



Alarms

This chapter provides instructions for configuring the alarms on the IR809. The IR829 does not have an alarm port.

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Finding Feature Information

Your software release may not support all the features documented in this chapter. For the latest feature information and caveats, see the release notes for your platform and software release.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to:

<http://www.cisco.com/go/cfn>.

An account on Cisco.com is not required.

Information About Alarms

If the conditions present on the IR809 do not match the set parameters, the IR809 software triggers an alarm or a system message. By default, the IR809 software sends the system messages to a system message logging facility, or a syslog facility. You can also configure the IR809 to send Simple Network Management Protocol (SNMP) traps to an SNMP server.

Alarm Port

The Cisco IR800 has alarm ports as shown in [Cisco IR809 Front Panel](#). Additional details and instructions about connecting the alarm ports are found in the [IR809 Hardware Configuration Guide](#) and the [Getting Started and Product Document of Compliance for the Cisco IR809 Integrated Services Router](#).

Alarm Conditions

There are two conditions that generate an alarm:

- If the alarm is connected to a door switch or an enclosure and detects a door opening.
 - This is an external alarm and requires wiring. See the IR809 Hardware Installation Guide.
- When the internal temperature is too high.
 - This is an internal alarm, no wiring required.



Note Prior to IOS 15.6(1)T, the default thresholds were set too low: minor alarm if exceeding 60°C, or major alarm if exceeding 75°C or too low of a cold temperature threshold, less than -25°C. After IOS 15.6(1)T, the default values were changed to 84C (Minor) and 93C (Major) .

When either condition is met, the alarm LED turns red, and a syslog message and SNMP trap are triggered if configured.

SNMP Traps

SNMP is an application-layer protocol that provides a message format for communication between managers and agents. The SNMP system consists of an SNMP manager, an SNMP agent, and a management information base (MIB).

The **snmp-server enable traps** command can be changed so that the user can send alarm traps to an SNMP server. You can use alarm profiles to set environmental or port status alarm conditions to send SNMP alarm traps.

Syslog Messages

You can use alarm profiles to send system messages to a syslog server.

Configuration Commands

You can set the alarm severity to critical, major, minor, or none. The severity is included in the alarm message when the alarm is triggered.

To configure and show alarms on the IR809, use the Command Line Interface (CLI).

Command	Purpose
configure terminal	Enters global configuration mode.
alarm contact <i>contact-number</i> description <i>string</i>	(Optional) Configures a description for the alarm contact number. <ul style="list-style-type: none"> • The <i>contact-number</i> value is from 1 to 4. • The description string is up to 80 alphanumeric characters in length and is included in any generated system messages.

Command	Purpose
alarm contact { <i>contact-number</i> / all } { severity critical major / minor none } trigger closed / open }	Configures 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. • For severity, enter critical, major, minor or none. 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.
end	Returns to privileged EXEC mode.
show env alarm-contact	Shows the configured alarm contacts.
copy running-config startup-config	(Optional) Saves your entries in the configuration file.

Configuration Examples

Configure an alarm.

```
IR809#conf term
Enter configuration commands, one per line.  End with CNTL/Z.

IR809(config)#alarm-contact 1 description
Your Descriptive Text Here

IR809(config)#alarm-contact 1 severity critical

IR809(config)#alarm-contact 1 trigger closed

IR809#
```

To show the alarm status:

```
IR809#show environment alarm-contact ! No Alarm Present
ALARM CONTACT
  Status:      Not Asserted
  Description: Test Input Alarm
  Severity:    Critical
  Trigger:     Closed
```

Example of an alarm being generated:

```
IR809# !
*Nov 27 14:54:52.573: %IR800_ALARM_CONTACT-0-EXTERNAL_ALARM_CONTACT_ASSERT: External alarm
asserted, Severity: Critical
```

To show the alarm status during an event:

```
IR809#show environment alarm-contact
ALARM CONTACT
  Status:      Asserted
  Description: Test Input Alarm
  Severity:    Critical
  Trigger:     Closed
```

Example of an alarm being cleared:

```
IR809# !
*Nov 27 14:55:02.573: %IR800_ALARM_CONTACT-0-EXTERNAL_ALARM_CONTACT_CLEAR: External alarm
cleared
IR809#
```



Note With IOS version 15.6(1)T, the **show platform led** command does not provide the ALM led status.

Enabling SNMP Traps

Procedure

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
Step 2	snmp-server enable traps alarms	Enables the switch to send SNMP traps.
Step 3	end	Returns to privileged EXEC mode.
Step 4	show alarm settings	Verifies the configuration.
Step 5	copy running-config startup-config	(Optional) Saves your entries in the configuration file.

MIBs

To locate and download MIBs using Cisco IOS software, use the Cisco MIB Locator found at the following URL and choose a platform under the Cisco Access Products menu: <https://mibs.cloudapps.cisco.com/ITDIT/MIBS/servlet/index>