

# **T** Commands

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

## timers active-time

To adjust the Enhanced Interior Gateway Routing Protocol (EIGRP) time limit for the active state, use the **timers active-time** command. To disable this function, use the **no** form of the command.

timers active-time [time-limit | disabled]

no timers active-time

| Syntax Description | time-limit   | (Optional) Active time limit (in minutes). The range is from 1 to 65535 minutes. The default value is 3. |  |
|--------------------|--|--|--|
|                    | disabled   | (Optional) Disables the timers and permits the routing wait time to remain active indefinitely.          |  |
| Command Default    | Disabled   |  |  |
| Command Modes      | Address family configur<br>Router configuration mo<br>Router VRF configurat  | ode  |  |
| Command History    | Release  | Modification   |  |
|                    | 5.2(1)N1(1)  | This command was introduced.   |  |
| Usage Guidelines   | Use the <b>timers active-time</b> command to control the time that the router waits (after a query is sent) before declaring the route to be in the stuck in active (SIA) state. |  |  |
|                    | This command requires  | the LAN Base Services license.   |  |
| Examples           | This example shows how to configure an indefinite routing wait time on the specified EIGRP route:  |  |  |
|                    | <pre>switch(config)# router eigrp 1 switch(config-router) address-family ipv4 unicast switch(config-router-af)# timers active-time disabled switch(config-router-af)#</pre>      |  |  |
| Related Commands   | Command  | Description  |  |
|                    | copy running-config<br>startup-config  | Saves the configuration changes to the startup configuration file.                                       |  |
|                    | show ip eigrp  | Displays EIGRP information.  |  |

## timers nsf converge

To adjust the time limit for nonstop forwarding (NSF) convergence for the Enhanced Interior Gateway Routing Protocol (EIGRP), use the **timers nsf converge** command. To disable this function, use the **no** form of the command.

timers nsf converge seconds

no timers nsf converge

| Syntax Description | seconds  | Time limit for convergence after an NSF switchover (in seconds). The range is from 60 to 180 seconds. The default value is 120. |
|--------------------|--|---|
| Command Default    | 120 seconds  |   |
| Command Modes      | Address family configu<br>Router configuration m<br>Router VRF configurat  | ode   |
| Command History    | Release  | Modification  |
|                    | 5.2(1)N1(1)  | This command was introduced.  |
| Usage Guidelines   | switchover.  | werge command to control the time that the router waits for convergence after a the LAN Base Services license.                  |
| Examples           | This example shows how to configure the NSF convergence time for EIGRP:<br>switch(config)# router eigrp 1<br>switch(config-router) address-family ipv4 unicast<br>switch(config-router-af)# timers nsf converge 100<br>switch(config-router-af)# |   |
| Related Commands   | Command  | Description   |
|                    | copy running-config<br>startup-config  | Saves the configuration changes to the startup configuration file.  |
|                    | show ip eigrp  | Displays EIGRP information.   |

## timers nsf route-hold

To set the timer that determines how long an NSF-aware Enhanced Interior Gateway Routing Protocol (EIGRP) router holds routes for an inactive peer, use the **timers nsf route-hold** command. To return the route hold timer to the default value, use the **no** form of this command.

timers nsf route-hold seconds

no timers nsf route-hold

| Syntax Description | seconds  | Time, in seconds, that EIGRP holds routes for an inactive peer. The range is from 20 to 300 seconds. The default is 240. |  |  |
|--------------------|--|--|--|--|
| Command Default    | EIGRP NSF awareness is enabled.<br>seconds: 240  |  |  |  |
| Command Modes      | Address family con<br>Router configurati<br>Router VRF confi   | on mode  |  |  |
| Command History    | Release  | Modification   |  |  |
|                    | 5.2(1)N1(1)  | This command was introduced.   |  |  |
| Usage Guidelines   | Use the <b>timers nsf route-hold</b> command to set the maximum period of time that the NSF-aware router holds known routes for an NSF-capable neighbor during a switchover operation or a well-known failure condition. The route hold timer is configurable so that you can tune network performance and avoid undesired effects, such as "black holing" routes (advertising invalid routes) if the switchover operation takes too much time. When this timer expires, the NSF-aware router scans the topology table and discards any stale routes, allowing EIGRP peers to find alternate routes instead of waiting during a long switchover operation.<br>This command requires the LAN Base Services license. |  |  |  |
|                    | This command req   | unes the LAN base services neense.   |  |  |
| Examples           | This example show seconds):  | ws how to set the route hold timer value for an NSF-aware router to 2 minutes (120                                       |  |  |
|                    |  | <pre>router eigrp 1 uter) address-family ipv4 unicast uter-af)# timers nsf route-hold 120</pre>                          |  |  |
|                    |  |  |  |  |

| Related Commands | Command                               | Description  |
|------------------|---------------------------------------|--|
|                  | copy running-config<br>startup-config | Saves the configuration changes to the startup configuration file. |
|                  | show ip eigrp                         | Displays EIGRP information.  |

## timers nsf signal

To set the time limit to signal a nonstop forwarding (NSF) restart for the Enhanced Interior Gateway Routing Protocol (EIGRP), use the **timers nsf signal** command. To return the route hold timer to the default, use the **no** form of this command.

timers nsf signal seconds

no timers nsf signal

| Syntax Description | seconds  | Time, in seconds, that EIGRP waits for a peer to signal an NSF restart. The range is from 10 to 360 seconds. |  |
|--------------------|--|--|--|
| Command Default    | EIGRP NSF awareness  | is enabled   |  |
| Command Modes      | Address family configuration mode<br>Router configuration mode<br>Router VRF configuration mode  |  |  |
| Command History    | Release  | Modification   |  |
| •                  | 5.2(1)N1(1)  | This command was introduced.   |  |
|                    | for an NSF-capable neighbor to signal a restart.<br>This command requires the LAN Base Services license.   |  |  |
|                    | This command requires  | the LAN Base Services license.   |  |
| Examples           | This example shows how to set the signal timer value for an NSF-aware router to the maximum (30 seconds):  |  |  |
|                    | <pre>switch(config)# router eigrp 1 switch(config-router) address-family ipv4 unicast switch(config-router-af)# timers nsf signal 30 switch(config-router-af)#</pre> |  |  |
| Related Commands   | Command  | Description  |  |
|                    | copy running-config<br>startup-config  | Saves the configuration changes to the startup configuration file.   |  |
|                    | show ip eigrp  | Displays EIGRP information.  |  |