Configure Remote Network Monitoring (RMON) Events Control Settings on a Switch through the Command Line Interface (CLI)

Objective

Remote Network Monitoring (RMON) was developed by the Internet Engineering Task Force (IETF) to support monitoring and protocol analysis of Local Area Networks (LANs). It is a standard monitoring specification which enables different network monitors and console systems to exchange their network-monitoring data with each other. It enables a Simple Network Management Protocol (SNMP) agent in the device to proactively monitor traffic statistics over a given period and send traps to an SNMP manager. The local SNMP agent compares actual, real-time counters against predefined thresholds and generates alarms, without the need for polling by a central SNMP management platform. This is an effective mechanism for proactive management, provided that you have set the correct thresholds relative to the baseline of your network.

Note: To know how to configure SNMP trap settings through the web-based utility of your switch, click here. For Command Line Interface (CLI)-based instructions, click here.

RMON allows you to choose among the network-monitoring probes and consoles with features that meet your particular networking needs. RMON specifically defines the information that any network monitoring system should be able to provide. Statistics, events, history, alarms, hosts, hosts top N, matrix, filter, capture, and token ring are the ten groups in RMON.

This article provides instructions on how to configure RMON event settings on your switch through the CLI.

Note: To know how to configure the RMON events control settings through the web-based utility of your switch, click here.

Applicable Devices

- Sx300 Series
- Sx350 Series
- SG350X Series
- Sx500 Series
- Sx550X Series

Software Version

- 1.4.7.05 — Sx300, Sx500
- 2.2.8.4 — Sx350, SG350X, Sx550X

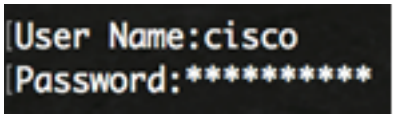
Configure RMON Events on the Switch through the CLI

Configure RMON Events

RMON decreases the traffic between the manager and the device since the SNMP manager does not have to poll the device frequently for information, and enables the manager to get timely status reports since the device reports events as they occur.

Follow these steps to configure the RMON events settings on your switch.

Step 1. Log in to the switch console. The default username and password is cisco/cisco. If you have configured a new username or password, enter the credentials instead.



Note: In this example, the switch is accessed through Telnet.

Step 2. In the Privileged EXEC mode of the switch, enter the Global Configuration context by entering the following:

```
SG350X#configure
```

Step 3. Enter the rmon event command to configure a new event by entering the following:

```
SG350X#rmon event [index] [none | log | trap | log-trap]
[community text] [description text] [owner name]
```

- index — Specifies the event index. The range is from 1 up to 65535.
- none — Specifies that no notification is generated by the device for this event.
- log — Specifies that a notification entry is generated in the log table by the device for this event.
- trap — Specifies that an SNMP trap is sent to one or more management stations by the device for this event.
- log-trap — Specifies that an entry is generated in the log table and an SNMP trap is sent to one or more management stations by the device for this event.
- community text — (Optional) Specifies the SNMP community or password used when an SNMP trap is sent. It should be an octet string and the length can range from 0 up to 127 characters.
- **Note:** This must be a community used in the configuration of an SNMP host. To learn more about how to configure an SNMP community through the CLI of your switch, click here.
- description text — (Optional) Specifies a comment describing this event. The length ranges from 0 to 127 characters.
- owner name — (Optional) Specifies the name of the person who configured this event. If not specified, the owner name defaults to an empty string.



Note: In this example, the event index is 1, the notification type is log-trap, the community name is Community1, and the owner is cisco.

Step 4. (Optional) To remove an event, enter the following:

```
SG350X#no rmon event [index]
```

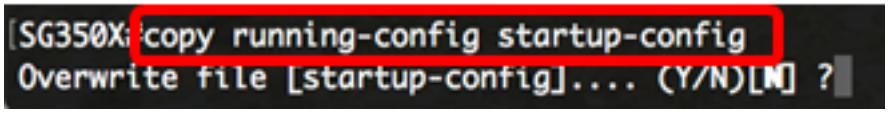
Step 5. Enter the **exit** command to go back to the Privileged EXEC mode of the switch.

```
SG350X#exit
```

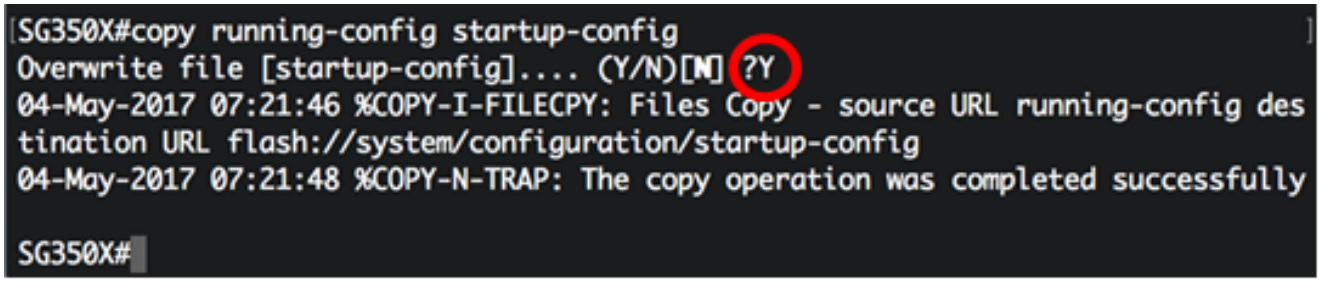


Step 6. (Optional) In the Privileged EXEC mode of the switch, save the configured settings to the startup configuration file, by entering the following:

```
SG350X#copy running-config startup-config
```



Step 7. (Optional) Press **Y** for Yes or **N** for No on your keyboard once the Overwrite file [startup-config]… prompt appears.



You should now have successfully configured the RMON event settings on your switch through the CLI.

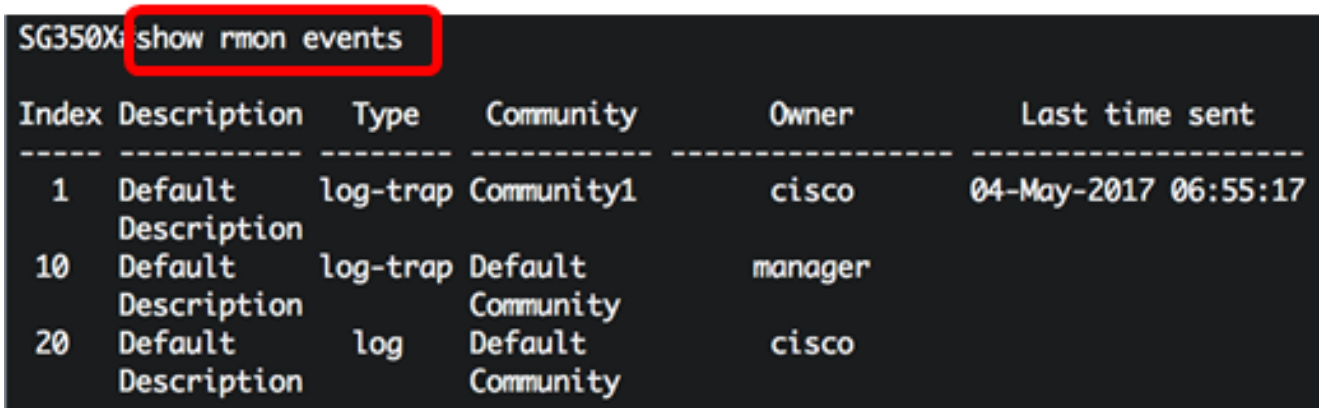
View RMON Events

The Events page displays the log of events or actions that occurred. Two types of events can be logged: Log or Log and Trap. The action in the event is performed when the event is bound to an alarm and the conditions of the alarm have occurred. For instructions on how to configure RMON Alarms on the web-based utility of your switch, click here. For CLI-based, click here.

Step 1. In the Privileged EXEC mode of the switch, enter the following to display the configured rmon events settings on your switch:

```
SG350X#show rmon events
```

- Index — Unique index that identifies this event.
- Description — Comment describing this event.
- Type — Type of notification that the device generates about this event. It can have the following values: none, log, trap, log-trap. In the case of log, an entry is made in the log table for each event. In the case of trap, an SNMP trap is sent to one or more management stations.
- Community — If an SNMP trap is to be sent, it is sent with the SNMP community string specified by this octet string.
- Owner — The entity that configured this event.
- Last time sent — The time this entry last generated an event. If this entry has not generated any events, this value is zero.



Step 2. To display the RMON event logs on your switch, enter the following:

```
SG350X#show rmon log [event]
```

- event — (Optional) Specifies the event index. The range is from 1 up to 65535.
- This table displays the following fields:
- Event — Log entry number of the event.
- Description — Description of event that triggered the alarm.
- Time — Time that the log entry was entered.

Note: In this example, RMON event 1 is used.



You should now have viewed the configured RMON event settings on your switch through the CLI.