I Commands

This chapter describes the Cisco NX-OS MSDP commands that begin with I.

ip msdp description

To configure a description for the Multicast Source Discovery Protocol (MSDP) peer, use the **ip msdp description** command. To remove the description for the peer, use the **no** form of this command.

ip msdp description *peer-address text*

no ip msdp description *peer-address* [*text*]

Syntax Description	*peer-address*	IP address of MSDP peer.
	text	Text description.

Command Default   None

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure an MSDP peer description:

```
switch(config)# ip msdp description 192.168.1.10 engineering peer
```

This example shows how to remove an MSDP peer description:

```
switch(config)# no ip msdp description 192.168.1.10
```

Related Commands

Command	Description
show ip msdp peer	Displays information about MSDP peers.

ip msdp event-history

To configure the size of the Multicast Source Discovery Protocol (MSDP) event history buffers, use the **ip msdp event-history** command. To revert to the default buffer size, use the **no** form of this command.

ip msdp event-history {**cli** | **events** | **msdp-internal** | **routes** | **tcp**} **size** *buffer-size*

no ip msdp event-history {**cli** | **events** | **msdp-internal** | **routes** | **tcp**} **size** *buffer-size*

Syntax Description		
cli	Configures the CLI event history buffer.
events	Configures the peer-events event history buffer.
msdp-internal	Configures the MSDP internal event history buffer.
routes	Configures the routes event history buffer.
tcp	Configures the TCP event history buffer.
size	Specifies the size of the buffer to allocate.
buffer-size	Buffer size that is one of the following values: **disabled**, **large**, **medium**, or **small**. The default buffer size is **small**.

Command Default   All history buffers are allocated as small.

Command Modes   Any command mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure the size of the MSDP event history buffer:

```
switch(config)# ip msdp event-history events size medium
switch(config)#
```

Related Commands	Command	Description
	clear ip routing multicast event-history	Clears information in the IPv4 MRIB event history buffers.

Command	Description
show routing ip multicast event-history	Displays information in the IPv4 MRIB event history buffers.
show running-config msdp	Displays information about the running-system MSDP configuration.

ip msdp flush-routes

To flush routes when the Multicast Source Discovery Protocol (MSDP) process is restarted, use the **ip msdp flush-routes** command. To leave routes in place, use the **no** form of this command.

ip msdp flush-routes

no ip msdp flush-routes

Syntax Description	This command has no arguments or keywords.

Command Default	The routes are not flushed.

Command Modes	Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   To display whether flush routes are configured, use this command line:

```
switch(config)# show running-config | include flush-routes
```

This command requires the LAN Base Services license.

Examples   This example shows how to configure flushing routes when the MSDP process is restarted:

```
switch(config)# ip msdp flush-routes
```

This example shows how to configure leaving routes when the MSDP process is restarted:

```
switch(config)# no ip msdp flush-routes
```

Related Commands

Command	Description
show running-config	Displays information about the running-system configuration.

ip msdp group-limit

To configure the Multicast Source Discovery Protocol (MSDP) maximum number of (S, G) entries that the software creates for the specified prefix, use the **ip msdp group-limit** command. To remove the group limit, use the **no** form of this command.

> **ip msdp group-limit** *limit* **source** *prefix*

> **no ip msdp group-limit** *limit* **source** *prefix*

Syntax Description

limit	Limit on number of groups. The range is from 0 to 4294967295. The default is no limit.
source *prefix*	Specifies the prefix to match sources against.

Command Default   None

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure the maximum number of (S, G) entries to create for a source:

```
switch(config)# ip msdp group-limit 4000 source 192.168.1.0/24
```

This example shows how to remove the limit entries to create:

```
switch(config)# no ip msdp group-limit 4000 source 192.168.1.0/24
```

Related Commands

Command	Description
show ip msdp sources	Displays information about the MSDP learned sources and group limit.

ip msdp keepalive

To configure a Multicast Source Discovery Protocol (MSDP) peer keepalive interval and timeout, use the **ip msdp keepalive** command. To reset the timeout and interval to the default, use the **no** form of this command.

ip msdp keepalive *peer-address interval timeout*

no ip msdp keepalive *peer-address* [*interval timeout*]

Syntax Description		
peer-address	IP address of an MSDP peer.	
interval	Keepalive interval in seconds. The range is from 1 to 60. The default is 60.	
timeout	Keepalive timeout in seconds. The range is from 1 to 90. The default is 90.	

Command Default
The keepalive interval is 60 seconds.
The keepalive timeout is 90 seconds.

Command Modes
Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines
This command requires the LAN Base Services license.

Examples
This example shows how to configure an MSDP peer keepalive interval and timeout:

```
switch(config)# ip msdp keepalive 192.168.1.10 60 80
```

This example shows how to reset a keepalive interval and timeout to the default:

```
switch(config)# no ip msdp keepalive 192.168.1.10
```

Related Commands	Command	Description
	show ip msdp peer	Displays information about MSDP peers.

ip msdp mesh-group

To configure a Multicast Source Discovery Protocol (MSDP) mesh group with a peer, use the **ip msdp mesh-group** command. To remove the peer from one or all mesh groups, use the **no** form of this command.

ip msdp mesh-group *peer-address name*

no ip msdp mesh-group *peer-address* [*name*]

Syntax Description	*peer-address*	IP address of an MSDP peer in a mesh group.
	name	Name of a mesh group.

Command Default   None

Command Modes   Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure a mesh group with a peer:

```
switch(config)# ip msdp mesh-group 192.168.1.10 my_admin_mesh
```

This example shows how to remove a peer from a mesh group:

```
switch(config)# no ip msdp mesh-group 192.168.1.10 my_admin_mesh
```

Related Commands	Command	Description
	show ip msdp mesh-group	Displays information about MSDP mesh groups.

ip msdp originator-id

To configure the IP address used in the RP field of a Source-Active message entry, use the **ip msdp originator-id** command. To reset the value to the default, use the **no** form of this command.

ip msdp originator-id {**ethernet** *slot*/*port* | **loopback** *if_number* | **port-channel** *number* | **vlan** *vlan-id*}

no ip msdp originator-id [{**ethernet** *slot*/*port* | **loopback** *if_number* | **port-channel** *number* | **vlan** *vlan-id*}]

Syntax Description		
ethernet *slot*/*port*	Specifies the Ethernet interface and the slot number and port number. The slot number is from 1 to 255, and the port number is from 1 to 128.
loopback *if_number*	Specifies the loopback interface. The loopback interface number is from 0 to 1023.
port-channel *number*	Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096.
vlan *vlan-id*	Specifies the VLAN interface. The range is from 1 to 4094.

Command Default   The MSDP process uses the RP address of the local system.

Command Modes   Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure the IP address used in the RP field of SA messages:

```
switch(config)# ip msdp originator-id loopback0
```

This example shows how to reset the RP address to the default:

```
switch(config)# no ip msdp originator-id loopback0
```

Related Commands	Command	Description
	show ip msdp summary	Displays a summary of MDSP information.

ip msdp password

To enable a Multicast Source Discovery Protocol (MSDP) MD5 password for the peer, use the **ip msdp password** command. To disable an MD5 password for a peer, use the **no** form of this command.

ip msdp password *peer-address password*

no ip msdp password *peer-address* [*password*]

Syntax Description	*peer-address*	IP address of an MSDP peer.
	password	MD5 password.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines This command requires the LAN Base Services license.

Examples This example shows how to enable an MD5 password for a peer:

```
switch(config)# ip msdp password 192.168.1.10 my_password
```

This example shows how to disable an MD5 password for a peer:

```
switch(config)# no ip msdp password 192.168.1.10
```

Related Commands	Command	Description
	show ip msdp peer	Displays MDSP peer information.

ip msdp peer

To configure a Multicast Source Discovery Protocol (MSDP) peer with the specified peer IP address, use the **ip msdp peer** command. To remove an MDSP peer, use the **no** form of this command.

> **ip msdp peer** *peer-address* **connect-source** {**ethernet** *slot/port* | **loopback** *if_number* | **port-channel** *number* | **vlan** *vlan-id*} [**remote-as** *asn*]

> **no ip msdp peer** *peer-address* [**connect-source** {**ethernet** *slot/port* | **loopback** *if_number* | **port-channel** *number* | **vlan** *vlan-id*}] [**remote-as** *asn*]

Syntax Description

peer-address	IP address of the MSDP peer.
connect-source	Configures a local IP address for a TCP connection.
ethernet *slot/port*	Specifies the Ethernet interface and the slot number and port number. The slot number is from 1 to 255, and the port number is from 1 to 128.
loopback *if_number*	Specifies the loopback interface. The loopback interface number is from 0 to 1023.
port-channel *number*	Specifies the EtherChannel interface and EtherChannel number. The range is from 1 to 4096.
vlan *vlan-id*	Specifies the VLAN interface. The range is from 1 to 4094.
remote-as *asn*	(Optional) Configures a remote autonomous system (AS) number.

Command Default   None

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   The software uses the source IP address of the interface for the TCP connection with the peer. If the AS number is the same as the local AS, then the peer is within the Protocol Independent Multicast (PIM) domain; otherwise, this peer is external to the PIM domain.

This command requires the LAN Base Services license.

Examples   This example shows how to configure an MSDP peer:

```
switch(config)# ip msdp peer 192.168.1.10 connect-source ethernet 1/0 remote-as 8
```

This example shows how to remove an MSDP peer:

```
switch(config)# no ip msdp peer 192.168.1.10
```

Related Commands

Command	Description
show ip msdp summary	Displays a summary of MSDP information.

ip msdp reconnect-interval

To configure a reconnect interval for the TCP connection, use the **ip msdp reconnect-interval** command. To reset a reconnect interval to the default, use the **no** form of this command.

ip msdp reconnect-interval *interval*

no ip msdp reconnect-interval [*interval*]

Syntax Description	*interval*	Reconnect interval in seconds. The range is from 1 to 60. The default is 10.

Command Default   The reconnect interval is 10 seconds.

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure a reconnect interval for the TCP connection:

```
switch(config)# ip msdp reconnect-interval 20
```

This example shows how to reset a reconnect interval to the default:

```
switch(config)# no ip msdp reconnect-interval
```

Related Commands

Command	Description
show ip msdp peer	Displays information about MSDP peers.

ip msdp sa-interval

To configure the interval at which the software transmits Source-Active (SA) messages, use the **ip msdp sa-interval** command. To reset the interval to the default, use the **no** form of this command.

ip msdp sa-interval *interval*

no ip msdp sa-interval [*interval*]

Syntax Description

interval	SA transmission interval in seconds. The range is from from 60 to 65,535. The default is 60.

Command Default   The SA message interval is 60 seconds.

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   To display the SA interval configuration command, use this command line:

switch(config)# **show running-config | include sa-interval**

This command requires the LAN Base Services license.

Examples   This example shows how to configure an SA transmission interval:

switch(config)# **ip msdp sa-interval 100**

This example shows how to reset the interval to the default:

switch(config)# **no ip msdp sa-interval**

Related Commands

Command	Description
show running-config	Displays information about the running-system configuration.

ip msdp sa-limit

To configure a limit on the number of (S, G) entries accepted from the peer, use the **ip msdp sa-limit** command. To remove the limit, use the **no** form of this command.

    ip msdp sa-limit *peer-address limit*

    no ip msdp sa-limit *peer-address* [*limit*]

Syntax Description		
	peer-address	IP address of an MSDP peer.
	limit	Number of (S, G) entries. The range is from 0 to 4294967295. The default is none.

Command Default   None

Command Modes   Global configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to configure a Source-Active (SA) limit for a peer:

```
switch(config)# ip msdp sa-limit 192.168.1.10 5000
```

This example shows how to reset the limit to the default:

```
switch(config)# no ip msdp sa-limit 192.168.1.10
```

Related Commands	Command	Description
	show ip msdp peer	Displays information about MSDP peers.

ip msdp sa-policy in

To enable filtering of incoming Multicast Source Discovery Protocol (MSDP) Source-Active (SA) messages, use the **ip msdp sa-policy in** command. To disable filtering, use the **no** form of this command.

ip msdp sa-policy *peer-address policy-name* **in**

no ip msdp sa-policy *peer-address policy-name* **in**

Syntax Description

peer-address	IP address of an MSDP peer.
policy-name	Route-map policy name.

Command Default   Disabled

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to enable filtering of incoming SA messages:

```
switch(config)# ip msdp sa-policy 192.168.1.10 my_incoming_sa_policy in
```

This example shows how to disable filtering:

```
switch(config)# no ip msdp sa-policy 192.168.1.10 my_incoming_sa_policy in
```

Related Commands

Command	Description
show ip msdp peer	Displays information about MSDP peers.

ip msdp sa-policy out

To enable filtering of outgoing Source-Active (SA) messages, use the **ip msdp sa-policy out** command. To disable filtering, use the **no** form of this command.

ip msdp sa-policy *peer-address policy-name* **out**

no ip msdp sa-policy *peer-address policy-name* **out**

Syntax Description

peer-address	IP address of an MSDP peer.
policy-name	Route-map policy name.

Command Default   Disabled

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to enable filtering of SA messages:

```
switch(config)# ip msdp sa-policy 192.168.1.10 my_incoming_sa_policy out
```

This example shows how to disable filtering:

```
switch(config)# no ip msdp sa-policy 192.168.1.10 my_incoming_sa_policy out
```

Related Commands

Command	Description
show ip msdp peer	Displays information about MSDP peers.

ip msdp shutdown

To shut down a Multicast Source Discovery Protocol (MSDP) peer, use the **ip msdp shutdown** command. To enable the peer, use the **no** form of this command.

ip msdp shutdown *peer-address*

no ip msdp shutdown *peer-address*

Syntax Description

peer-address	IP address of an MSDP peer.

Command Default   Enabled

Command Modes   Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines   This command requires the LAN Base Services license.

Examples   This example shows how to disable an MSDP peer:

```
switch(config)# ip msdp shutdown 192.168.1.10
```

This example shows how to enable an MSDP peer:

```
switch(config)# no ip msdp shutdown 192.168.1.10
```

Related Commands

Command	Description
show ip msdp peer	Displays information about MSDP peers.