M Commands

This chapter describes the Cisco NX-OS Enhanced Interior Gateway Routing Protocol (EIGRP) commands that begin with M.

maximum-paths (EIGRP)

To control the maximum number of parallel routes that the Enhanced Interior Gateway Routing Protocol (EIGRP) can support, use the **maximum-paths** command. To remove the **maximum-paths** command from the configuration file and restore the default, use the **no** form of this command.

maximum-paths *maximum*

no maximum- paths

Syntax Description

maximum	Maximum number of parallel routes that EIGRP can install in a routing table. The range is from 1 to 16 routes.

Command Default

8 *paths*

Command Modes

Address-family configuration mode
Router configuration mode
Router VRF configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **maximum-paths** command to allow EIGRP to install multiple paths into the routing table for each prefix. Multiple paths are installed for both internal and external routes that are learned in the same autonomous system and that have an equal cost (according to the EIGRP best path algorithm).

This command requires the LAN Base Services license.

Examples

This example shows how to allow a maximum of 10 paths to a destination:

```
switch(config)# router eigrp 1
switch(config-router)# maximum-paths 10
switch(config-router)#
```

Related Commands

Command	Description
copy running-config startup-config	Saves the configuration changes to the startup configuration file.
show ip eigrp	Displays EIGRP information.

metric maximum-hops

To advertise that those Enhanced Interior Gateway Routing Protocol (EIGRP) routes with a higher hop count than you specified are unreachable, use the **metric maximum-hops** command. To reset the value to the default, use the **no** form of this command.

metric maximum-hops *hops-number*

no metric maximum-hops

Syntax Description

hops-number	Maximum hop count. The range is from 1 to 255 hops.

Command Default

hops-number: 100

Command Modes

Address-family configuration mode
Router configuration mode
Router VRF configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **metric maximum-hops** command to provide a safety mechanism that causes EIGRP to advertise routes with a hop count greater than the value assigned to the *hops-number* argument as unreachable.

This command requires the LAN Base Services license.

Examples

This example shows how to configure a hop count to 200:

```
switch(config)# router eigrp 1
switch(config-router) address-family ipv4 unicast
switch(config-router-af)# metric maximum-hops 200
switch(config-router-af)#
```

Related Commands

Command	Description
metric weights	Tunes the EIGRP metric calculations.

metric weights

To tune the Enhanced Interior Gateway Routing Protocol (EIGRP) metric calculations, use the **metric weights** command. To reset the values to their defaults, use the **no** form of this command.

metric weights *tos k1 k2 k3 k4 k5*

no metric weights

Syntax Description

tos	Type of service (ToS). The range is from 0 to 8.
k1 k2 k3 k4 k5	Constants that convert an EIGRP metric vector into a scalar quantity. The arguments are as follows: • k1—The range is from 0 to 255. The default is 1. • k2—The range is from 0 to 255. The default is 0. • k3—The range is from 1 to 255. The default is 1. • k4—The range is from 0 to 255. The default is 0. • k5—The range is from 0 to 255. The default is 0.

Command Default

tos: 0

k1: 1

k2: 0

k3: 1

k4: 0

k5: 0

Command Modes

Address-family configuration mode
Router configuration mode
Router VRF configuration mode

Command History

Release	Modification
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **metric weights** command to alter the default behavior of EIGRP routing and metric computation and allow the tuning of the EIGRP metric calculation for a particular type of service (ToS).

This command requires the LAN Base Services license.

Examples

This example shows how to set the metric weights to change the default values:

```
switch(config)# router eigrp 1
```

```
switch(config-router) address-family ipv4 unicast
switch(config-router-af)# metric weights 0 2 0 2 0 0
switch(config-router-af)#
```

Related Commands

Command	Description
bandwidth	Sets the EIGRP bandwidth metric in interface configuration mode.
copy running-config startup-config	Saves the configuration changes to the startup configuration file.
delay	Sets the EIGRP delay metric in interface configuration mode.
show ip eigrp	Displays EIGRP information.