

**NAME**

ip-nexthop – nexthop object management

**SYNOPSIS**

**ip** [ *ip-OPTIONS* ] **nexthop** { *COMMAND* | **help** }

**ip nexthop** { **show** | **flush** } *SELECTOR*

**ip nexthop** { **add** | **replace** } id *ID NH*

**ip nexthop** { **get** | **del** } id *ID*

*SELECTOR* := [ **id** *ID* ] [ **dev** *DEV* ] [ **vrf** *NAME* ] [ **master** *DEV* ] [ **groups** ]

*NH* := { **blackhole** | [ **via** *ADDRESS* ] [ **dev** *DEV* ] [ **onlink** ] [ **encap** *ENCAP* ] | **group** *GROUP* }

*ENCAP* := [ *ENCAP\_MPLS* ]

*ENCAP\_MPLS* := **mpls** [ *LABEL* ] [ **ttl** *TTL* ]

*GROUP* := **id**[,**weight**[/...]

**DESCRIPTION**

**ip nexthop** is used to manipulate entries in the kernel's nexthop tables.

**ip nexthop add** id *ID*  
add new nexthop entry

**ip nexthop replace** id *ID*  
change the configuration of a nexthop or add new one

**via** [ *FAMILY* ] *ADDRESS*

the address of the nexthop router, in the address family *FAMILY*. Address family must match address family of nexthop instance.

**dev** *NAME*  
is the output device.

**onlink** pretend that the nexthop is directly attached to this link, even if it does not match any interface prefix.

**encap** *ENCAPTYPE ENCAPHDR*  
attach tunnel encapsulation attributes to this route.

*ENCAPTYPE* is a string specifying the supported encapsulation type. Namely:

**mpls** - encapsulation type MPLS

*ENCAPHDR* is a set of encapsulation attributes specific to the *ENCAPTYPE*.

**mpls**

*MPLSLABEL* - mpls label stack with labels separated by /

**tll** *TTL* - TTL to use for MPLS header or 0 to inherit from IP header

**group** *GROUP*

create a nexthop group. Group specification is id with an optional weight (id,weight) and a '/' as a separator between entries.

**blackhole**

create a blackhole nexthop

ip nexthop delete id ID

delete nexthop with given id.

ip nexthop show

show the contents of the nexthop table or the nexthops selected by some criteria.

**dev** *DEV*

show the nexthops using the given device.

**vrf** *NAME*

show the nexthops using devices associated with the vrf name

**master** *DEV*

show the nexthops using devices enslaved to given master device

**groups** show only nexthop groups

ip nexthop flush

flushes nexthops selected by some criteria. Criteria options are the same as show.

ip nexthop get id ID

get a single nexthop by id

**EXAMPLES**

ip nexthop ls

Show all nexthop entries in the kernel.

ip nexthop add id 1 via 192.168.1.1 dev eth0

Adds an IPv4 nexthop with id 1 using the gateway 192.168.1.1 out device eth0.

ip nexthop add id 2 encap mpls 200/300 via 10.1.1.1 dev eth0

Adds an IPv4 nexthop with mpls encapsulation attributes attached to it.

ip nexthop add id 3 group 1/2

Adds a nexthop with id 3. The nexthop is a group using nexthops with ids 1 and 2 at equal weight.

ip nexthop add id 4 group 1,5/2,11

Adds a nexthop with id 4. The nexthop is a group using nexthops with ids 1 and 2 with nexthop 1 at weight 5 and nexthop 2 at weight 11.

**SEE ALSO**

ip(8)

**AUTHOR**

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