



Alarms Configuration Guide, Cisco Catalyst IE9300 Rugged Series Switches

Cisco Catalyst IE9300 Rugged Series
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1 Switch Alarms

Topics:

- [Supported switch alarms](#)
- [Global status monitoring alarms](#)
- [Port status monitoring alarms](#)
- [External alarm pins](#)

Describes the alarm system used to monitor switch health and status. This information helps administrators identify and resolve hardware or software issues promptly.

Provides details on switch alarm types and their associated severity levels.

Supported switch alarms

Identifies switch alarms that enhance network monitoring by tracking operational status and health. These alarms facilitate issue identification and alert management through syslog and SNMP.

A switch alarm is a monitoring mechanism that tracks the operational status and health of the network and its environment to ensure alignment with predefined parameters.

- Monitors the condition of individual ports and the entire switch.
- Generates system messages or alerts when parameters deviate from expected values.
- Relays alerts to the syslog facility by default.

Supported alarm configurations

The IE9300 switch platform provides support for alarms in both standalone and stack configurations, including the following types:

- Global status monitoring alarms
- Port status monitoring alarms

Global status monitoring alarms

Explains Global status monitoring alarms that optimize switch performance by monitoring temperature and power supply conditions.

Global status monitoring alarms are critical oversight mechanisms that

- monitor temperature and power supply conditions within the switch to ensure optimal functionality and safety
- maintain reliable switch operations, and
- ensure a stable network environment.

Types of global status monitoring alarms

The table describes the types of global status monitoring alarms.

Table 1: Types of global status monitoring alarms

Alarm	Description
Power supply alarm	The switch monitors the status of two power supplies when both are installed. If one fails, the switch triggers an alarm to notify you of the failure. This alarm automatically clears once both power supplies are functioning properly again. You can configure this alarm to interact with hardware relays, allowing it to activate external devices or indicators when a power supply issue occurs. For additional details, see Configuring the Power Supply Alarms .

Alarm	Description
Temperature alarms	The switch features a temperature sensor with primary and secondary settings for monitoring environmental conditions. • Primary alarm: Automatically triggers for a low temperature of -40 degrees Fahrenheit (-40 degrees Celsius) and a high temperature of 204.8 degrees Fahrenheit (96 degrees Celsius). This alarm is always enabled and links to the major relay by default, which is the single alarm output relay on the switch. • Secondary alarm: Activates when the system temperature exceeds or falls below configured thresholds. This alarm is disabled by default. For more information, see Configuring the Switch Temperature Alarms.
SD Card alarm	By default, this alarm is disabled. The alarm triggers if the SD card is removed or if the file system becomes corrupted.

You can configure temperature types as primary and secondary and their severity to major, minor, or NONE. The primary temperature triggers only major severity alarms, causing the ALARM_OUT LED to flash RED. The secondary temperature triggers only minor severity alarms, but its ALARM_OUT LED relay is set to none by default, so the LED does not light up even though the minor alarm appears in the log.

The severity appears in the alarm message and determines the LED color: flashing RED for major alarms and solid RED for minor alarms. If severity is not set, the default is NONE and the LED remains Green.

Port status monitoring alarms

Explains how to use port status monitoring alarms and configure alarm profiles to enhance network management capabilities.

Port status monitoring alarms are a network management feature that

- help maintain the performance of Ethernet switches
- allow you to monitor Ethernet ports and get timely alarm notifications based on specific conditions, and
- help you manage your network effectively and respond to issues proactively.

Alarm profiles

The switch monitors Ethernet port statuses and generate alarm messages. The switch supports customizable alarm configurations through alarm profiles. You can create multiple profiles and assign them to individual Ethernet ports, allowing for tailored monitoring based on your network requirements.

You can activate or deactivate alarm conditions for each port using alarm profiles. You can link these alarm conditions to alarm relay. Additionally, you can configure alarm profiles to send alarm traps to an SNMP server and to send system messages to a syslog server. In the default configuration, the default alarm profile applies to all interfaces.



Note

You can associate multiple alarms with a single relay.

The table lists various port status monitoring alarms, their descriptions, and their functions. Each alarm is assigned a severity level according to the Cisco IOS System Error Message Severity Level.

Table 2: Port status monitoring alarms

Alarm list ID	Alarm	Description
1	Link Fault Alarm	This alarm activates when physical layer issues cause unreliable data transmission, such as loss of signal or clock. It clears automatically when the issue is resolved.
2	Port Not Forwarding Alarm	This alarm triggers when a port is not forwarding packets. It clears automatically once the port resumes forwarding.
3	Port Not Operating Alarm	This alarm occurs when a port fails during the startup self-test. It only clears after a switch restart and successful port operation.
4	FCS Bit Error Rate Alarm	This alarm is generated when the actual FCS bit error rate approaches the configured threshold. You can set this rate through the interface configuration CLI for each port. For more information, see Configure external alarms on page 20.

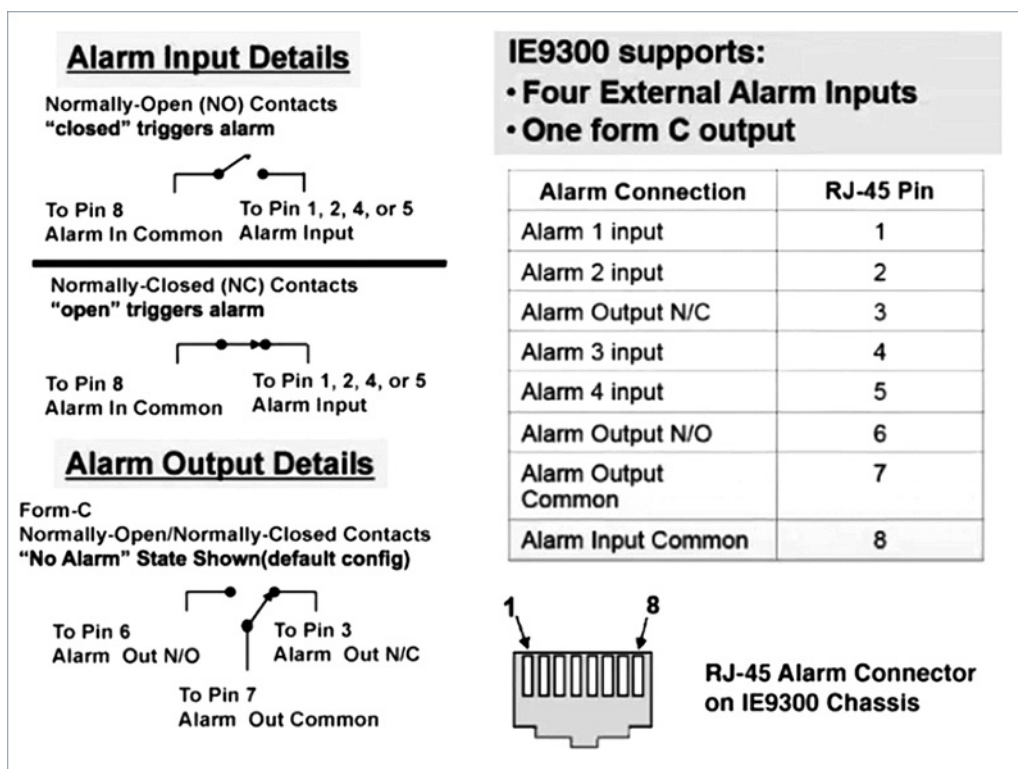
External alarm pins

Explains how external alarm pins enable connection of multiple alarm inputs to the switch, providing custom alarm triggers and severity notifications.

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. For each alarm input, you can configure an open or closed circuit to trigger an alarm. You can also configure the severity of the alarm.

The figure shows the alarm input pin details for setting up external alarms.

Figure 1: Alarm input pin details



The alarm input circuit is designed to sense whether a dry contact is open or closed relative to the Alarm-In reference pin.

The Alarm Out is a relay with Normally Open and Normally Closed contacts.

The switch software is configured to detect faults. Detected faults energize the relay coil and change the state of output alarm relay contacts. Both internal faults and external input alarms can be relayed to the output alarm pins.

The input alarm trigger setting can be either **open** or **closed**. If the alarm trigger setting is not specified, the alarm is triggered when the circuit closes.

- **Open** means that, under normal conditions, current flows through the contact (which indicates a normally closed contact). The alarm is generated when the current stops flowing.
- **Closed** means that, under normal conditions, no current flows through the contact (which indicates a normally open contact). The alarm is generated when current begins to flow.

A triggered alarm generates a system message. A triggered alarm also turns on the LED display (the LED is normally off, meaning no alarm). You can set the severity of the input alarm to **major**, **minor**, or **none**. The severity is included in the alarm message and also sets the LED color when the alarm is triggered. The LED displays a solid red for a minor alarm and flashing red for a major alarm. If not set, the default alarm severity is **minor**. See [Configure external alarms](#) on page 20 for details on how to configure external alarms.

2 How to Configure Switch Alarms

Topics:

- [Configure the power supply alarms](#)
- [Configure the switch temperature alarms](#)
- [Associate the temperature alarms with the relay](#)
- [FCS bit error rate threshold](#)
- [FCS error hysteresis thresholds](#)
- [Alarm profiles](#)
- [Enable SNMP traps](#)
- [Configure external alarms](#)

Describes the procedure for setting up alarm thresholds on network switches. This configuration ensures administrators receive timely notifications regarding hardware performance and connectivity status.

This reference provides the necessary parameters and configuration steps to enable and manage switch alarms effectively.

Configure the power supply alarms

Configure power supply alarm settings so your switch promptly detects and notifies you of power issues.

Proper monitoring of power supply alarms helps with prompt detection and resolution of power issues in a network switch, safeguarding critical operations.

Follow this procedure to configure power supply alarms in a network switch environment to ensure proper monitoring and notification of power supply status.

Ensure terminal access to the switch (either via SSH, console, or other means).

1. Use the **configure terminal** command to access the global configuration mode.

```
Switch# configure terminal
```

2. Configure the desired alarm settings.

- a) Use the **alarm facility power-supply disable** command to disable the power supply alarm.

```
Switch(config)# alarm facility power-supply disable
```

- b) Use the **alarm facility power-supply relay major** command to associate the alarm to the relay.

```
Switch(config)# alarm facility power-supply relay major
```

- c) Use the **alarm facility power-supply notifies** command to enable SNMP notifications.

```
Switch(config)# alarm facility power-supply notifies
```

- d) Use the **alarm facility power-supply syslog** command to log alerts to a syslog server.

```
Switch(config)# alarm facility power-supply syslog
```

3. Use the **end** command to exit to privileged EXEC mode.

```
Switch# end
```

4. Verify the power supply alarms configuration on your switch.

- a) Use the **show env power** command to check the power status.

```
Switch# show env power
```

- b) Use the **show facility-alarm status** command to review the current alarms.

```
Switch# show facility-alarm status
```

- c) Use the **show alarm settings** command to validate the settings.

```
Switch# show alarm settings
```

Configure the switch temperature alarms

Configure switch temperature alarms to monitor and manage temperature thresholds for network switches.

Follow this procedure to configure temperature alarms for a network switch to ensure effective monitoring of temperature thresholds.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. Use the **alarm facility temperature { primary | secondary } high threshold** command to set the high temperature threshold.

```
Switch(config)# alarm facility temperature primary high 100
```

You can specify a **threshold** value between -40° F (-40° C) and 204.8° F (96° C).

3. Use the **alarm facility temperature { primary | secondary } low threshold** command to set the low temperature threshold.

```
Switch(config)# alarm facility temperature primary low -10
```

You can specify a **threshold** value between -40° F (-40° C) and 204.8° F (96° C)..

4. Use the **end** command to exit to privileged EXEC mode.

```
Switch# end
```

5. Use the **show alarm settings** command to verify the switch temperature alarms configuration on your switch.

```
Switch# show alarm settings
```

Associate the temperature alarms with the relay

Configure temperature alarms to ensure critical temperature notifications are routed via relay, SNMP, or syslog.

Follow this procedure to associate temperature alarms with a relay to ensure that critical temperature notifications are routed appropriately.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. Use the **alarm facility temperature { primary | secondary } relay major** command to link either the primary or secondary temperature alarm to the major relay.

```
Switch(config)# alarm facility temperature primary relay major
```

3. (Optional) Use the **alarm facility temperature { primary | secondary } notifies** command to send primary or secondary temperature alarm traps to an SNMP server.

```
Switch(config)# alarm facility temperature primary notifies
```

4. (Optional) Use the **alarm facility temperature { primary | secondary } syslog** command to send primary or secondary temperature alarm traps to a syslog server.

```
Switch(config)# alarm facility temperature primary syslog
```

5. (Optional) Use the **no alarm facility temperature secondary** command to turn off the secondary temperature alarm.

```
Switch(config)# no alarm facility temperature secondary
```

6. Use the **end** command to exit to the privileged EXEC mode.

```
Switch# end
```

7. Use the **show alarm settings** command to confirm that temperature alarms are configured correctly.

```
Switch# show alarm settings
```

FCS bit error rate threshold

Describes how adjusting FCS bit error rate thresholds enhances network reliability and stability.

You can set up the Frame Check Sequence (FCS) bit error rate threshold and establish the error threshold on your switch.

By adjusting the error threshold and hysteresis threshold, you can enhance the reliability of your network, reduce false alarms during fluctuations in error rates and improve overall network stability.

Set the FCS bit error rate threshold

Configure the FCS bit error rate threshold to monitor and control frame transmission quality on a network interface.

Follow this procedure to configure the acceptable error rate for frames transmitted over a network interface.

The switch activates a FCS bit error-rate alarm when the measured error rate approaches the configured threshold.

FCS errors indicate frames with corrupted data. Setting a threshold helps monitor network health by notifying you when error rates exceed approved limits.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. Use the **interface *interface-id*** command to access the interface configuration.

```
Switch(config)# interface gig1/0/1
```

3. Use the **fcs-threshold *value*** command to attach the specified alarm profile to the interface.

```
Switch(config-if)# fcs-threshold value
```

4. Use the **end** command to exit to privileged EXEC mode.

```
Switch(config-if)# end
```

5. Use the **show fcs-threshold** command to confirm the setting.

```
Switch# show fcs-threshold
```


FCS error hysteresis thresholds

Explains what FCS error hysteresis thresholds are and describes how they help prevent unnecessary alarm notifications due to brief bit error rate fluctuations in Ethernet switches.

The FCS error hysteresis threshold in Ethernet switches helps manage alarm notifications related to bit error rates. Understanding this threshold helps network administrators prevent unnecessary alarms caused by brief bit error rate fluctuations, resulting in a more stable network monitoring environment.

Bit-error rate (BER): Ethernet standards specify a maximum bit-error rate of 10^{-8} , with a practical range between 10^{-6} and 10^{-11} .

FCS bit error rate: To configure the bit error rate for a switch, enter the exponent corresponding to your desired value (for 10^{-9} , enter 9). The default value is 10^{-8} .

The FCS error hysteresis threshold determines how a switch responds to changing bit error rates. If minor, brief increases in bit error rates occur, the hysteresis threshold prevents immediate alarm toggling (“alarm fatigue”). The threshold is expressed as the ratio of the alarm clear threshold to the alarm set threshold, measured as a percentage and can be set from 1 percent to 10 percent (default is 10 percent).

For instance, suppose the FCS bit error rate alarm is set to 10^{-8} (alarm set threshold) and the alarm clear threshold is set to 5×10^{-10} . The hysteresis value (h) is calculated as: $h = \text{alarm clear threshold} / \text{alarm set threshold}$

$$h = 5 \times 10^{-10} / 10^{-8} = 5 \times 10^{-2} = 0.05 = 5 \text{ percent}$$

The FCS hysteresis threshold applies across all ports on the switch. By adjusting the hysteresis threshold appropriately, you can enhance monitoring accuracy and reduce alarm fatigue for more effective network management. For more information, see [Configuring the FCS Bit Error Rate Alarm](#).

Set the FCS error hysteresis threshold

Configure the hysteresis threshold for FCS errors to prevent alarm toggling when bit error rates fluctuate around the configured threshold.

To configure the acceptable error rate for frames transmitted over a network interface.

The hysteresis setting prevents the alarm from toggling when the bit error-rate fluctuates around your configured threshold. The FCS hysteresis threshold is applied uniformly across all ports of the switch.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. Use the **alarm facility fcs-hysteresis percentage** command to set the hysteresis percentage for the switch.

```
Switch(config)# alarm facility fcs-hysteresis 8
```

For *percentage*, the range is 1 to 10. The default value is 10 percent.

3. Use the **end** command to exit to privileged EXEC mode.

```
Switch(config-if)# end
```

4. Use the **show running config** command to confirm the settings.

```
Switch# show running config
```

Alarm profiles

Explains what alarm profiles are, their key attributes, and their role in configuring system monitoring and response.

Configuring alarm profiles involves procedures for creating and modifying profiles using the necessary commands. The process starts by entering global configuration mode. You can create an alarm profile with only the **Port not operating** alarm enabled by default. The alarm profile includes instructions for modifying alarm parameters, configuring notifications, attaching profiles to specific ports, highlighting verification, and optionally saving configurations for effective system monitoring and response.

Create an alarm profile

Configure a new alarm profile or identify an existing one to monitor switch port status.

Use this procedure to create a new alarm profile or identify an existing one within a network switch system.

Alarm profiles help you track operational status of switch ports. By default, only the **port not operating** alarm is enabled in the default profile.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. Use the **alarm-profile** *alarm-profile-name* command to create a new profile or identify an existing profile and enter the alarm profile configuration mode.

```
Switch(config)# alarm-profile new-alarm
```

3. Use the **end** command to exit to privileged EXEC mode.

```
Switch(config-if)# end
```

4. Use the **show alarm profile name** command to verify the configuration on your switch.

```
Switch# show alarm profile name
```

Modify an alarm profile

Configure alarm profile settings and notification preferences to customize how alarms are generated and reported.

Modify an alarm profile to customize alarm settings according to your requirements. Adjust the alarm parameters and configure notifications for specific alarm types.

Alarm profiles allow you to tailor how alarms are generated and notified. For example, in the default profile, only the **port not operating** alarm is enabled.

Identify which alarm types require modification or additional notification.

1. (Optional) Use the **alarm {fcs-error | link-fault | not-forwarding | not-operating}** command to add or modify parameters for specific alarms.

```
Switch# alarm fcs-error
```

2. (Optional) Use the **notifies {fcs-error | link-fault | not-forwarding | not-operating}** command to configure the alarm to send an SNMP trap to an SNMP server.

```
Switch(config)# notifies link-fault
```

3. (Optional) Use the **relay-major {fcs-error | link-fault | not-forwarding | not-operating}** command to configure the alarm to send an alarm trap to the relay.

```
Switch(config)# relay-major not-forwarding
```

4. (Optional) Use the **syslog {fcs-error | link-fault | not-forwarding | not-operating}** command to configure the alarm to send an alarm trap to a syslog server.

```
Switch(config)# syslog fcs-error
```

Attach an alarm profile to a specific port

Attach a predefined alarm profile to an interface on your network switch to enable targeted alarm monitoring.

Follow this procedure to attach the alarm profile to a specific port within a network switch system.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. Use the **interface *interface-id*** command to access the interface configuration.

```
Switch(config)# interface gig1/0/1
```

3. Use the **alarm-profile *alarm-profile-name*** command to attach the specified alarm profile to the interface.

```
Switch(config-if)# alarm-profile new-alarm
```

4. Use the **end** command to exit to privileged EXEC mode.

```
Switch(config-if)# end
```

5. Verify the configuration on your switch with the **show alarm profile name** command.

```
Switch# show alarm profile name
```

Enable SNMP traps

Configure alarm notifications on the switch by enabling SNMP traps for real-time network management alerts.

Enable SNMP traps so the switch can notify management systems about alarm conditions.

SNMP traps are essential for real-time alerting in network management. By enabling SNMP traps on your switch, you ensure that alarm conditions trigger notifications to your SNMP monitoring system.

Ensure that SNMP is configured on your network switch.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch#configure terminal
```

2. Use the **snmp-server enable traps alarms** command to enable the switch to send SNMP traps.

```
Switch(config)# snmp-server enable traps alarms
```

3. Use the **end** command to exit to privileged EXEC mode.

```
Switch(config-if) # end
```

4. Verify the configuration on your switch with the **show alarm settings** command.

```
Switch# show alarm settings
```

Configure external alarms

Configure external alarm contacts to trigger alarms for external devices with specified trigger conditions and severity levels.

Configure external alarms to monitor and alert on the status of external devices in your environment, allowing you to set appropriate trigger conditions and severity levels for different alarm scenarios.

Configure an open or closed circuit to trigger an alarm for the external devices in your environment and configure the severity of the alarm.

1. Use the **configure terminal** command to enter global configuration mode.

```
Switch# configure terminal
```

2. (Optional) Use the **alarm contact** *contact-number* **description** *string* command to configure a description for the alarm contact number.

```
Switch(config) # alarm contact 2 description alarm for open door
```

- The *contact-number* is 1, 2, 4, or 5. See the figure in [External alarm pins](#) on page 10 section for the alarm contact pinouts.
- The *description string* is up to 80 alphanumeric characters in length and is included in any generated system messages.

3. Use the **alarm contact** {*contact-number* | **all**} {**severity** { **critical** | **major** | **minor** } | **trigger** { **closed** | **open** }} command to configure the trigger and severity for an alarm contact number or for all contact numbers.

```
Switch(config) # alarm contact 2 severity critical trigger open
```

- Enter a *contact-number* (1, 2, 4, or 5) or specify that you are configuring **all** alarms. See the figure in [External alarm pins](#) on page 10 section 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 **closed** or **open**. If you do not configure a trigger, the alarm is triggered when the circuit is **closed**.

4. Use the **show env alarm-contact** command to show the configured alarm contacts.

```
Switch(config) # show env alarm-contact
```

5. Use the **end** command to exit to privileged EXEC mode.

```
Switch(config-if) # end
```

3 Configuration Examples for Switch Alarms

Topics:

- [Configure external alarms](#)
- [Configure temperature alarms to a relay](#)
- [Configure dual power supplies](#)
- [Configuration example for display alarm settings](#)
- [Monitoring and maintaining alarms status of switches](#)

Provides configuration examples for managing switch alarms. These examples assist administrators in setting up monitoring thresholds and notification triggers for network hardware.

This document provides practical configuration examples for implementing and managing switch alarms within the network environment.

Configure external alarms

Describes the configuration of external alarm contacts to monitor physical conditions and trigger alerts. This process enables network devices to respond to environmental changes detected by connected sensors.

Configure external alarm contacts to monitor physical conditions and generate appropriate alarm levels when sensors detect changes in the environment.

External alarm contacts allow network devices to monitor physical conditions such as door sensors, temperature sensors, or other environmental monitoring equipment. These sensors can trigger alarms at different severity levels when detecting changes.

```
Switch# configure terminal
Switch(config)# alarm contact 1 description door sensor
Switch(config)# alarm contact 1 severity major
Switch(config)# alarm contact 1 trigger closed
Switch(config)# end
```

```
Switch# show env alarm-contact
ALARM CONTACT 1
Status: not asserted
Description: door sensor
Severity: major
Trigger: closed
ALARM CONTACT 2
Status: not asserted
Description: external alarm contact 2
Severity: minor
Trigger: closed
```

Configure temperature alarms to a relay

Describes the configuration of temperature alarm associations to relay outputs. This process ensures reliable alert management through threshold monitoring and logging to syslog and SNMP servers.

This configuration assigns the secondary temperature alarm to the major relay. With a high temperature threshold of 45 degrees Celsius. All alarms and traps associated with temperature alarm are logged to both a syslog server and an SNMP server, thereby ensuring reliable alert management.

The following commands are used to configure temperature alarm associations:

```
Switch# configure terminal
Switch(config)# alarm facility temperature secondary high 45
Switch(config)# alarm facility temperature secondary relay major
Switch(config)# alarm facility temperature secondary syslog
Switch(config)# alarm facility temperature secondary notifies
```

This configuration assigns the primary temperature alarm to the major relay. All alarms and traps related to this alarm are sent to a syslog server..

```
Switch(config)# alarm facility temperature primary syslog
Switch(config)# alarm facility temperature primary relay major
```

Configure dual power supplies

Describes the configuration of two power supplies for redundancy and the verification of their operational status. This setup ensures continuous system operation during a power supply failure.

This reference provides the commands and expected output to enable dual power supply mode and monitor power redundancy status on the switch.

Configuration commands

This example demonstrates how to configure two power supplies:

```
Switch# enable
Switch# configure terminal
Switch(config)# power-supply dual
```

Verification commands

These examples show how to display information when two power supplies are absent, resulting in an alarm that is triggered.



Note

The **show facility-alarm status** command displays information when two power supplies are absent, resulting in a triggered alarm

```
Switch# show facility-alarm status
Source Severity Description Relay Time
Switch MAJOR 5 Redundant Pwr missing or failed NONE Mar 01
1993 00:23:52
```

```
Switch# show env power
POWER SUPPLY A is DC OK
POWER SUPPLY B is DC FAULTY <--
```

```
Switch# show hard led
SWITCH: 1
SYSTEM: GREEN
ALARM : ALT_RED_BLACK <--
```

Configuration example for display alarm settings

Provides an example of displaying current alarm settings and configurations in the system.

This section explains how to display the current alarm settings and configurations. It describes the active alarms and their parameters in the system.

```
Switch# show alarm settings
```

```
Alarm relay mode: Positive
Power Supply
```

```

Alarm                Enabled
Relay
Notifies             Disabled
Syslog               Enabled
Temperature-Primary
Alarm                Enabled
Thresholds           MAX: 80C          MIN: 0C
Relay                MAJ
Notifies             Enabled
Syslog               Enabled
Temperature-Secondary
Alarm                Disabled
Threshold
Relay
Notifies             Disabled
Syslog               Disabled
SD-Card
Alarm                Disabled
Relay
Notifies             Disabled
Syslog               Disabled
Input-Alarm 1
Alarm                Enabled
Relay
Notifies             Disabled
Syslog               Enabled
Input-Alarm 2
Alarm                Enabled
Relay
Notifies             Disabled
Syslog               Enabled
Input-Alarm 3
Alarm                Enabled
Relay
Notifies             Disabled
Syslog               Enabled
Input-Alarm 4
Alarm                Enabled
Relay
Notifies             Disabled
Syslog               Enabled
PTP
Alarm                Disabled
Relay
Notifies             Disabled
Syslog               Disabled
HSR
Alarm                Disabled
Relay
Notifies             Disabled
Syslog               Disabled

```

Monitoring and maintaining alarms status of switches

Provides the necessary commands to retrieve alarm information and manage switch alarms effectively. This information helps administrators identify and address potential issues within the network infrastructure.

Use specific commands to retrieve alarm information and manage switch alarms effectively to maintain network health.

Table 3: Commands for displaying global and port alarm status

No.	Command	Purpose
1	<code>show alarm profile [name]</code>	Displays all alarm profiles in the system or a specified profile.
2	<code>show alarm settings</code>	Displays all global alarm settings on the switch.
3	<code>show env { alarm-contact all power temperature }</code>	Displays the status of environmental facilities on the switch.
4	<code>show facility-alarm status [critical info major minor]</code>	Displays generated alarms on the switch.

