

# 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, see the following commands.

Use the **no** form of this command in global configuration mode to delete an RMON alarm.

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

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## Syntax Description

*index*

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

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.
```

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## (config-rmonalarm) active

To activate the RMON alarm, use the **active** command. Before you can activate an alarm, you must specify the owner parameter. To suspend an alarm to change its configuration, use the **suspend** command.

**active**

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### Related Commands

(config-rmonalarm) owner  
(config-rmonalarm) suspend

## (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. Use the **no** form of this command to reset the event index to 0.

**falling-event** *falling\_index*  
**no falling-event**

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### 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. The default is 0.
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### Usage Guidelines

You must suspend the alarm to change the 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. Use the **no** form of this command to reset the threshold to 0.

**falling-threshold** *falling\_value*  
**no falling-threshold**

<b>Syntax Description</b>	<i>falling_value</i>	Threshold for the falling sample type. Enter an integer from 0 to 4294967295. The default is 0.
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**Usage Guidelines** You must suspend the alarm to change the 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*

<b>Syntax Description</b>	<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, see the general **no** command. The following options are available in RMON alarm mode.

Syntax Description		
	<b>no falling-event</b>	Resets the event index to 0
	<b>no falling-threshold</b>	Resets the threshold to 0
	<b>no owner</b>	Deletes the owner
	<b>no rising-event</b>	Resets the event index to 0
	<b>no rising-threshold</b>	Resets the threshold to 0
	<b>no sample-interval</b>	Resets the interval to 300
	<b>no sample-type</b>	Resets the sample type to delta
	<b>no sample-variable</b>	Deletes the variable
	<b>no startup-type</b>	Resets the type to a rising alarm

## (config-rmonalarm) owner

To specify the owner of the RMON alarm, use the **owner** command. Use the **no** form of this command to delete the owner.

```
owner "owner_name"
no owner
```

Syntax Description		
	<i>owner_name</i>	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. Use the **no** form of this command to reset the event to 0.

```
rising-event rising_index
no rising-event
```

<b>Syntax Description</b>	<i>rising_index</i>	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. The default is 0.
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<b>Usage Guidelines</b>	You must suspend the alarm to change the index.
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## (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. Use the **no** form of this command to reset the threshold to 0.

```
rising-threshold rising_value
no rising-threshold
```

<b>Syntax Description</b>	<i>rising_value</i>	Threshold for the rising sample type. Enter an integer from 0 to 4294967295. The default is 0.
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<b>Usage Guidelines</b>	You must suspend the alarm to change the threshold.
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## (config-rmonalarm) sample-interval

To specify the sampling interval for the RMON alarm, use the **sample-interval** command. Use the **no** form of this command to reset the interval to 300.

**sample-interval** *interval*  
**no sample-interval**

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### Syntax Description

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<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. The default is 300.
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### Usage Guidelines

You must suspend the alarm to change the interval.

## (config-rmonalarm) sample-type

To specify the sample type for the RMON alarm, use the **sample-type** command. Use the **no** form of this command to reset the type to delta sampling.

```
sample-type [absolutedelta]
no sample-type
```

### Syntax Description

<b>absolute</b>	Uses absolute sampling
<b>delta</b>	Uses delta sampling (default)

### Usage Guidelines

You must suspend the alarm to change the sample type.

## (config-rmonalarm) sample-variable

To specify the sample variable for the RMON alarm, use the **sample-variable** command. Use the **no** form of this command to delete the variable.

```
sample-variable snmp_object_id
no sample-variable
```

### Syntax Description

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

You must suspend the alarm to change the variable.

## (config-rmonalarm) startup-type

To specify the initial alarm type for the RMON alarm, use the **startup-type** command. Use the **no** form of this command to reset the type to a rising alarm.

```
startup-type [falling|rising|rising-and-falling]
no startup-type
```

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**Syntax Description**

<b>falling</b>	Uses a falling alarm
<b>rising</b>	Uses a rising alarm (default)
<b>rising-and-falling</b>	Uses both rising and falling alarms

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**Usage Guidelines**

You must suspend the alarm to change the startup type.

## (config-rmonalarm) suspend

To suspend the RMON alarm allowing you to change its configuration setting, use the **suspend** command.

```
suspend
```

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**Related Commands**

(config-rmonalarm) active

# 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, see the following commands.

Use the **no** form of this command in global configuration mode to delete an RMON event.

**rmon-event** *index*  
**no rmon-event** *index*

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## Syntax Description

<i>index</i>	The RMON event index number. Enter an integer from 1 to 65535.  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:  %% Index internally used. Administrative control not allowed.
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## (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. To suspend an event to change its configuration, use the **suspend** command.

**active**

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## Related Commands

(config-rmonevent) owner  
 (config-rmonevent) suspend

## (config-rmonevent) community

To specify the RMON event community where you want to send the SNMP trap, use the **community** command. Use the **no** form of this command to reset the community to public.

```
community community_name  
no community
```

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### Syntax Description

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<i>community_name</i>	The name of the community. This variable is the name of the SNMP community you configured using the <b>snmp trap-host</b> command. Enter an unquoted text string with a maximum length of 127 characters.
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### Usage Guidelines

If you have activated the event, you cannot specify a community. Suspend the event through the (config-rmonevent) **suspend** command.

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### Related Commands

**snmp trap-host**

## (config-rmonevent) description

To specify the RMON event description, use the **description** command. Use the **no** form of this command to delete the description.

**description** "*description*"  
**no description**

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### Syntax Description

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<i>description</i>	The description of the RMON event. Enter a quoted text string with a maximum length of 126 characters.
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### Usage Guidelines

If you have activated the event, you cannot specify a description. Suspend the event through the (config-rmonevent) **suspend** command.

## (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, see the general **no** commands. The following options are available in RMON event mode.

Syntax Description		
	<b>no community</b>	Resets the community to public
	<b>no description</b>	Deletes the description
	<b>no type</b>	Resets the generated event type to log
	<b>no owner</b>	Deletes the owner

## (config-rmonevent) owner

To specify the owner of the RMON event, use the **owner** command. Use the **no** form of this command to delete the owner.

```
owner "owner_name"
no owner
```

Syntax Description		
	<i>owner_name</i>	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 an owner. To change the owner, first, suspend the event through the **(config-rmonevent) suspend** command.

**Related Commands** **(config-rmonevent) active**

## (config-rmonevent) type

To specify the generated RMON event type, use the **type** command. Use the **no** form of this command to reset the type to generate a log.

```
type [log|log-and-trap|trap]
no type
```

### Syntax Description

<b>log</b>	Generates a log
<b>log-and-trap</b>	Generates a log and a trap
<b>trap</b>	Generates a trap

### Usage Guidelines

If you have activated the event, you cannot specify this parameter. Suspend the event through the **(config-rmonevent) suspend** command.

## (config-rmonevent) suspend

To suspend the RMON event allowing you to change its configuration setting, use the **suspend** command.

```
suspend
```

### Related Commands

**(config-rmonevent) suspend**

# 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, see the following commands.

Use the **no** form of this command in global configuration mode 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.
	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:
	%% Index internally used. Administrative control not allowed.

## (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.

**Related Commands** (config-rmonhistory) owner

## (config-rmonhistory) data-source

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

**data-source** *data\_object\_id*

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### Syntax Description

<i>data_object_id</i>	The data object ID. To see a list of data object IDs, enter: <b>data-source ?</b>
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### 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*

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### Syntax Description

<i>value</i>	The interval value in seconds. Enter an integer from 1 to 3600. The default is 1800.
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### 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, see the general **no** command.

## (config-rmonhistory) owner

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

**owner** "*owner\_name*"

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### Syntax Description

*owner\_name*

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

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### Usage Guidelines

Before activating the event, you must specify an owner.

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### 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*

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### 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.

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### Usage Guidelines

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