

EVPN Routing Policy Language Commands

This section describes the EVPN routing policy language (RPL) commands used to create, modify, monitor, and maintain routing policies.

Note All commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 540 Series Router that is introduced from Cisco IOS XR Release 6.3.2. References to earlier releases in Command History tables apply to only the Cisco NCS 5500 Series Router.

Note

- Starting with Cisco IOS XR Release 6.6.25, all commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 560 Series Routers.
- Starting with Cisco IOS XR Release 6.3.2, all commands applicable for the Cisco NCS 5500 Series Router are also supported on the Cisco NCS 540 Series Router.
- References to releases before Cisco IOS XR Release 6.3.2 apply to only the Cisco NCS 5500 Series Router.
- Cisco IOS XR Software Release 7.0.1 specific updates are not applicable for the following variants of Cisco NCS 540 Series Routers:
  - N540-28Z4C-SYS-A
  - N540-28Z4C-SYS-D
  - N540X-16Z4G8Q2C-A
  - N540X-16Z4G8Q2C-D
  - N540X-16Z8Q2C-D
  - N540-12Z20G-SYS-A
  - N540-12Z20G-SYS-D
  - N540X-12Z16G-SYS-A
  - N540X-12Z16G-SYS-D

For detailed information about EVPN RPL concepts, configuration tasks, and examples, see the *EVPN Features* chapter in the *L2VPN and Ethernet Services Configuration Guide for Cisco NCS 5500 Series Routers*.



Note For the rest of the RPL commands, see *Routing Policy Language Commands* chapter in the *Routing Command Reference for Cisco NCS 5500 Series Routers*.

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esi in

To match a esi entry in a esi set name or inline esi set, use the **esi in** command in route-policy configuration mode.

esi in {*esi-set-name inline-esi-set parameter*}

Syntax Description

esi-set-name	Name of a esi set. The esi-set accepts H.H.H.H.H value.
inline-esi-set	Inline esi set. The inline esi set must be enclosed in parentheses.
parameter	Parameter name. The parameter name must be preceded with a "$."

Command Default

No default behavior or values

Command Modes

Route-policy configuration

Command History

Release	Modification
Release 6.1.31	This command was introduced.

Usage Guidelines

Use the **esi in** command as a conditional expression within an **if** statement to match a esi entry in a named esi set or inline esi set.

Note For a list of all conditional expressions available within an **if** statement, see the **if** command.

Task ID

Task ID	Operations
route-policy	read, write

Examples

```
Router(config)# route-policy policy_A
Router(config-rpl)# if esi in (abcd.aaaa.0000.dddd.ffff) then
Router(config-rpl-if)# set local-preference 200
Router(config-rpl-if)# endif
Router(config-rpl)# end-policy
```

etag-in

To match a etag entry in a etag set name or inline etag set, use the **etag in** command in route-policy configuration mode.

etag in {*etag-set-name inline-etag-set parameter*}

Syntax Description

etag-set-name	Name of a etag set. The etag-set accepts 32-bit Integer value. Range is 0 to 4294967295.
inline-etag-set	Inline etag set. The inline etag set must be enclosed in parentheses.
parameter	Parameter name. The parameter name must be preceded with a "$."

Command Default

No default behavior or values

Command Modes

Route-policy configuration

Command History

Release	Modification
Release 6.1.31	This command was introduced.

Usage Guidelines

Use the **etag in** command as a conditional expression within an **if** statement to match a etag entry in a named etag set or inline etag set.

Note For a list of all conditional expressions available within an **if** statement, see the **if** command.

Task ID

Task ID	Operations
route-policy	read, write

Examples

```
Router(config)# route-policy policy_A
Router(config-rpl)# if etag in (200) then
Router(config-rpl-if)# pass
Router(config-rpl-if)# endif
Router(config-rpl)# end-policy
```

evpn-gateway

To match the gateway IP address, use the **evpn-gateway in** command in route-policy configuration mode.

evpn-gateway in {*IP addressparameter*}

Syntax Description

IP address	The gateway IP address (32-bit or 128-bit field (IPv4 or IPv6)).
parameter	Parameter name. The parameter name must be preceded with a "$."

Command Default

No default behavior or values

Command Modes

Route-policy configuration

Command History

Release	Modification
Release 6.1.31	This command was introduced.

Usage Guidelines

Use the **evpn-gateway in** command as a conditional expression within an **if** statement.



Note For a list of all conditional expressions available within an **if** statement, see the **if** command.

Task ID

Task ID	Operations
route-policy	read, write

Examples

```
Router(config)# route-policy policy gateway_A
Router(config-rpl)# if evpn-gateway in (10.0.0.0/24)then
Router(config-rpl-if)# pass
Router(config-rpl-if)# else
Router(config-rpl-else)# drop
Router(config-rpl-if)# endif
Router(config-rpl)# end-policy
```

evpn-originator in

To match the originating router's IP address, use the **evpn-originator in** command in route-policy configuration mode.

evpn-originator in {*IP addressparameter*}

Syntax Description

IP address	The originating router's IP address (4 or 16 octets).
parameter	Parameter name. The parameter name must be preceded with a "$."

Command Default

No default behavior or values

Command Modes

Route-policy configuration

Command History

Release	Modification
Release 6.1.31	This command was introduced.

Usage Guidelines

Use the **evpn-originator in** command as a conditional expression within an **if** statement.



Note For a list of all conditional expressions available within an **if** statement, see the **if** command.

Task ID

Task ID	Operations
route-policy	read, write

Examples

```
Router(config)# route-policy policy originator_A
Router(config-rpl)# if evpn-originator in (10.0.0.0/24) then
Router(config-rpl-if)# set local-preference 100
Router(config-rpl-if)# else
Router(config-rpl-else)# set med 200
Router(config-rpl-else)# endif
Router(config-rpl)# end-policy
```

evpn-route-type is

To match the EVPN route types, use the **evpn-route-type is** command in route-policy configuration mode.

evpn-route-type is {*route types in decimal parameter*}

Syntax Description

route type in decimal	A three bit decimal number. Range is from 1 to 5. • Use route type 1 to specify Ethernet Auto-Discovery Route • Use route type 2 to specify MAC/IP Advertisement Route • Use route type 3 to specify Inclusive Multicast Ethernet Tag Route • Use route type 4 to specify Ethernet Segment Route • Use route type 5 to specify IP Prefix Route
parameter	Parameter name. The parameter name must be preceded with a "$."

Command Default

No default behavior or values

Command Modes

Route-policy configuration

Command History

Release	Modification
Release 6.1.31	This command was introduced.

Usage Guidelines

Use the **evpn-route-type is** command as a conditional expression within an **if** statement.

Note For a list of all conditional expressions available within an **if** statement, see the **if** command.

Task ID

Task ID	Operations
route-policy	read, write

Examples

```
Router(config)# route-policy policy_A
Router(config-rpl)# if evpn-route-type is 3 then
Router(config-rpl-if)# set local-preference 200
Router(config-rpl-if)# endif
Router(config-rpl)# end-policy
```

mac in

To match a mac entry in a mac set name or inline mac set, use the **mac in** command in route-policy configuration mode.

mac in {*mac-set-name inline-mac-set parameter*}

Syntax Description

mac-set-name	Name of a mac-set. The mac-set accepts H.H.H value.
inline-mac-set	Inline mac set. The inline mac set must be enclosed in parentheses.
parameter	Parameter name. The parameter name must be preceded with a "$."

Command Default

No default behavior or values

Command Modes

Route-policy configuration

Command History

Release	Modification
Release 6.1.31	This command was introduced.

Usage Guidelines

Use the **mac in** command as a conditional expression within an **if** statement to match a mac entry in a named mac set or inline mac set.

Note For a list of all conditional expressions available within an **if** statement, see the **if** command.

Task ID

Task ID	Operations
route-policy	read, write

Examples

```
Router(config)# route-policy policy_A
Router(config-rpl)# if mac in (abcd.1234.ffff) then
Router(config-rpl-if)# set local-preference 300
Router(config-rpl-if)# endif
Router(config-rpl)# end-policy
```