S Commands

This chapter describes the Cisco NX-OS Open Shortest Path First (OSPF) commands that begin with S.

set forwarding-address

To set the Open Shortest Path First (OSPF) forwarding address for redistributed type-5 Link State Advertisements (LSAs), use the **set forwarding-address** command. To remove the address, use the **no** form of this command.

set forwarding-address

no forwarding-address

Syntax Description

This command has no arguments or keywords.

Command Default

No forwarding address is set as a default.

Command Modes

Route-map configuration mode

Command History

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

Usage Guidelines

This command is used by the OSPF to set the forwarding address for the redistributed type-5 LSAs. The value of the forwarding address specified by the autonomous system boundary router (ASBR) can be either 0.0.0.0 or nonzero. The 0.0.0.0 address indicates that the originating router (the ASBR) is the next hop.

If the ASBR redistributes routes and OSPF is not enabled on the next hop interface for those routes, the forwarding address is set to 0.0.0.0 .

All of the following conditions must be met to set the forwarding address field to a nonzero address:

- OSPF is enabled on the ASBR's next hop interface.
- ASBR’s next hop interface is non-passive under OSPF.
- ASBR’s next hop interface is not point-to-point.
- ASBR’s next hop interface is not point-to-multipoint.

For all other conditions, set the forwarding address to 0.0.0.0.

Examples

This example shows how to set the forwarding address:

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

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.

shutdown (OSPF)

To stop an Open Shortest Path First (OSPF) instance without removing the configuration, use the **shutdown** command. To start a stopped OSPF instance, use the **no** form of this command.

shutdown

no shutdown

Syntax Description

This command has no arguments or keywords.

Command Default

No process is stopped.

Command Modes

Router configuration mode

VRF configuration mode

Command History

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

Usage Guidelines

Entering the **shutdown** command stops a router process but does not remove any configuration parameters. The **shutdown** command is displayed in the running configuration file when enabled.

This command requires the LAN Base Services license.

Examples

This example shows how to stop an active OSPF instance:

```
switch(config)# router ospf firstcompany
switch(config-router)# shutdown
```

Related Commands

Command	Description
feature ospf	Enables OSPF on the router.
router ospf	Configures an OSPF instance.

summary-address (OSPF)

To create aggregate addresses for the Open Shortest Path First (OSPF) protocol, use the **summary-address** command. To return to the default, use the **no** form of this command.

summary-address *ip-prefix/length* [**not-advertise**] [**tag** *tag*]

no summary-address *ip-prefix/length* [**not-advertise**] [**tag** *tag*]

Syntax Description

ip-prefix/length	IP prefix designated for a range of addresses, including the prefix length. Specify *ip-prefix* as an IP address. Specify *length* as a number from 1 to 31.
not-advertise	(Optional) Suppresses routes that match the specified prefix/length pair.
tag *tag*	(Optional) Specifies the tag value that can be used as a match value for controlling redistribution using route maps. The range is from 1 to 65535.

Command Default

None

Command Modes

Router configuration mode

Command History

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

Usage Guidelines

Use the **summary-address** command to create an aggregate address to replace a series of more-specific addresses. The metric used to advertise the summary is the smallest metric of all the more specific routes.

Use this command to help reduce the size of the routing table and allow an OSPF Autonomous System Boundary Router (ASBR) to advertise one external route as an aggregate for all redistributed routes that are covered by the address.

This command requires the LAN Base Services license.

Examples

This example shows how to configure the summary address 192.0.0.0 to include address 192.0.1.0, 192.0.2.0, 192.0.3.0, and so on. Only the address 192.0.0.0 is advertised in an external link-state advertisement.

```
switch(config)# router ospf 201
switch(config-router)# summary-address 192.0.0.0/16
```

Related Commands

Command	Description
copy running-config startup-config	Saves the configuration changes to the startup configuration file.
redistribute (OSPF)	Redistributes external routing protocol routes into OSPF.
show ip ospf summary-address	Displays OSPF summary-address redistribution information.