CHAPTER 10

E Commands

The commands in this chapter apply to the Cisco MDS 9000 Family of multilayer directors and fabric switches. All commands are shown here in alphabetical order regardless of command mode. See "About the CLI Command Modes" section on page 1-3 to determine the appropriate mode for each command.

egress-sa

To configure the Security Association (SA) to the egress hardware, use the **engress-sa** command. To delete the SA from the egress hardware, use the **no** form of the command.

engress-sa *spi-number*

no engress-sa *spi-number*

Syntax Description

spi-number	The range is from 256 to 4294967295.

Defaults

None.

Command Modes

Configuration submode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to configure the SA to the egress hardware:

```
switch# config terminal
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)# interface fc 2/1 - 3
switch(config-if)# fcsp esp manual
switch(config-if-esp)# egress-sa 258
switch(config-if-esp)#
```

Related Commands

Command	Description
show fcsp interface	Displays FC-SP-related information for a specific interface.

email-contact

To configure an e-mail contact with the Call Home function, use the **email-addr** command in Call Home configuration submode. To disable this feature, use the **no** form of the command.

email-addr *email-address*

no email-addr *email-address*

Syntax Description

email-address	Configures an e-mail address. Uses a standard e-mail address that does not have any text size restrictions.

Defaults

None.

Command Modes

Call Home configuration submode.

Command History

Release	Modification
1.0(2)	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to configure e-mail contact in the Call Home configuration:

```
switch# config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config)# callhome
switch(config-callhome)# email-contact username@company.com
```

Related Commands

Command	Description
callhome	Configures the Call Home function.
callhome test	Sends a dummy test message to the configured destination(s).
show callhome	Displays configured Call Home information.

enable

To turn on the privileged commands, use the **enable** command. To disable this feature, use the disable command.

enable *privilege-level*

Syntax Description

privilege-level	Specifies privilege level. Default value is 15.

Defaults

Enabled.

Command Modes

EXEC mode.

Command History

Release	Modification
NX-OS 5.0(1a)	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to turn on the privileged commands:

```
switch# enable 15
switch#
```

Related Commands

Command	Description
enable secret	Displays the secret for privilege escalation.

enable (Call Home configuration submode)

To enable the Call Home function, use the **enable** command in Call Home configuration submode. To disable this feature, use the **disable** command.

enable

Syntax Description

This command has no arguments or keywords.

Defaults

None.

Command Modes

Call Home configuration submode.

Command History

Release	Modification
1.0(2)	This command was introduced.

Usage Guidelines

To disable the Call Home function, use the **disable** command:

Examples

The following example shows how to enable the Call Home function.

```
switch# config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
switch(config)# callhome
switch(config-callhome)# enable
```

Related Commands

Command	Description
callhome	Configures the Call Home function.
callhome test	Sends a dummy test message to the configured destination(s).
show callhome	Displays configured Call Home information.

enable user-server-group

To enable or disable group validation, use the **enable user-server-group** command. To disable this feature, use the **no** form of the command.

enable user-server-group

no enable user-server-group

Syntax Description-

This command has no arguments or keywords.

Defaults

None.

Command Modes

Configuration submode.

Command History

Release	Modification
NX-OS 5.0	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to enable group validation:

```
switch(config-ldap)# enable user-server-group
switch(config-ldap)#
```

Related Commands

Command	Description
show ldap-server groups	Displays the configured LDAP server groups.

enable secret

To create secret for privilege escalation, use the **enable secret** command. To disable this feature, use the **no** form of the command.

enable secret {**0** | **5**} [*password* **priv-lvl** *privilege-level*]

no enable secret {**0** | **5**} [*password* **priv-lvl** *privilege-level*]

Syntax Description

0	Specifies that the secret that follows should be in clear text.
5	Specifies that the secret that follows should be encrypted.
password	(Optional) Specifies that the secret for user privilege escalation.
priv-lvl	(Optional) Specifies the privilege level to which the secret belongs.
privilege-level	(Optional) Specifies the privilege level. Default value is 15.

Defaults

Enabled.

Command Modes

Configuration mode.

Command History

Release	Modification
NX-OS 5.0(1a)	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to specifiy the secret that follows should be in clear text:

```
switch(config)# enable secret 0 admin priv-lvl 4
switch(config)#
```

The following example shows how to specify the secret that follows should be encrypted:

```
switch(config)# enable secret 5 admin priv-lvl 4
switch(config)#
```

Related Commands

Command	Description
show fcip	Displays FCIP information.

enable cert-DN-match

To enable or disable cert DN matching, use the **enable cert-DN-match** command. To disable this feature, use the **no** form of the command.

enable cert-DN-match

no enable cert-DN-match

Syntax Description-

This command has no arguments or keywords.

Defaults

None.

Command Modes

Configuration submode.

Command History

Release	Modification
NX-OS 5.0(1a)	This command was introduced.

Usage Guidelines

If Cert-DN match is configured, user will be allowed to login only if the user profile lists the subject-DN of the usercertificate as authorized for logging in.

Examples

The following example shows how to enable cert DN match:

```
switch(config-ldap)# enable cert-dn-match
switch(config-ldap)#
```

Related Commands

Command	Description
show ldap-server groups	Displays the configured LDAP server groups.

encryption

To configure an encryption algorithm for an IKE protocol policy, use the **encryption** command. To revert to the default, use the **no** form of the command.

encryption {**3des** | **aes** | **des**}

no encryption

Syntax Description

3des	Specifies 168-bit DES (3DES).
aes	Specifies 128-bit AES-CBC.
des	Specifies 56-bit DES-CBS.

Defaults

3des

Command Modes

IKE policy configuration submode.

Command History

Release	Modification
2.0(x)	This command was introduced.

Usage Guidelines

To use this command, the IKE protocol must be enabled using the **crypto ike enable** command.

Examples

The following example shows how to configure the encryption algorithm for the IKE protocol:

```
switch# config terminal
switch(config)# crypto ike domain ipsec
switch(config-ike-ipsec)# policy 1
switch(config-ike-ipsec-policy)# encryption 3des
```

Related Commands

Command	Description
crypto ike domain ipsec	Enters IKE configuration mode.
crypto ike enable	Enables the IKE protocol.
policy	Configures IKE policy parameters.
show crypto ike domain ipsec	Displays IKE information for the IPsec domain.

end

To exit any of the configuration modes and return to EXEC mode, use the **end** command in configuration mode.

end

Syntax Description

This command has no arguments or keywords.

Defaults

None.

Command Modes

Configuration mode.

Command History

Release	Modification
4.1(1b)	Modified the command output.
1.0(2)	This command was introduced.

Usage Guidelines

You can also press **Ctrl-Z** to exit configuration mode.

Examples

The following example shows how to exit from configure mode:

```
switch(config-port-monitor)# end
switch#
```

The following example changes the name to george. Entering the **end** command causes the system to exit configuration mode and return to EXEC mode.

```
switch(config)# hostname george
george(config)# end
switch#
```

Related Commands

Command	Description
exit	Exits configuration mode, or any of the configuration modes.

enrollment terminal

To enable manual cut-and-paste certificate enrollment through the switch console, use the **enrollment terminal** command in trust point configuration submode. To revert to the default certificate enrollment process, use the **no** form of the command.

enrollment terminal

no enrollment terminal

Syntax Description

This command has no arguments or keywords.

Defaults

The default enrollment method is manual cut-and-paste, which is the only enrollment method that the MDS switch currently supports.

Command Modes

Trust point configuration submode.

Command History

Release	Modification
3.0(1)	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to configure trust point enrollment through the switch console:

```
switch# config terminal
switch(config)# crypto ca trustpoint admin-ca
switch(config-trustpoint)# enrollment terminal
```

The following example shows how to discard a trust point enrollment through the switch console:

```
switch(config)# crypto ca trustpoint admin-ca
switch(config-trustpoint)# no enrollment terminal
```

Related Commands

Command	Description
crypto ca authenticate	Authenticates the certificate of the certificate authority.

errdisable detect cause link-down

To error-disable and bring down a port on a link failure, use the **errdisable detect cause link-down** command. To disable this feature, use the **no** form of the command.

errdisable detect cause link-down num-times {*flaps number*} **duration**{*sec*}

no errdisable detect cause link-down num-times {*flaps number*} **duration**{*sec*}

Syntax Description

num-times	Specifies the flap number.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Interface Configuration mode.

Command History

Release	Modification
NX-OS 4.1(3)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to configure the port as down when the link flaps once:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause link-down
```

The following example shows how to configure the port as down when the link flaps 5 times in 30 seconds:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause link-down num-times 5 duration 30
```

The following example shows how to remove the port guard feature on the interface:

```
Switch# config t
Switch (config)# interface fc1/1
Switch (config-if)# no errdisable detect cause link-down
switch(config)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

errdisable detect cause bit-errors

To enable error-disable detection on bit errors, use the **errdisable detect cause bit-errors** command. To disable this feature, use the **no** form of the command.

errdisable detect cause bit-errors num-times {*flaps number*} **duration** {*sec*}

no errdisable detect cause bit-errors num-times {*flaps number*} **duration** {*sec*}

Syntax Description

num-times	Specifies the number of flaps.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Interface Configuration mode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to enable error-disable detection on bit errors:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause bit-errors num-times 5 duration 30
Switch (config-if)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.

Command	Description
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

errdisable detect cause credit-loss

To enable error-disable detection on a credit loss, use the **errdisable detect cause credit-loss** command. To disable this feature, use the **no** form of the command.

errdisable detect cause credit-loss num-times {*flaps numbe*r} **duration** {*sec*}

no errdisable detect cause credit-loss num-times {*flaps numbe*r} **duration** {*sec*}

Syntax Description

num-times	Specifies the flap number.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Interface Configuration mode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to enable error-disable detection on a credit loss:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause credit-loss num-times 5 duration 30
Switch (config-if)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

errdisable detect cause link-reset

To enable error-disable detection on a link reset, use the **errdisable detect cause link-reset** command. To disable this feature, use the **no** form of the command.

errdisable detect cause link-reset num-times {*number*} **duration** {*sec*}

no errdisable detect cause link-reset num-times {*number*} **duration** {*sec*}

Syntax Description

num-times	Specifies the flap number.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Interface Configuration mode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to enable error-disable detection on a link reset:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause link-reset num-times 5 duration 30
Switch (config-if)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

errdisable detect cause signal-loss

To enable error-disable detection on a signal loss, use the **errdiable detect cause signal-loss** command. To disable this feature, use the **no** form of the command.

errdisable detect cause signal-loss num-times {*number*} **duration** {*sec*}]

no errdisable detect cause signal-loss num-times {*number*} **duration** {*sec*}]

Syntax Description

num-times	Specifies the flap number.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Interface Configuration mode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to enable error-disable on a signal loss:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause signal-loss num-times 5 duration 30
Switch (config-if)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

errdisable detect cause sync-loss

To enable error-disable detection on a sync loss, use the **errdisable detect cause sync-loss** command. To disable this feature, use the **no** form of the command.

errdisable detect cause sync-loss num-times {number} duration {sec}

no errdisable detect cause sync-loss num-times {number} duration {sec}

Syntax Description

num-times	Specifies the flap number.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Interface Configuration mode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to enable error-disable detection on a syncronised loss:

```
Switch# configure terminal
Switch (config)# interface fc1/1
Switch (config-if)# errdisable detect cause sync-loss num-times 5 duration 30
Switch (config-if)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

errdisable detect cause trustsec-violation

To enable error-disable detection on a trustsec violation, use the **errdisable detect cause trustsec-violation** command. To disable this feature, use the **no** form of the command.

errdisable detect cause trustsec-violation num-times {*number*} **duration** {*sec*}

no errdisable detect cause trustsec-violation num-times {*number*} **duration** {*sec*}

Syntax Description

num-times	Specifies the flap number.
flaps number	Specifies the number of flaps. The range is from 1 to 1023.
duration	Specifies the time in seconds.
sec	The range is from 1 to 2000000.

Defaults

None.

Command Modes

Configuration mode.

Command History

Release	Modification
NX-OS 4.2(1)	This command was introduced.

Usage Guidelines

The port guard feature is used in the environments where the system and application does not adapt quickly and efficiently to a port going down and back up or to a port rapidly cycling up and down which can happen in some failure modes. For example, if the port is going up and down once a second, and the system takes five seconds to stabilize after the port goes down, this situation might cause a more severe failure in the fabric.

The port guard feature gives the SAN administrator the ability to prevent this issue from occuring in environments that are vulnerable to these problems. The port can be configured to stay down after the first failure, or after a specified number of failures in a specified time period. This allows the SAN administartaion to intervene and control the recovery and avoiding any problems caused by the cycling.

Examples

The following example shows how to enable error-disable detection on a trustsec violation:

```
switch#(config-if)# errdisable detect cause trustsec-violation num-times 1 duration 1
switch#(config-if)#
```

Related Commands

Command	Description
device-alias commit	Commits changes to the active device alias database.

Command	Description
device-alias database	Configures and activates the device alias database.
show device-alias	Displays device alias information.

event

To configure the event statement for the policy, use the **event** command. To delete the event statement for the policy, use the **no** form of the command.

event {**cli match** *expression* **[count** *countnum***] [time** *seconds***] | counter name** *name* **entry-val** *entry* **entry-op {eq | ge | gt | le | lt | ne} [exit-val** *value* **exit-op {eq | ge | gt | le | lt | ne}] | fanabsent [***fan number***] time** *seconds* **| fanbad [***fan number***] time** *seconds* **| memory** { **critical | minor | severe**} **| module-failure type** *failure-type* **module** {*slot* **| all**} **count repeats [time** *seconds*] **| oir** {**fan | module | powersupply**} {**anyoir | insert | remove}** [*number*]**| policy-default count** *repeats* **[time** *seconds* **| poweroverbudget [time** *seconds*] **| snmp oid** *oid* **get-type {exact | next} entry-op** {**eq | ge | gt | le | lt |ne**} **entry-val** *entry* **[exit-comb** {**and | or**}] **exit-op {eq | ge | gt | le | lt |ne**} **exit-val** *exit* **exit-time** *time* **polling-interval** *interval* **| temperature** [**module** *slot*] [*sensor number*] **threshold** {**any | major | minor**}}

no event {**cli match** *expression* **[count** *countnum***] [time** *seconds***] | counter name** *name* **entry-val** *entry* **entry-op {eq | ge | gt | le | lt | ne} [exit-val** *value* **exit-op {eq | ge | gt | le | lt | ne}] | fanabsent [***fan number***] time** *seconds* **| fanbad [***fan number***] time** *seconds* **| memory** { **critical | minor | severe**} **| module-failure type** *failure-type* **module** {*slot* **| all**} **count repeats [time** *seconds*] **| oir** {**fan | module | powersupply**} {**anyoir | insert | remove}** [*number*]**| policy-default count** *repeats* **[time** *seconds* **| poweroverbudget [time** *seconds*] **| snmp oid** *oid* **get-type {exact | next} entry-op** {**eq | ge | gt | le | lt |ne**} **entry-val** *entry* **[exit-comb** {**and | or**}] **exit-op {eq | ge | gt | le | lt |ne**} **exit-val** *exit* **exit-time** *time* **polling-interval** *interval* **| temperature** [**module** *slot*] [*sensor number*] **threshold** {**any | major | minor**}}

Syntax Description

cli	Specifies a CLI event specification.
match *expression*	Specifies the regular expression used to perform the CLI command pattern match. The CLI command must have been successfully parsed before the pattern match is attempted. The pattern match is compared with the fully expanded CLI command string. If the expression contains embedded blanks, enclose it in double quotation mark.
count *countnum*	(Optional) Specifies the number of matching occurrences before an EEM event is triggered. When a number is not specified, an EEM event is triggered after the first match. The *countnum* argument must be an integer greater than 0.
time *seconds*	(Optional) Specifies the time interval during which the one or more occurrences must take place. When the keyword is not specified, no time period check is applied.
counter	Specifies a counter event.
name *name*	Specifies the name of the counter that will be monitored. The name identifier can be any string value.
entry-val *entry*	Specifies the value with which the contents of the current counter are compared to decide if a counter event should be raised. The entry value ranges from 0 to 2147483647.

entry-op *op*	(Optional) Compares the contents of the current counter with the exit value using a specified operator: •eq—Equal to •ge—Greater than or equal to •gt—Greater than •le—Less than or equal to •lt—Less than •ne—Not equal to
exit-val *value*	(Optional) Specifies the value with which the contents of the current counter are compared to decide whether the exit criteria are met.The exit value ranges from 0 to 2147483647.
exit-op *op*	
fanabsent	Specifies fanabsent event specification.
fan number	The fan number range is from 1 to 4.
time *seconds*	The seconds range is from 0 to 4294967295.
fanbad	Specifes fanbad event specification.
memory	Specifies the memory thresholds event specification.
critical	Specifies critical alert.
minor	Specifies minor alert.
severe	Specifies severe alert.
module-failure	Specifies a module failure event specification.
type *failure-type*	Specifies the type of failure condition.
module *slot* | **all**	Specifies that one module or all modules must be monitored.
oir	Specifies online-insertion-removal event specification.
fan	Specifies the system fans. Optionally specifies an individual fan.
module	Specifies the system modules. Optionally specifies an individual module.
powersupply	Specifies the system power supplies. Optionally specifies an individual power supply.
anyoir | insert | remove	Specify the OIR event that triggers the EEM applet. •insert—OIR insert •remove—OIR remove •anyoir—Either OIR insert or OIR remove
number	(Optional) If you selected fan, enter a fan number to monitor for an OIR event. The number is in the range of 1-4. If you selected module, enter a module number to monitor for an OIR event. The number is in the range of 1-10. If you selected powersupply, enter a power supply number to monitor for an OIR event. The number is in the range of 1-3.
policy-default	Specifies the event in the system policy being overridden.
poweroverbudget	Specifies poweroverbudget event specification.
snmp	Specifies a SNMP event specification.
oid *oid*	Specifies the OID of data element in dot notation.

get-type	Specifies the type of SNMP get operation to be applied to the object ID specified by the OID value argument.
exact	Retrieves the object ID specified by the OID value argument.
next	Retrieves the object ID that is the alphanumeric successor to the object ID specified by the OID value argument.
exit-comb	(Optional) Indicates the combination of exit conditions that must be met before event monitor is reenabled.
and	(Optional) Specifies that an exit comparison operator, an exit object ID value, and an exit time value must exist.
or	(Optional) Specifies that an exit comparison operator and an exit object ID value or an exit time value must exist.
exit-time *time*	
polling-interval *interval*	Specifies the time interval between consecutive polls. The value argument is an integer that represents seconds in the range from 1 to 4294967295. The minimum polling interval is 1 second.
temperature	Specifies temperature event specification.
module *slot*	(Optional) Specifies module number. The slot range is from 1 to 10.
sensor number	(Optional) Specifies sensor number.
threshold	Specifies major or minor threshhold.
any	Specifies major or minor threshold.
major	Specifies major threshold.
mi nor	Specifies minor threshold.

Defaults

None.

Command Modes

Embeded Event Manager.

Command History

Release	Modification
NX-OS 4.2(1)	Added a note.
NX-OS 4.1(2)	This command was introduced.

Usage Guidelines

None.

Note If you want to allow the triggered event to process any default actions, you must configure the **EEM** policy to allow the event default action statement. For example, if you match a **CLI** command in a match statement, you must add the event-default action statement to the **EEM** policy or **EEM** will not allow the **CLI** command to execute.

Examples

The following example shows how to specify the event criteria for an EEM applet that is run by matching a Cisco NX-OS command line interface (CLI) command.

```
switch(config-applet)# event cli match "shutdown"
```

The following example show how to specify an event criteria for an EEM applet that is run when the defined critical_errors counter exceeds the entry value:

```
switch(config)# event manager applet eventcntr-applet
switch(config-applet)# event counter name critical_errors entry-val 3 entry-op gt
switch(config-applet)#
```

This following example shows how to specify that an EEM applet runs when a fan absent event occurs:

```
switch# configure terminal
switch(config)# event manager applet absent-applet
switch(config-applet)# event fanabsent time 42
switch(config-applet)#
```

The example example shows how to specify that an EEM applet runs when a fan absent event occurs:

```
switch# configure terminal
switch(config)# event manager applet bad-applet
switch(config-applet)# event fanbad time 42
switch(config-applet)#
```

The example shows how to specify that an EEM applet runs when a module failure event occurs:

```
switch# configure terminal
switch(config)# event manager applet modfail-applet
switch(config-applet)# event module-failure type unexpected-registration module 6 count 2
switch(config-applet)#
```

The following example shows how to specify that an EEM applet be run on the basis of an event raised when a module OIR occurs:

```
switch# configure terminal
switch(config)# event manager applet oir-applet
switch(config-applet)# event oir module anyoir
switch(config-applet)#
```

The following example shows how to use the event in the system policy being overridden:

```
switch# configure terminal
switch(config)# event policy-default count 6
switch(config)#
```

The following example shows how to specify the event criteria for an EEM applet that is run by sampling SNMP object identifier values:

```
switch# configure terminal
switch(config)# event manager applet snmp-applet
switch(config-applet)# event snmp oid 4.2.1.6 get-type next entry-op eq entry-val 42
poll-interval 2
switch(config-applet)#
```

The following example shows how to specify that an EEM applet runs when a temperature event occurs:

```
switch# configure terminal
switch(config)# event manager applet temp-applet
switch(config-applet)# event temperature threshold major
switch(config-applet)#
```

Related Commands

Command	Description
show event manager policy	Displays the register Embedded Event manager policies.

event manager applet

To register an applet with the Embedded Event Manager (EEM) and to enter applet configuration mode, use the **event manager applet** command.

event manager applet *applet-name*

Syntax Description

applet-name	The applet name can be any case-sensitive alphanumeric string up to 29 characters.

Defaults

None.

Command Modes

Embedded Event Manager.

Command History

Release	Modification
NX-OS 4.1(3)	This command was introduced.

Usage Guidelines

None.

Examples

This example shows how to register an applet with EEM and to enter applet configuration mode:

```
switch# configure terminal
switch(config)# event manager applet eem-applet
switch(config-applet)#
```

Related Commands

Command	Description
show event manager policy	Displays the register Embedded Event manager policies.

event manager policy

To register and activate an Embeded Event Manager policy (EEM) script policy, use the **event manager policy** command.

event manager policy *policy-script*

no event manager policy *policy-script*

Syntax Description

policy-script	Specifies the EEM policy script. This name becomes the name of the EEM policy. The maximum size is 29 characters.

Defaults

None.

Command Modes

EXEC mode.

Command History

Release	Modification
NX-OS 4.1(3)	This command was introduced.

Usage Guidelines

The EEM schedules and runs policies on the basis of an event specification that is contained within the policy itself. When the **event manager policy** command is invoked, the EEM examines the policy and registers it to be run when the specified event occurs.

Examples

The following example shows how to register a policy:

```
switch# configure terminal
switch(config)# event manager policy modulescript
switch(config)#
```

Related Commands

Command	Description
event manager applet	Displays an applet with the Emedded Event manager.

event manager environment

To configure an EEM environment variable, use the **event manager environment** command. To disable an EEM environment variable, use the **no** form of the command.

event manager environment *variable-name variable-value*

no event manager environment *variable-name variable-value*

Syntax Description

variable-name	Specifies the name of the EEM environment variable. The variable name can be any case-sensitive alphanumeric string up to 32 characters.
variable-value	Specifies the value of the EEM environment. The variable name can be any case-sensitive alphanumeric string up to 32 characters.

Defaults

None.

Command Modes

Embeded Event Manager.

Command History

Release	Modification
NX-OS 4.1(3)	This command was introduced.

Usage Guidelines

None.

Examples

The following example shows how to set an EEM environment variable:

```
switch# configure terminal
switch(config)# event manager environment emailto "admin@anyplace.com"
switch(config)#
```

Related Commands

Command	Description
show event manager environment	Displays the name and value of the Embedded Event manager.
show event manager policy	Displays the register Embedded Event manager policies.

exit

To exit any configuration mode or close an active terminal session and terminate the EXEC, use the **exit** command at the system prompt.

exit

Syntax Description

This command has no arguments or keywords.

Defaults

None.

Command Modes

EXEC and configuration modes.

Command History

Release	Modification
4.1(1b)	Modified the command output.
1.0(2)	This command was introduced.

Usage Guidelines

Use the **exit** command at the EXEC levels to exit the EXEC mode. Use the **exit** command at the configuration level to return to privileged EXEC mode. Use the **exit** command in interface configuration mode to return to configuration mode. You also can press **Ctrl-Z**, or use the **end** command, from any configuration mode to return to EXEC mode.

Note The **exit** command is associated with privilege level 0. If you configure AAA authorization for a privilege level greater than 0, this command will not be included in the command set for that privilege level.

Examples

The following example displays an exit from the submode:

```
switch(config-port-monitor)# exit
switch(config)#
```

The following example displays an exit from the interface configuration mode for VRRP to return to the interface configuration mode:

```
switch(config-if-vrrp)# exit
switch(config-if)#
```

The following example displays an exit from the interface configuration mode to return to the configuration mode:

```
switch(config-if)# exit
switch(config)#
```

The following example shows how to exit an active session (log-out):

```
switch# exit
```

Related Commands

Command	Description
end	Returns you to EXEC mode.