



CHAPTER 7

Configuring the Switch External Alarms

On the ME 3800X and ME 3600X switch, you can configure external alarm inputs.

Understanding Switch Alarms

You can connect up to four alarm inputs from external devices in your environment, such as a door, a temperature gauge, or a fire alarm, to the alarm input port on the switch front panel. [Figure 7-1](#) shows the location of the alarm pinouts.

Figure 7-1 Alarm Input Port Pinouts

Pin	Alarm connection	1	2	3	4	5	6	7	8
1	Alarm 1 input								
2	Alarm 2 input								
3	no connection								
4	Alarm 3 input								
5	Alarm 4 input								
6	no connection								
7	no connection								
8	Alarm common								

For each alarm input, you can configure an open or closed circuit to trigger an alarm and configure the severity of the alarm. A triggered alarm generates a system message. If you enter a descriptive name for the alarm, that name is included in the system message. A triggered alarm also turns on the LED display (the LED is normally off, meaning no alarm). See the *Cisco ME-3800X and ME 3600X Hardware Installation Guide* for information about the LEDs.

The alarm trigger setting is **open** or **closed**. If not set, the alarm is triggered when the circuit closes.

- Open means that the normal condition has current flowing through the contact (normally closed contact). The alarm is generated when the current stops flowing.
- Closed means that no current flows through the contact (normally open contact). The alarm is generated when current does flow.

You can set the alarm severity to **minor**, **major**, or **critical**. The severity is included in the alarm message and also sets the LED color when the alarm is triggered. The LED is amber for a minor alarm, red for a major alarm, and blinking red for a critical alarm. If not set, the default alarm severity is **minor**.

Configuring Switch Alarms

Beginning in privileged EXEC mode, follow these steps to configure alarm contacts.

	Command	Purpose
Step 1	configure terminal	Enter global configuration mode.
Step 2	alarm-contact <i>contact-number</i> description <i>string</i>	(Optional) Configure a description for the alarm contact number. <ul style="list-style-type: none"> The <i>contact-number</i> can be from 1 to 4. The description string can be up to 80 alphanumeric characters in length and is included in any generated system messages.
Step 3	alarm-contact { <i>contact-number</i> all } { severity { critical major minor } trigger { closed open }	Configure the trigger and severity for an alarm contact number or for all contact numbers. <ul style="list-style-type: none"> Enter a contact number (1 to 4) or specify that you are configuring all alarms. See Figure 7-1 for the alarm contact pinouts. For severity, enter critical, major, or minor. If you do not configure a severity, the default is minor. For trigger, enter open or closed. If you do not configure a trigger, the alarm is triggered when the circuit is closed.
Step 4	end	Return to privileged EXEC mode.
Step 5	show env alarm-contact	Show the configured alarm contacts.
Step 6	copy running-config startup-config	(Optional) Save your entries in the configuration file.

To delete the alarm description, enter the **no alarm-contact** *contact-number* **description** privileged EXEC command. To set the alarm severity to **minor** (the default), enter the **no alarm-contact** { *contact-number* | **all** } **severity**. To set the alarm contact trigger to **closed** (the default), enter the **no alarm-contact** { *contact-number* | **all** } **trigger**.

To see the alarm configuration and status, enter the **show env alarm-contact** privileged EXEC command.

For more detailed information about the alarm commands, see the command reference for this release.



Note

The switch supports the CISCO-ENTITY-ALARM-MIB for these alarms.

This example configures alarm input 2 named *door sensor* to assert a major alarm when the door circuit is closed and then displays the status and configuration for all alarms:

```
Switch(config)# alarm-contact 2 description door sensor
Switch(config)# alarm-contact 2 severity major
Switch(config)# alarm-contact 2 trigger closed
Switch(config)# end
Switch(config)# show env alarm-contact
Switch# show env alarm-contact
ALARM CONTACT 1
  Status:      not asserted
  Description: test_1
  Severity:    critical
  Trigger:     open
ALARM CONTACT 2
  Status:      not asserted
  Description: door sensor
  Severity:    major
  Trigger:     closed
ALARM CONTACT 3
  Status:      not asserted
  Description: flood sensor
  Severity:    critical
  Trigger:     closed
ALARM CONTACT 4
  Status:      not asserted
  Description:
  Severity:    critical
  Trigger:     closed
```

