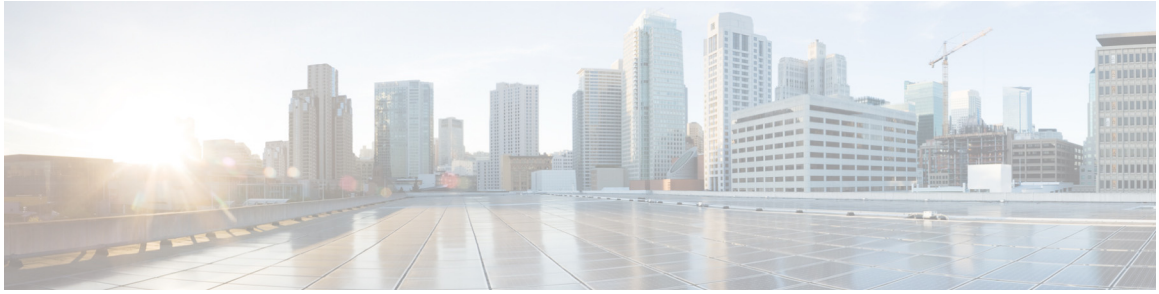

# B Commands

This chapter describes the Cisco NX-OS Multiprotocol Label Switching commands that begin with B.

# backoff

To configure session setup delay parameters for the Label Distribution Protocol (LDP) backoff mechanism, use the **backoff** command. To return to the default setting, use the **no** form of this command.

**backoff** *initial-backoff max-backoff*

**no backoff**

## Syntax Description

| | |
|---|---|
| *initial-backoff* | Initial backoff value in seconds. The range is from 5 to 2147483. |
| *max-backoff* | Maximum backoff value in seconds. The range is from 5 to 2147483. |

## Defaults

None

## Command Modes

LDP configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1) | This command was introduced. |

## Usage Guidelines

This command requires the MPLS Services license.

## Examples

This example shows how to setup delay parameters for the LDP backoff mechanism:

```
switch(config)# mpls ldp configuration
switch(config-ldp)# backoff 30 240
switch(config-ldp)#
```

## Related Commands

| Command | Description |
|---|---|
| **mpls ldp configuration** | Configures the Multiprotocol Label Switching (MPLS) Label Distribution Protocol (LDP). |

# backup-bw

To specify whether this tunnel-te, when used as a backup tunnel, should provide bandwidth protection, and how much, use the **backup-bw** command. To restore the system to its default condition, use the **no** form of this command.

**backup-bw** *bandwidth*

**no backup-bw**

## Syntax Description

| | |
|---|---|
| *bandwidth* | Amount of allocatable backup bandwidth. The range is from 1 to 4294967295. |

## Defaults

None

## Command Modes

TE interface configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1) | This command was introduced. |

## Usage Guidelines

This command requires the MPLS Services license.

## Examples

This example shows how to associate the bandwidth with a backup tunnel:

```
switch# configure terminal
switch(config)# interface tunnel-te 2
switch(config-if-te)# backup-bw 1000
switch(config-if-te)#
```

## Related Commands

| Command | Description |
|---|---|
| **interface tunnel-te** | Configures the traffic engineering (TE) interface. |

# bandwidth (LSP attribute configuration mode)

To configure the label switched path (LSP) bandwidth, use the **bandwidth** command. To restore the system to its default condition, use the **no** form of this command.

**bandwidth** *kbps*

**no bandwidth**

## Syntax Description

| | |
|---|---|
| *kbps* | Number of kilobits per second set aside for the path option. The range is from 1 to 4294967295. |

## Defaults

None

## Command Modes

LSP attribute configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1) | This command was introduced. |

## Usage Guidelines

The following conditions apply for all tunnel engineering (TE) commands that can be specified both in "TE interface configuration mode; path-option command line, or LSP attribute configuration mode:

- If a setting is specified for a label switched path (LSP), either via the path-option command directly or by assigning an LSP attribute list to a path-option, takes this setting precedence for that specific path option.
- If no setting is specified for an LSP, then the LSP/path-option inherits any setting specified in the tunnel-te configuration mode: affinity, auto-bw, priority, record-route, protection/fast-reroute.

The **bandwidth** command configures the initial tunnel bandwidth, which is adjusted by the auto bandwidth mechanism.

This command requires the MPLS Services license.

## Examples

This example shows how to configure the LSP bandwidth:

```
switch# configure terminal
switch(config)# mpls traffic-eng configuration
switch(config-te)# lsp attributes 1
switch(config-lsp-attr)# bandwidth 5000
```

## Related Commands

| Command | Description |
|---|---|
| **mpls traffic-eng configuration** | Configures the Multiprotocol Label Switching (MPLS) Traffic Engineering Protocol (MPLS-TE). |

# bandwidth (TE interface configuration mode)

To configure the bandwidth for a Multiprotocol Label Switching (MPLS) traffic engineering (TE) tunnel, use the **bandwidth** command. To restore the system to its default condition, use the **no** form of this command.

**bandwidth** *bandwidth*

**no bandwidth**

## Syntax Description

| | |
|---|---|
| *bandwidth* | Bandwidth in kilobits per second. The range is from 1 to 4294967295. |

## Defaults

0

## Command Modes

TE interface configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1) | This command was introduced. |

## Usage Guidelines

This command requires the MPLS Services license.

## Examples

This example shows how to configure the bandwidth for a MPLS TE tunnel:

```
switch# configure terminal
switch(config)# interface tunnel-te 1
switch(config-if-te)# bandwidth 250
switch(config-if-te)#
```

## Related Commands

| Command | Description |
|---|---|
| **interface tunnel-te** | Configures the traffic engineering (TE) interface. |

# bfd interval

To set the Bidirectional Forwarding Detection (BFD) intervals for this interface, use the **bfd interval** command. To restore the system to its default condition, use the **no** form of this command.

**bfd interval** *milliseconds* **min_rx** *milliseconds* **multiplier** *interval-multiplier*

**no bfd interval**

## Syntax Description

| | |
|---|---|
| *milliseconds* | TX interval in milliseconds, which is the required rate at which control packets can be received. The range is from 50 to 999 milliseconds. |
| **min_rx** | Specifies minimum RX interval, which is the desired rate for transmitting control packets. The range is from 50 to 999 milliseconds. |
| **multiplier** | Specifies the detect multiplier for BFD sessions. |
| *interval-multiplier* | Multiplier interval. The range is from 1 to 50 milliseconds. |

## Defaults

Interval milliseconds-50

Min_rx_50

Multiplier interval-multiplier-3

## Command Modes

Interface configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1) | This command was introduced. |

## Usage Guidelines

This command requires the MPLS Services license.

## Examples

This example shows how to set the BFD intervals:

```
switch# configure terminal
switch# configure terminal
switch(config)# interface ethernet 2/2
switch(config-if)# bfd interval 100 min_rx 100 multiplier 4
```

**Related Commands**

| Command | Description |
|---|---|
| **mpls ldp configuration** | Configures the Multiprotocol Label Switching (MPLS) Label Distribution Protocol (LDP). |

# bfd slow-timer

To configure the slow mode timer for sessions, use the **bfd slow-timer** command. To restore the system to its default condition, use the **no** form of this command.

**bfd slow-timer** *milliseconds*

**no bfd slow-timer** *milliseconds*

## Syntax Description

| | |
|---|---|
| *milliseconds* | Slow rate timer in milliseconds. The range is from 1000 to 30000 milliseconds. |

## Defaults

None

## Command Modes

Global configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1) | This command was introduced. |

## Usage Guidelines

This command requires the MPLS Services license.

## Examples

This example shows how to configure the slow mode timer for sessions:

```
switch# configure terminal
switch(config)# bfd slow-timer 1000
switch(config)#
```

## Related Commands

| Command | Description |
|---|---|
| **mpls ldp configuration** | Configures the Multiprotocol Label Switching (MPLS) Label Distribution Protocol (LDP). |

# bridge-domain

To enter bridge-domain configuration mode and configure a bridge domain, use the **bridge-domain** command. To remove the bridge-domain configurations, use the **no** form of this command.

**bridge-domain** *domain-id*

**no bridge-domain** *domain-id*

## Syntax Description

| | |
|---|---|
| *domain-id* | Bridge-domain ID. The range is defined by the system-bridge-domain configuration. |

## Defaults

None

## Command Modes

Global configuration mode

## SupportedUserRoles

network-admin
vdc-admin

## Command History

| Release | Modification |
|---|---|
| 6.2.2 | This command was introduced. |

## Usage Guidelines

Removing the bridge-domain configuration does not remove the underlying VLAN. If a VLAN is associated with a bridge domain, you cannot remove the VLAN without first removing the bridge domain. To remove the underlying VLAN, use the **no vlan** command after you remove the bridge domain.

This command requires the MPLS Services license.

## Examples

This example shows how to enter bridge-domain configuration mode and configure a bridge domain:

```
switch# configure terminal
switch(config)# bridge-domain 10
switch(config)#
```

This example shows how to remove the bridge-domain configuration including port associations:

```
switch(config)# no bridge-domain 10
switch(config)#
```

## Related Commands

| Command | Description |
|---|---|
| **system bridge-domain** | Identifies the IDs that are available for bridge-domain configurations. |