

Configuration of History and History Table in Remote Network Monitoring (RMON) on Sx500 Series Stackable Switches

Objective

Remote Network Monitoring (RMON) was developed by the Internet Engineering Task Force (IETF) to support monitoring and protocol analysis of LANs. It is a standard monitoring specification which enables different network monitors and console systems to exchange their network-monitoring data with each other. RMON facilitates network administrators to choose among the network-monitoring probes and consoles with features that meet their particular networking needs. RMON specifically defines the information that any network monitoring system should be able to provide. The ten groups in RMON are: statistics, events, history, alarms, hosts, hosts top N, matrix, filter, capture, and token ring. History group in RMON is used to collect the history of port statistics so that the data traffic trends or patterns in the device can be observed.

This document explains how to configure history and the history table in RMON on Sx500 Series Stackable Switches.

Applicable Devices

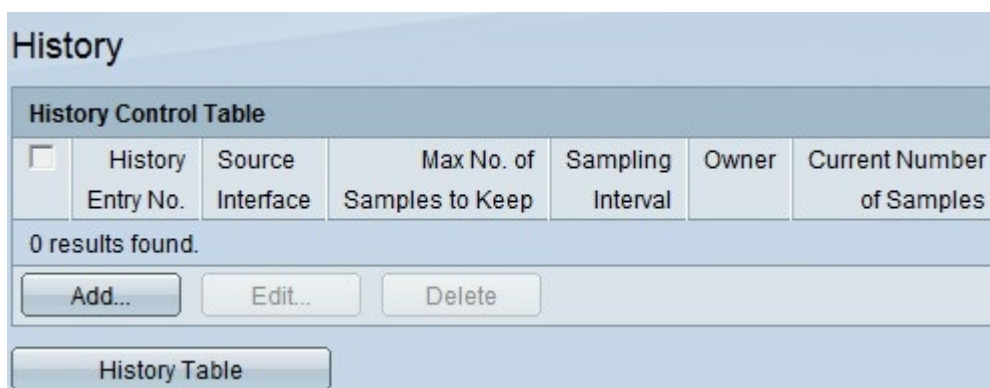
- Sx500 Series Stackable Switches

Software Version

- 1.3.0.62

Configuration of History in RMON

Step 1. Log in to the web configuration utility and choose **Status and Statistics > RMON > History**. The *History* page opens:



History Control Table						
<input type="checkbox"/>	History Entry No.	Source Interface	Max No. of Samples to Keep	Sampling Interval	Owner	Current Number of Samples
0 results found.						

Step 2. Click **Add** to add a new history entry, which has a specific defined number samples and intervals and their details. The *Add RMON History* page opens:

New History Entry: 1

Source Interface: Unit/Slot 1/1 Port GE1 LAG 1

Max No. of Samples to Keep: 15 (Range: 1 - 50, Default: 50)

Sampling Interval: 1500 sec. (Range: 1 - 3600, Default: 1800)

Owner: Owner 1 (7/160 Characters Used)

Note: The New History Entry field displays the event entry index number for the new entry.

Step 3. Choose the Source Interface on which the history samples are to be taken, from the Unit/Slot drop-down list and then choose the port from the Port drop-down list. If you configured the LAG then you choose the desired LAG from the LAG drop-down list.

Note: To configure Link Aggregation Group (LAG) refer to the article [Link Aggregation Group \(LAG\) Management and Settings on Sx500 Series Stackable Switches](#).

Step 4. Enter the number of samples to store in the Max No. of Samples to Keep field. By default it will be 50 samples.

Step 5. Enter the sampling interval in seconds in the Sampling Interval field. This is the amount of time that elapses between the collection of samples. By default it will be 1800 seconds (30 minutes).

Step 6. Enter the RMON station device user that requests the RMON information in the Owner field.

Step 7. Click **Apply** to save. The entry is added to the History Control Table and the running configuration file is updated.

History

History Control Table						
<input type="checkbox"/>	History Entry No.	Source Interface	Max No. of Samples to Keep	Sampling Interval	Owner	Current Number of Samples
<input type="checkbox"/>	1	GE1/1/8	45	30	user1	45

Step 8. Click **History Table** to view the statistics. The *History Control Table* page opens:

History														
History Table														
Filter <input type="checkbox"/> History Entry No. equals to 1 Go Clear Filter														
History Entry No.	Owner	Sample No.	Drop Events	Bytes Received	Packets Received	Broadcast Packets	Multicast Packets	CRC Align Errors	Undersize Packets	Oversize Packets	Fragments	Jabbers	Collisions	Utilization
1	user1	1	0	4969	27	0	0	0	0	0	0	0	0	0
1	user1	2	0	9160	54	0	16	0	0	0	0	0	0	0

History Control Table

The above fields are explained as follows:

- Owner — Displays history table entry owner.
- Sample No. — Displays the sample number from which the statics were considered.
- Drop Events — Displays the number of dropped packets. These could happen due to many reasons, one of the reasons being due to the failure of network resources during the sampling interval.
- Bytes Received — Displays the number of octets of bytes received on the chosen interface. This includes error packets and FCS octets. FCS (Frame Check Sequence) is a 4-octet CRC to detect the corrupted data in the frames.
- Packets Received — Displays the number of packets received on the chosen interfaces. It includes error packets, multicast packets, and broadcast packets.
- Broadcast Packets — Displays the number of broadcast packets received on the chosen interface. This number does not include Multicast packets.
- Multicast Received — Displays the number of multicast packets received on the chosen interface. This number does not include Broadcast packets.
- CRC Align Errors — Displays the number of CRC (Cyclic Redundancy Check) Align errors that have occurred. The frames that do not end with an even number of octets or have a bad CRC are considered CRC Align errors.
- Undersize Packets — Displays the number of undersized packets received. Undersized packets are the packets whose size is less than 64 octets.
- Oversize Packets — Displays the number of oversize packets received. Oversize packets are the packets whose size is more than 2000 octets.
- Fragments — Displays the number of fragments received. Fragments are the packets with less than 64 octets, excluding framing bits, and includes FCS octets.
- Jabbers — Displays the number of received packets whose size was longer than 2000 octets, excluding frame bits, and includes FCS octets that had either a FCS error or alignment error.
- Collisions — Displays the number of collisions detected.
- Utilization — Displays the percentage of current traffic that is used by the interface compared to maximum traffic that the interface can handle.

Step 9. Click **History Control Table** to return to the history control page.