

RMON Alarm Configuration Mode Commands

RMON alarm configuration mode allows you to configure an RMON alarm. An RMON alarm allows you to monitor every SNMP object in the CSS for a desired transitory state.

To access RMON alarm configuration mode, use the **rmon-alarm** command from any configuration mode except boot configuration mode. The prompt changes to (config-rmonalarm [*index*]). You can also use this command in RMON alarm mode to configure another alarm. For information about commands available in this mode, refer to the following commands.

Use the **no** form of this command to delete an RMON alarm.

rmon-alarm *index*
no rmon-alarm *index*

Syntax Description

index

The RMON alarm index number. Enter an integer from 1 to 65535.



Note

The RMON alarm index 65535 is administratively predefined and cannot be modified. If you enter this index number, a message similar to the following appears:
 %% Index internally used. Administrative control not allowed.

(config-rmonalarm) active

To activate the RMON alarm, use the **active** command. Before you can activate an alarm, you must specify all RMON alarm parameters. To deactivate an alarm, exit to global configuration mode and use the **no rmon-alarm** command.

active

Related Commands

(config) rmon-alarm
 (config-rmonalarm) falling-event
 (config-rmonalarm) falling-threshold
 (config-rmonalarm) owner
 (config-rmonalarm) rising-event
 (config-rmonalarm) rising-threshold
 (config-rmonalarm) sample-interval
 (config-rmonalarm) sample-variable
 (config-rmonalarm) startup-type

(config-rmonalarm) falling-event

To specify the falling event index for the RMON alarm, use the **falling-event** command. When the falling threshold is exceeded, this is the RMON event that is triggered.

falling-event *falling_index*

Syntax Description	<i>falling_index</i>	The event index used when a falling threshold is crossed. Enter an integer from 0 to 65535. If you enter 0, no event is generated.
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Usage Guidelines Before activating the alarm, you must specify an index.

(config-rmonalarm) falling-threshold

To specify the falling threshold for the RMON alarm, use the **falling-threshold** command. A single event is generated when the sampled value is less than or equal to the threshold, and the value at the last sampling interval is greater than the threshold.

falling-threshold *falling_value*

Syntax Description	<i>falling_value</i>	Threshold for the falling sample type. Enter an integer from 0 to 4294967295.
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Usage Guidelines Before activating the alarm, you must specify a threshold.

(config-rmonalarm) lookup

To look up an SNMP variable and to view the description associated with a MIB object, use the **lookup** command.

lookup *variable*

Syntax Description	<i>variable</i>	The name of the variable to look up. Enter an unquoted text string with a maximum length of 32 characters.
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(config-rmonalarm) no

To negate a command or set it to its default, use the **no** command. For information on general **no** commands you can use in this mode, refer to the general **no** command. The following options are available in RMON alarm mode.

Syntax Description

no rmon-event *index* Deletes an RMON event

no rmon-history *index* Deletes an RMON history

(config-rmonalarm) owner

To specify the owner of the RMON alarm, use the **owner** command.

owner “*owner_name*”

Syntax Description

owner_name The name of the owner that configured this entry and is using its assigned resources. Enter a quoted text string with a maximum length of 32 characters.

Usage Guidelines

Before activating the alarm, you must specify an owner.

(config-rmonalarm) rising-event

To specify the rising event index for the RMON alarm, use the **rising-event** command.

rising-event *rising_index*

Syntax Description

rising_index

The event index used when a rising threshold is crossed. Enter an integer from 0 to 65535. If you enter 0, no event is generated.

Usage Guidelines

Before activating the alarm, you must specify an index.

(config-rmonalarm) rising-threshold

To specify the rising threshold for the RMON alarm, use the **rising-threshold** command. When the sampled value is greater than or equal to the threshold and the value at the last sampling interval was less than the threshold, a single event is generated.

rising-threshold *rising_value*

Syntax Description

rising_value

Threshold for the rising sample type. Enter an integer from 0 to 4294967295.

Usage Guidelines

Before activating the alarm, you must specify a threshold.

(config-rmonalarm) sample-interval

To specify the sampling interval for the RMON alarm, use the **sample-interval** command.

sample-interval *interval*

Syntax Description

<i>interval</i>	The interval, in seconds, over which the data is sampled and compared with the rising and falling thresholds. Enter an integer from 1 to 65535. With delta sampling, be careful to set the interval short enough so that the sampled variable is not likely to increase or decrease by more than $2^{31}-1$ during a single sampling interval.
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Usage Guidelines

Before activating the alarm, you must specify a sample interval.

(config-rmonalarm) sample-type

To specify the sample type for the RMON alarm, use the **sample-type** command.

sample-type [*absoluteldelta*]

Syntax Description

absolute	Uses absolute sampling
delta	Uses delta sampling

Usage Guidelines

Before activating the alarm, you must specify a sample type.

(config-rmonalarm) sample-variable

To specify the sample variable for the RMON alarm, use the **sample-variable** command.

```
sample-variable snmp_object_id
```

Syntax Description

<i>snmp_object_id</i>	The SNMP object ID. To see a list of SNMP object IDs, enter:
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```
sample-variable ?
```

Usage Guidelines

Before activating the alarm, you must specify a sample variable.

(config-rmonalarm) startup-type

To specify the initial alarm type for the RMON alarm, use the **startup-type** command.

```
startup-type [falling|rising|rising-and-falling]
```

Syntax Description

falling	Uses a falling alarm
rising	Uses a rising alarm
rising-and-falling	Uses both rising and falling alarms

Usage Guidelines

Before activating the alarm, you must specify an alarm type.


RMON Event Configuration Mode Commands

RMON event configuration mode allows you to configure an RMON event. An RMON event defines what should occur when an RMON alarm is triggered.

To access RMON event configuration mode, use the **rmon-event** command from any configuration mode except boot configuration mode. The prompt changes to (config-rmonevent [*index*]). You can also use this command in RMON event mode to configure another event. For information about commands available in this mode, refer to the following commands.

Use the **no** form of this command to delete an RMON event.

```
rmon-event index
no rmon-event index
```

Syntax Description	<i>index</i>	The RMON event index number. Enter an integer from 1 to 65535.
		 <p>Note The RMON event index 65535 is administratively predefined and cannot be modified. If you enter this index number, a message similar to the following appears:</p> <pre>%% Index internally used. Administrative control not allowed.</pre>

(config-rmonevent) active

To activate the RMON event, use the **active** command. Before you can activate an event, you must specify the owner of the event.

```
active
```

Related Commands (config-rmonevent) owner

(config-rmonevent) community

To specify the RMON event community where you want to send the SNMP trap, use the **community** command.

community *community_name*

Syntax Description

community_name

The name of the community. Enter an unquoted text string with a maximum length of 127 characters.

Usage Guidelines

If you have activated the event, you cannot specify a community.

(config-rmonevent) description

To specify the RMON event description, use the **description** command.

description “*description*”

Syntax Description

description

The description of the RMON event. Enter a quoted text string with a maximum length of 126 characters.

Usage Guidelines

If you have activated the event, you cannot specify a description.

(config-rmonevent) no

To negate a command or set it to its default, use the **no** command. For information on general **no** commands you can use in this mode, refer to the general **no** commands. The following options are available in RMON event mode.

Syntax Description

no rmon-event *index* Deletes an RMON event

no rmon-history *index* Deletes an RMON history

(config-rmonevent) owner

To specify the owner of the RMON event, use the **owner** command.

owner "*owner_name*"

Syntax Description

owner_name The name of the owner that configured this entry and is using its assigned resources. Enter a quoted text string with a maximum of 126 characters.

Usage Guidelines

Before activating the event, you must specify this parameter.

Related Commands

(config-rmonevent) **active**

(config-rmonevent) type

To specify the generated RMON event type, use the **type** command.

type [log|log-and-trap|trap]

Syntax Description

log	Generates a log
log-and-trap	Generates a log and a trap
trap	Generates a trap

Usage Guidelines


If you have activated the event, you cannot specify this parameter.

RMON History Configuration Mode Commands

RMON history configuration mode allows you to configure the RMON history operation. To access RMON history configuration mode, use the **rmon-history** command from any configuration mode except boot configuration mode. The prompt changes to (config-rmonhistory [*index*]). For information about commands available in this mode, refer to the following commands.

Use the **no** form of this command to delete an RMON history.

```
rmon-history index
no rmon-history index
```

Syntax Description	<i>index</i>	The RMON history index number. Enter an integer from 1 to 65535.
		 <p>Note Some history index numbers are administratively predefined and cannot be modified. If you enter an index number under administrative control, a message similar to the following appears:</p> <pre>%% Index internally used. Administrative control not allowed.</pre>

(config-rmonhistory) active

To activate an RMON history entry, use the **active** command.

```
active
```

Usage Guidelines	Before activating this command, you must specify an owner of the RMON history entry.
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Related Commands	(config-rmonhistory) owner
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(config-rmonhistory) data-source

To specify the object of the RMON history operation, use the **data-source** command.

data-source *data_object_id*

Syntax Description

data_object_id

The data object ID. To see a list of data object IDs, enter:

data-source ?

Usage Guidelines

If you have activated the history, you cannot specify this object.

(config-rmonhistory) interval

To specify the bucket interval for the RMON history operation, use the **interval** command.

interval *value*

Syntax Description

value

The interval value in seconds. Enter an integer from 1 to 3600. The default is 1800.

Usage Guidelines

If you have activated the history, you cannot specify an interval.

(config-rmonhistory) no

To negate a command or set it to its default, use the **no** command. For information on general **no** commands you can use in this mode, refer to the general **no** command. The following options are available in RMON history mode

Syntax Description	
no rmon-event <i>index</i>	Deletes another RMON event
no rmon-history <i>index</i>	Deletes another RMON history

(config-rmonhistory) owner

To specify the owner of the RMON history event, use the **owner** command.

owner *owner_name*

Syntax Description	
<i>owner_name</i>	The name of the owner that configured the entry and is using its assigned resources. Enter an unquoted text string with a maximum length of 32 characters.

Usage Guidelines Before activating the event, you must specify an owner.

Related Commands (config-rmonhistory) active

(config-rmonhistory) requested-buckets

To specify the bucket count for the RMON history operation, use the **requested-buckets** command.

requested-buckets *count*

Syntax Description

count

The requested number of discrete time intervals in buckets over which to save data associated with the history entry. Enter an integer from 1 to 65535. The default is 50.

Usage Guidelines

If you have activated the history, you cannot specify this parameter.