S Commands

This chapter describes the Cisco NX-OS Border Gateway Protocol (BGP) commands that begin with S.

send-community

To send the Border Gateway Protocol (BGP) community attribute to a peer, use the **send-community** command. To revert to the defaults, use the **no** form of this command.

send-community [**extended**]

no send-community [**extended**]

Syntax Description

extended	(Optional) Specifies the BGP extended community.

Command Default

No community attributes are sent to the peer.

Command Modes

BGP neighbor address-family configuration mode

Command History

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

Usage Guidelines

Before you use this command, you must configure BGP communities using the **set community** command.

This command requires the LAN Enterprise Services license.

Examples

This example shows how to configure the router to send the community attribute to the neighbor 192.168.1.3:

```
switch# configure terminal
switch(config)# router bgp 102
switch(config-router)# neighbor 192.168.1.3 remote-as 64497
switch(config-router-neighbor)# address-family ipv4 multicast
switch(config-router-neighbor-af)# send-community
switch(config-router-neighbor-af)#
```

Related Commands

Command	Description
set community	Defines the BGP community attributes.
show ip bgp	Displays the BGP configuration information.

set as-path

To modify an autonomous system path (as-path) for BGP routes, use the **set as-path** command. To not modify the autonomous system (AS) path, use the **no** form of this command.

set as-path {**tag** | {**prepend** *as-num*[**...***as-num*] | **last-as** *num*}}

no as-path {**tag** | {**prepend** *as-num*[*...as-num*] | **last-as** *num*}}

Syntax Description

tag	Converts the tag of a route into an autonomous system path. Applies only when redistributing routes into Border Gateway Protocol (BGP).
prepend *as-num*	Appends the specified AS number to the autonomous system path of the route that is matched by the route map. Applies to both inbound and outbound BGP route maps. Range: 1 to 65535. You can configure more than on AS number.
last-as *num*	Prepends the last AS numbers to the as-path. Range: 1 to 10.

Command Default

Autonomous system path is not modified.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Once you enter route-map configuration mode, you can enter the **set** command.

The only global BGP metric available to influence the best path selection is the autonomous system path length. By varying the length of the autonomous system path, a BGP speaker can influence the best-path selection by a peer further away.

By allowing you to convert the tag into an autonomous system path, the **set as-path tag** variation of this command modifies the autonomous system length. The **set as-path prepend** variation allows you to prepend an arbitrary autonomous system path string to BGP routes. Usually, the local autonomous system number is prepended multiple times, increasing the autonomous system path length.

Examples

This example shows how to convert the tag of a redistributed route into an autonomous system path:

```
switch(config)# route-map test1
switch(config-route-map)# set as-path tag
```

This example shows how to prepend 100 to all the routes advertised to 10.108.1.1:

```
switch(config)# route-map test1
switch(config-route-map)# match as-path 1
switch(config-route-map)# set as-path prepend 100
```

```
switch(config)# router bgp 64496
switch(config-router)# neighbor 10.108.1.1 remote-as 64497
switch(config-router-neighbor)# address-family ipv4 unicast
switch(config-router-neighbor-af)# route-map set-as-path test1 out
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
match community	Matches a BGP community.
match ip next-hop	Redistributes any routes that have a next-hop router address passed by one of the access lists specified.
match ip route-source	Redistributes routes that have been advertised by routers and access servers at the address specified by the access lists.
match metric	Redistributes routes with the metric specified.
match tag	Redistributes routes in the routing table that match the specified tags.
route-map (IP)	Defines the conditions for redistributing routes from one routing protocol into another.
set as-path	Modifies an autonomous system path for BGP routes.
set community	Sets the BGP communities attribute.
set level	Indicates where to import routes.
set local-preference	Specifies a preference value for the autonomous system path.
set metric	Sets the metric value for a routing protocol.
set metric-type	Sets the metric type for the destination routing protocol.
set next-hop	Specifies the address of the next hop.
set tag	Sets a tag value of the destination routing protocol.
set weight	Specifies the BGP weight for the routing table.

set comm-list delete

To remove communities from the community attribute of an inbound or outbound update, use the **set comm-list delete** command. To remove a previous **set comm-list delete** command, use the **no** form of this command.

set comm-list *community-list-name* **delete**

no set comm-list

Syntax Description

community-list-name	Standard or expanded community list name. The name is any alphanumeric string up to 63 characters.

Command Default

No communities are removed.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

This **set** route-map configuration command removes communities from the community attribute of an inbound or outbound update using a route map to filter and determine the communities to be deleted. Depending upon whether the route map is applied to the inbound or outbound update for a neighbor, each community that passes the route map **permit** clause and matches the given community list is removed from the community attribute being received from or sent to the Border Gateway Protocol (BGP) neighbor.

Each entry of a standard community list should list only one community when used with the **set comm-list delete** command. For example, in order to be able to delete communities 10:10 and 10:20, you must use the following format to create the entries:

```
switch(config)# ip community-list 500 permit 10:10
switch(config)# ip community-list 500 permit 10:20
```

The following format for a community list entry, while acceptable otherwise, does not work with the **set comm-list delete** command:

```
switch(config)# ip community-list 500 permit 10:10 10:20
```

When both the **set community** *community-number* and **set comm-list delete** commands are configured in the same sequence of a route map attribute, the deletion operation (**set comm-list delete**) is performed before the set operation (**set community** *community-number*).

Examples

This example shows how to remove communities from the community attribute of an inbound or outbound update:

```
switch(config)# route-map test1
switch(config-route-map)# match as-path 1
switch(config-route-map)# set comm-list list1 delete
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
match community	Matches a BGP community.
match ip next-hop	Redistributes any routes that have a next-hop router address passed by one of the access lists specified.
match ip route-source	Redistributes routes that have been advertised by routers and access servers at the address specified by the access lists.
match metric	Redistributes routes with the metric specified.
match tag	Redistributes routes in the routing table that match the specified tags.
route-map (IP)	Defines the conditions for redistributing routes from one routing protocol into another.
set as-path	Modifies an autonomous system path for BGP routes.
set community	Sets the BGP communities attribute.
set level	Indicates where to import routes.
set local-preference	Specifies a preference value for the autonomous system path.
set metric	Sets the metric value for a routing protocol.
set metric-type	Sets the metric type for the destination routing protocol.
set next-hop	Specifies the address of the next hop.
set tag	Sets a tag value of the destination routing protocol.
set weight	Specifies the BGP weight for the routing table.

set community

To set the Border Gateway Protocol (BGP) communities attribute, use the **set community** command. To delete the entry, use the **no** form of this command.

set community {**none** | {*aa*:*nn* [*...aa:nn*] | **additive** | **local-as** | **no-advertise** | **no-export**}}

no set community {**none** | {*aa*:*nn* | **additive** | **local-as** | **no-advertise** | **no-export**}}

Syntax Description

none	Specifies the no community attribute. You cannot configure any other keyword if you configure the **none** keyword.
aa:*nn*	Autonomous system (AS) number and network number entered in the 4-byte new community format. This value is configured with two 2-byte numbers separated by a colon. A number from 1 to 65535 can be entered as each 2-byte number. A single community can be entered or multiple communities can be entered, each separated by a space. You can configure one or more AS numbers. You can configure one or more keywords.
additive	Adds to existing community. You can configure one or more keywords.
local-as	Specifies the local-as community (well-known community). Routes with community are advertised to only peers that are part of the local autonomous system or to only peers within a subautonomous system of a confederation. These routes are not advertised to external peers or to other subautonomous systems within a confederation. You can configure one or more keywords.
no-advertise	Specifies the no-advertise community (well-known community). Routes with this community are not advertised to any peer (internal or external). You can configure one or more keywords.
no-export	Specifies the no-export community (well-known community). Routes with this community are advertised to only peers in the same autonomous system or to only other subautonomous systems within a confederation. These routes are not advertised to external peers. You can configure one or more keywords.

Command Default

No BGP communities attributes exist.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

You must have a match clause (even if it points to a "permit everything" list) if you want to set tags.

Use the **route-map** global configuration command and the **match** and **set** route map configuration commands to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

The **set** route map configuration commands specify the redistribution set actions to be performed when all of the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

Examples

This example shows how to configure the routes that pass the autonomous system path access list 1 to have the community set to 109:02 and 33:40. Routes that pass the autonomous system path access list 2 have the community set to no-export (these routes are not advertised to any external BGP [eBGP] peers).

```
switch(config)# route-map test1 10 permit
switch(config-route-map)# match as-path 1
switch(config-route-map)# set community 109:02 33:40
switch(config-route-map)# exit
switch(config)# route-map test1 20 permit
switch(config-route-map)# match as-path 2
switch(config-route-map)# set community no-export
```

This example shows how to configure the routes that pass the autonomous system path access list 1 to have the community set to 109:30. Routes that pass the autonomous system path access list 2 have the community set to local-as (the router does not advertise this route to peers outside the local autonomous system.

```
switch(config)# route-map test1 10 permit
switch(config-route-map)# match as-path 1
switch(config-route-map)# set community 109:30 additive
switch(config-route-map)# exit
switch(config)# route-map test1 20 permit
switch(config-route-map)# match as-path 2
switch(config-route-map)# set community local-as
```

Related Commands

Command	Description
ip community-list	Creates a community list for BGP and control access to it.
match community	Matches a BGP community.
route-map (IP)	Defines the conditions for redistributing routes from one routing protocol into another.
set comm-list delete	Removes communities from the community attribute of an inbound or outbound update.
show ip bgp community	Displays routes that belong to specified BGP communities.

set dampening

To set the Border Gateway Protocol (BGP) route dampening factors, use the **set dampening** command. To disable this function, use the **no** form of this command.

set dampening *half-life reuse suppress max-suppress-time*

no set dampening

Syntax Description

half-life	Time (in minutes) after which a penalty is decreased. Once the route has been assigned a penalty, the penalty is decreased by half after the half life period (which is 15 minutes by default). The process of reducing the penalty occurs every 5 seconds. The range is from 1 to 45, and the default is 15.
reuse	Route that is unsuppressed if the penalty for a flapping route decreases enough to fall below this value. The process of unsuppressing routes occurs at 10-second increments. Range: 1 to 20000. Default: 750.
suppress	Route that is suppressed when its penalty exceeds this limit. The range is from 1 to 20000, and the default is 2000.
max-suppress-time	Maximum time (in minutes) that a route can be suppressed. The range is from 1 to 255, and the default is four times the *half-life* value. If the default *half-life* value is used, the maximum suppress time defaults to 60 minutes.

Command Default

Disabled

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Use the **route-map** global configuration command and the **match** and **set** route-map configuration commands to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

When a BGP peer is reset, the route is withdrawn and the flap statistics cleared. In this instance, the withdrawal does not incur a penalty even though route flap dampening is enabled.

Examples

This example sets the half life to 30 minutes, the reuse value to 1500, the suppress value to 10000, and the maximum suppress time to 120 minutes:

```
switch(config)# route-map test1 10 permit
```

```
switch(config-route-map)# set dampening 30 1500 10000 120
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
match community	Matches a BGP community.
match ip next-hop	Redistributes any routes that have a next-hop router address passed by one of the access lists specified.
match ip route-source	Redistributes routes that have been advertised by routers and access servers at the address specified by the access lists.
match metric	Redistributes routes with the metric specified.
match tag	Redistributes routes in the routing table that match the specified tags.
route-map (IP)	Defines the conditions for redistributing routes from one routing protocol into another.
set as-path	Modifies an autonomous system path for BGP routes.
set community	Sets the BGP communities attribute.
set level	Indicates where to import routes.
set local-preference	Specifies a preference value for the autonomous system path.
set metric	Sets the metric value for a routing protocol.
set metric-type	Sets the metric type for the destination routing protocol.
set next-hop	Specifies the address of the next hop.
set tag	Sets a tag value of the destination routing protocol.
set weight	Specifies the BGP weight for the routing table.

set etxcommunity

To set the Border Gateway Protocol (BGP) extended communities attribute, use the **set extcommunity** command. To delete the entry, use the **no** form of this command.

set extcommunity {**none** | {**generic** {**transitive** | **nontransitive**} *aa4*:*nn* [*...aa4:nn*] } | **additive**}

no set extcommunity {**none** | {**generic** {**transitive** | **nontransitive**} *aa4*:*nn* [*...aa4:nn*] } | **additive**}

Syntax Description

none	Specifies the no community attribute.
generic	Specifies the generic specific extended community type.
transitive	Configures BGP to propagate the extended community attributes to other autonomous systems.
nontransitive	Configures BGP to propagate the extended community attributes to other autonomous systems.
aa4:*nn*	Autonomous system number and network number. This value is configured with a 4-byte AS number and a 2-byte network number separated by a colon. The 4-byte AS number range is from 1 to 4294967295 in plaintext notation, or from 1.0 to 56636.65535 in AS.dot notation. You can enter a single community or multiple communities, each separated by a space.
additive	Adds to existing community.

Command Default

No BGP communities attributes exist.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Use the **set extcommunity** command in a route map to set the extended community attribute in a BGP route.

You must have a match clause in a route map (even if it points to a “permit everything” list) if you want to use **set** commands.

The **set** commands specify the set actions to be performed when all of the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

Examples

This example shows how to configure a route map that sets the extended community to 1.5:

```
switch(config)# route-map test1 10 permit
switch(config-route-map)# match as-path 1
switch(config-route-map)# set extcommunity generic transitive 1.5
```

```
switch(config-route-map)# exit
```

Related Commands

Command	Description
ip extcommunity-list	Creates a community list for BGP and controls access to it.
match extcommunity	Matches an extended community in a route map.
route-map	Defines the conditions for redistributing routes from one routing protocol into another.
send-community	Configures BGP to propagate community attributes to BGP peers.

set extcomm-list delete

To remove extended communities from the extended community attribute of an inbound or outbound Border Gateway Protocol (BGP) update, use the **set extcomm-list delete** command. To remove a previous **set extcomm-list delete** command, use the **no** form of this command.

set extcomm-list *community-list-name* **delete**

no set extcomm-list

Syntax Description

community-list-name	Standard or expanded extended community list name. The name is any alphanumeric string up to 63 characters.

Command Default

No communities are removed.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Use the **set extcomm-list delete** command in a route map to delete the extended community attribute in a BGP route.

You must have a match clause in a route map (even if it points to a “permit everything” list) if you want to use **set** commands.

The **set** commands specify the set actions to be performed when all of the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

When you configure both the **set extcommunity** *community-number* and **set ext comm-list delete** commands in the same sequence of a route map attribute, the deletion operation (**set extcomm-list delete**) is performed before the set operation (**set extcommunity** *community-number*).

Examples

This example shows how to remove extended communities from the extended community attribute of an inbound or outbound update:

```
switch# configure terminal
switch(config)# route-map test1
switch(config-route-map)# match as-path 1
switch(config-route-map)# set extcomm-list list1 delete
switch(config-route-map)#
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
match extcommunity	Matches a BGP extended community.
set extcommunity	Sets the BGP extended communities attribute.
show route-map	Displays information about a route map.

set local-preference

To specify a preference value for the autonomous system path, use the **set local-preference** command. To delete an entry, use the **no** form of this command.

set local-preference *number-value*

no set local-preference *number-value*

Syntax Description

number-value	Preference value. Range: 0 to 4294967295. Default: 100.

Command Default

Preference value of 100 by default.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

The preference is sent only to all routers in the local autonomous system.

You must have a match clause (even if it points to a “permit everything” list) if you want to set tags.

Use the **route-map** global configuration command and the **match** and **set** route-map configuration commands to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

The **set** route-map configuration commands specify the redistribution set actions to be performed when all the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

You can change the default preference value with the **bgp default local-preference** command.

Examples

This example shows how to set the local preference to 100 for all routes that are included in access list 1:

```
switch# configure terminal
switch(config)# route-map test1
switch(config-router)# route-map map-preference
switch(config-route-map)# match as-path 1
switch(config-route-map)# set local-preference 100
switch(config-route-map)#
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
route-map	Defines the conditions for redistributing routes from one routing protocol into another.
show route-map	Displays information about a route map.

set metric

To set the metric value for a routing protocol, use the **set metric** command. To return to the default metric value, use the **no** form of this command.

set metric [**+** | **-**] *bandwidth-metric*

set metric *bandwidth-metric* [*delay-metric reliability-metric load-metric mtu*]

no set metric

Syntax Description

+	(Optional) Adds to the existing delay metric value.
-	(Optional) Subtracts from the existing delay metric value.
bandwidth-metric	Interior Gateway Routing Protocol (IGRP) bandwith metric, in Kb/s. The range is from 0 to 4294967295.
delay-metric	(Optional) Interior Gateway Routing Protocol (IGRP) delay metric, in 10 microsecond units. The range is from 1 to 4294967295.
reliability-metric	(Optional) IGRP reliability metric. The range is from 0 to 255.
load-metric	(Optional) IGRP load metric. The range is from 1 to 255.
mtu	(Optional) IGRP maximum transmission unit (MTU) of the path. The range is from 1 to 4294967295.

Command Default

None

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Use the **set metric** command to modify the IGRP metric values.

Note We recommend that you consult your Cisco technical support representative before changing the default value.

When you confiture the *reliability-metric* and the *load-metric* arguments, 255 means 100 percent reliability.

Use the **+** or **-** keywords to modify the existing delay metric value. You can modify only the delay metric with these keywords.

Use the **route-map** global configuration command and the **match** and **set** route-map configuration command to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands

specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

The **set** route-map configuration commands specify the redistribution set actions to be performed when all the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

Examples

This example shows how to set the bandwith metric value for the routing protocol to 100:

```
switch# configure terminal
switch(config)# route-map set-metric
switch(config-route-map)# set metric 100
switch(config-route-map)#
```

This example shows how to increase the bandwith metric value for the routing protocol by 100:

```
switch# configure terminal
switch(config)# route-map set-metric
switch(config-route-map)# set metric +100
switch(config-route-map)#
```

Related Commands

Command	Description
route-map	Defines the conditions for redistributing routes from one routing protocol into another.
show route-map	Displays information about a route map.

set metric-type

To set the metric type for the destination routing protocol, use the **set metric-type** command. To return to the default, use the **no** form of this command.

set metric-type {**internal** | **type-1** | **type-2**}

no set metric-type {**internal** | **type-1** | **type-2**}

Syntax Description

internal	Specifies the Interior Gateway Protocol (IGP) metric as the multi-exit discriminator (MED) for BGP.
type-1	Specifies the Open Shortest Path First (OSPF) external Type 1 metric.
type-2	Specifies the OSPF external Type 2 metric.

Command Default

This command is disabled by default.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Use the **route-map** global configuration command with **match** and **set** route-map configuration commands to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

The **set** route-map configuration commands specify the redistribution set actions to be performed when all the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

Note This command is not supported for redistributing routes into Border Gateway Protocol (BGP).

Examples

This example shows how to set the metric type of the destination protocol to OSPF external Type 1:

```
switch# configure terminal
switch(config)# route-map map-type
switch(config-route-map)# set metric-type type-1
switch(config-route-map)#
```

Related Commands

Command	Description
route-map	Defines the conditions for redistributing routes from one routing protocol into another.
show ip community-list	Displays information about a community list.
show ip extcommunity-list	Displays information about an extended community list.
show ip prefix-list	Displays information about IPv4 prefix lists.
show route-map	Displays information about a route map.

set origin

To set the Border Gateway Protocol (BGP) origin code, use the **set origin** command. To delete the entry, use the **no** form of this command.

set origin {**egp** *as-num* [:*as-num*] | **igp** | **incomplete**}

no set origin

Syntax Description

egp *as-num*	Specifies the autonomous system (AS) number for a remote exterior gateway protocol (EGP) system. You can specify the AS number as a 2-byte integer or a 4-byte integer in aa:nn format. Range is from 1 to 65535.
igp	Specifies a local interior gateway protocol (IGP) system.
incomplete	Specifies an unknown heritage.

Command Default

Default origin, based on route in main IP routing table.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

You must have a match clause (even if it points to a “permit everything” list) if you want to set tags.

Use the **route-map** global configuration command, and the **match** and **set** route-map configuration commands, to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

The **set route-map** configuration commands specify the redistribution set actions to be performed when all of the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

Examples

This example shows how to set the origin of routes that pass the route map to IGP:

```
switch# configure terminal
switch(config)# route-map set_origin
switch(config-route-map)# match as-path 10
switch(config-route-map)# set origin igp
switch(config-route-map)#
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
route-map	Defines the conditions for redistributing routes from one routing protocol into another.
show ip community-list	Displays information about a community list.
show ip extcommunity-list	Displays information about an extended community list.
show ip prefix-list	Displays information about IPv4 prefix lists.
show route-map	Displays information about a route map.

set tag

To set a tag value of the destination routing protocol, use the **set tag** command. To delete the entry, use the **no** form of this command.

set tag *tag-value*

no set tag *tag-value*

Syntax Description

tag-value	Name for the tag. The value is an integer from 0 to 4294967295.

Command Default

If not specified, the default action is to *forward* the tag in the source routing protocol onto the new destination protocol.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

Use the **route-map** global configuration command and the **match** and **set** route-map configuration commands to define the conditions for redistributing routes from one routing protocol into another. Each **route-map** command has a list of **match** and **set** commands associated with it. The **match** commands specify the match criteria—the conditions under which redistribution is allowed for the current **route-map** command. The **set** commands specify the set actions—the particular redistribution actions to perform if the criteria enforced by the **match** commands are met. The **no route-map** command deletes the route map.

The **set** route-map configuration commands specify the redistribution set actions to be performed when all the match criteria of a route map are met. When all match criteria are met, all set actions are performed.

Examples

This example shows how to set the tag value of the destination routing protocol to 5:

```
switch(config)# route-map test
switch(config-route-map)# set tag 5
```

Related Commands

Command	Description
match tag	Redistributes routes in the routing table that match the specified tags.
route-map	Defines the conditions for redistributing routes from one routing protocol into another.

set weight

To specify the Border Gateway Protocol (BGP) weight for the routing table, use the **set weight** command. To delete an entry, use the **no** form of this command.

set weight *number*

no set weight [*number*]

Syntax Description

number	Weight value. Range: 0 to 65535.

Command Default

The weight is not changed by the specified route map.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

The implemented weight is based on the first matched autonomous system path. Weights indicated when an autonomous system path is matched override the weights assigned by global **neighbor** commands.

Examples

This example shows how to set the BGP weight for the routes that match the autonomous system path access list to 200:

```
switch# configure terminal
switch(config)# route-map set-weight
switch(config-route-map)# match as-path 10
switch(config-route-map)# set weight 200
switch(config-route-map)#
```

Related Commands

Command	Description
match as-path	Matches a BGP autonomous system path access list.
route-map	Defines the conditions for redistributing routes from one routing protocol into another.
show ip community-list	Displays information about a community list.
show ip extcommunity-list	Displays information about an extended community list.
show ip prefix-list	Displays information about IPv4 prefix lists.
show route-map	Displays information about a route map.

shutdown (BGP)

To shut down an instance of the Border Gateway Protocol (BGP), use the **shutdown** command. To disable this function, use the **no** form of this command.

shutdown

no shutdown

Syntax Description

This command has no arguments or keywords.

Command Default

Enabled

Command Modes

Router configuration mode

Command History

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

Usage Guidelines

Use the **shutdown** command to disable an instance of BGP without removing the configuration.

This command requires the LAN Enterprise Services license.

Examples

This example shows how to disable BGP 64496:

```
switch# configure terminal
switch(config)# router bgp 64496
switch(config-router)# shutdown
switch(config-router)#
```

Related Commands

Command	Description
show bgp	Displays BGP routes.

soft-reconfiguration inbound (BGP)

To configure the switch software to start storing Border Gateway Protocol (BGP) peer updates, use the **soft-reconfiguration** command. To not store received updates, use the no form of this command.

soft-reconfiguration inbound

no soft-reconfiguration inbound

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Neighbor address-family configuration mode

Command History

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

Usage Guidelines

Entering this command starts the storage of updates, which is required to do inbound soft reconfiguration.

To use soft reconfiguration, or soft reset, without preconfiguration, both BGP peers must support the soft route refresh capability.

Examples

This example shows how to configure the soft reconfiguration on the neighbor at 192.168.0.1:

```
switch# configure terminal
switch(config)# router bgp 102
switch(config-router)# neighbor 192.168.0.1 remote-as 201
switch(config-router-neighbor)# address-family ipv4 unicast
switch(config-router-neighbor-af)# soft-reconfiguration inbound
switch(config-router-neighbor-af)#
```

Related Commands

Command	Description
address-family (BGP)	Enters the router in address family configuration mode for configuring BGP routing sessions.
neighbor	Configures a BGP neighbor.
show ip bgp neighbors	Displays BGP peer information.

suppress-inactive

To advertise the active routes to a Border Gateway Protocol (BGP) peer only, use the **suppress-inactive** command. To remove the restriction, use the **no** form of this command. To return to the default setting, use the **default** form of this command.

suppress-inactive

no default suppress-inactive

Syntax Description

This command has no arguments or keywords.

Command Default

BGP advertises routes to a peer as soon as they are installed in the local routing table, even if the routes are not the active routes in the table.

Command Modes

Neighbor address-family configuration mode

Command History

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

Usage Guidelines

Use the **suppress-inactive** command to advertise only active routes to a BGP peer.

This command requires the LAN Enterprise Services license.

Examples

This example shows how to create a summary address. The path advertised for this route is an autonomous system set consisting of all elements contained in all paths that are being summarized.

```
switch# configure terminal
switch(config)# router bgp 64496
switch(config-router)# neighbor 192.0.2.1/8 remote-as 64497
switch(config-router-neighbor)# address-family ipv4 unicast
switch(config-router-neighbor af)# suppress-inactive
switch(config-router-neighbor af)#
```

Related Commands

Command	Description
route-map	Creates a route map.