets received that were directed to the broadcast address.
- Multi-cast: The total number of good packets received that were directed to a multicast address.
- **CRC Errors**: The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non integral number of octets (Alignment Error).
- Under-size: The total number of packets received that were less than 64 octets.
- Over-size: The total number of packets received that were longer than 1518 octets.
- Frag.: The number of frames which size is less than 64 octets received with invalid CRC.
- Jabb.: The number of frames which size is larger than 64 octets received with invalid CRC.
- Coll.: The best estimate of the total number of collisions on this Ethernet segment.
- 64: The total number of packets (including bad packets) received that were 64 octets in length.
- 65~127: The total number of packets (including bad packets) received that were between 65 to 127 octets in length.
- 128~255: The total number of packets (including bad packets) received that were between 128 to 255 octets in length.
- 256~511: The total number of packets (including bad packets) received that were between 256 to 511 octets in length.
- **512~1023**: The total number of packets (including bad packets) received that were between 512 to 1023 octets in length.
- **1024~1588**: The total number of packets (including bad packets) received that were between 1024 to 1588 octets in length.

#### **Related Topics**

#### **Configuring Security**

### **RMON History Overview**

This option provides an overview of RMON History entries. Each page shows up to 99 entries from the History table, default being 20, selected through the **entries per page** input field. When first visited, the web page will show the first 20 entries from the beginning of the History table. The first displayed will be the one with the lowest History Index and Sample Index found in the History table.

uluih cisco							м	E1200'	™ Gig	aBit E	itherne	et Swi	tch			10	<b>a</b> 6	2
Configuration     Monitor     System     Green Ethernet     Thermal Protection     Ports     Link CAM     DHCP     Security     Access     Management	^	RMON History Overview Start from Control Index 0 and Sample Index 0 with 20								Auto-refresh								>
	8	History Index No more e	Sample Index ntries	Sample Start	Drop	Octets	Pkts	Broad- cast	Multi- cast	CRC Errors	Under- size	Over- size	Frag.	Jabb.	Coll.	Utilization	]	409713

The **Start from History Index and Sample Index** allows the user to select the starting point in the History table. Clicking the **Refresh** button will update the displayed table starting from that or the next closest History table match.

The >> will use the last entry of the currently displayed entry as a basis for the next lookup. When the end is reached the text **No more entries** is shown in the displayed table. Use the |<< button to start over.

The displayed fields are:

- History Index: Indicates the index of History control entry.
- Sample Index: Indicates the index of the data entry associated with the control entry.
- Sample Start: The value of sysUpTime at the start of the interval over which this sample was measured.
- **Drop**: The total number of events in which packets were dropped by the probe due to lack of resources.
- Octets: The total number of octets of data (including those in bad packets) received on the network.
- Pkts: The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
- Broadcast: The total number of good packets received that were directed to the broadcast address.
- Multicast: The total number of good packets received that were directed to a multicast address.
- **CRCErrors**: The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
- Undersize: The total number of packets received that were less than 64 octets.
- Oversize: The total number of packets received that were longer than 1518 octets.
- Frag.: The number of frames which size is less than 64 octets received with invalid CRC.
- Jabb.: The number of frames which size is larger than 64 octets received with invalid CRC.
- Coll.: The best estimate of the total number of collisions on this Ethernet segment.
- Utilization: The best estimate of the mean physical layer network utilization on this interface during this sampling interval, in hundredths of a percent.

#### **Related Topics**

**Configuring Security** 

### **RMON Alarm Overview**

This option provides an overview of RMON Alarm entries. Each page shows up to 99 entries from the Alarm table, default being 20, selected through the **entries per page** input field. When first visited, the web page will show the first 20 entries from the beginning of the Alarm table. The first displayed will be the one with the lowest ID found in the Alarm table.

uluulu cisco						ME	E1200™ (	GigaB	it Ethern	et Switcł	n 🖷	6	2
Configuration Monitor > System > Green Ethernet - Thermal Protection	RMC Start	ON Alarm	Overview of Index 0	v with [	20 en	itries per pa	ge.		Auto-refre	sh 🗆 Refre	sh  <<		~
Ports     Link OAM	ID	Interval	Variable	Sample Type	Value	Startup Alarm	Rising Threshold	Rising Index	Falling Threshold	Falling Index			Ξ
DHCP     Security     Access Management     Cardiation	Nor	more entries	8										1007-

The **Start from Control Index** allows the user to select the starting point in the Alarm table. Clicking the **Refresh** button will update the displayed table starting from that or the next closest Alarm table match.

The >> will use the last entry of the currently displayed entry as a basis for the next lookup. When the end is reached the text **No more entries** is shown in the displayed table. Use the |<< button to start over.

The displayed fields are:

- ID: Indicates the index of Alarm control entry.
- Interval: Indicates the interval in seconds for sampling and comparing the rising and falling threshold.
- Variable: Indicates the particular variable to be sampled.
- **Sample Type**: The method of sampling the selected variable and calculating the value to be compared against the thresholds.
- Value: The value of the statistic during the last sampling period.
- Startup Alarm: The alarm that may be sent when this entry is first set to valid.
- Rising Threshold: Rising threshold value.
- Rising Index: Rising event index.
- Falling Threshold: Falling threshold value.
- Falling Index: Falling event index.

#### **Related Topics**

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### **RMON Event Overview**

This option provides an overview of RMON Event table entries. Each page shows up to 99 entries from the Event table, default being 20, selected through the **entries per page** input field. When first visited, the web page will show the first 20 entries from the beginning of the Event table. The first displayed will be the one with the lowest Event Index and Log Index found in the Event table.

cisco		ME1200™ GigaBit Ethernet Switch	<b>₫ (} ©</b>
Configuration     Monitor     System     Green Ethernet     Thermal Protection	RMON Event Overview Start from Control Index 0 and Sample Index 0	Auto-refresh C Refresh with 20 entries per page.	>>
Ports     Link OAM     DHCP     Security     Access Management	Event Index         LogIndex         LogTime         LogDescription           No more entries         No         No <td< th=""><th></th><th>409712</th></td<>		409712



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The **Start from Event Index and Log Index** allows the user to select the starting point in the Event table. Clicking the **Refresh** button will update the displayed table starting from that or the next closest Event table match.

The >> will use the last entry of the currently displayed entry as a basis for the next lookup. When the end is reached the text **No more entries** is shown in the displayed table. Use the |<< button to start over.

- Event Index: Indicates the index of the event entry.
- Log Index: Indicates the index of the log entry.
- LogTime: Indicates Event log time.
- LogDescription: Indicates the Event description.

#### **Related Topics**

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