

## **D** Commands

This chapter describes the Cisco NX-OS Routing Information Protocol (RIP) commands that begin with D.

## default-information originate (RIP)

To generate a default route into the Routing Information Protocol (RIP), use the **default-information originate** command. To disable this feature, use the **no** form of this command.

default-information originate [always] [route-map map-name]

no default-information originate

| Syntax Description           | always                                                                                                                                            | (Optional) Generates the default route if the route is not in the RIP routing information base.                                                                                 |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | route-map map-name                                                                                                                                | (Optional) Generates the default route only if the route is permitted by the route map. The map name is any alphanumerical string up to 63 characters.                          |
| Command Default              | Disabled                                                                                                                                          |                                                                                                                                                                                 |
| Command Modes                | Router address-family c                                                                                                                           | onfiguration mode                                                                                                                                                               |
| Command History              | Release                                                                                                                                           | Modification                                                                                                                                                                    |
| -                            | 5.2(1)N1(1)                                                                                                                                       | This command was introduced.                                                                                                                                                    |
|                              |                                                                                                                                                   |                                                                                                                                                                                 |
| Examples                     | <pre>map:<br/>switch(config)# route<br/>switch(config-router)<br/>switch(config-router-</pre>                                                     | er rip Enterprise<br># address-family ipv4 unicast<br>af)# default-information originate route-map Condition                                                                    |
| Examples                     | <pre>map:<br/>switch(config)# route<br/>switch(config-router)<br/>switch(config-router-<br/>switch(config-router-</pre>                           | er rip Enterprise<br># address-family ipv4 unicast<br>af)# default-information originate route-map Condition<br>af)#                                                            |
|                              | <pre>map:<br/>switch(config)# route<br/>switch(config-router)<br/>switch(config-router-<br/>switch(config-router-</pre>                           | <pre># address-family ipv4 unicast af)# default-information originate route-map Condition af)# Description</pre>                                                                |
| Examples<br>Related Commands | <pre>map:<br/>switch(config)# route<br/>switch(config-router)<br/>switch(config-router-<br/>switch(config-router-<br/>switch(config-router-</pre> | r rip Enterprise<br># address-family ipv4 unicast<br>af)# default-information originate route-map Condition<br>af)#<br>Description<br>Enters address-family configuration mode. |
| -                            | <pre>map:<br/>switch(config)# route<br/>switch(config-router)<br/>switch(config-router-<br/>switch(config-router-</pre>                           | er rip Enterprise<br># address-family ipv4 unicast<br>af)# default-information originate route-map Condition<br>af)#<br>Description                                             |
|                              | <pre>map:<br/>switch(config)# route<br/>switch(config-router)<br/>switch(config-router-<br/>switch(config-router-<br/>switch(config-router-</pre> | <pre>pr rip Enterprise # address-family ipv4 unicast af)# default-information originate route-map Condition af)# Description Enters address-family configuration mode.</pre>    |

## default-metric (RIP)

To set default metric values for the Routing Information Protocol (RIP), use the **default-metric** command in router address-family configuration mode. To return to the default state, use the **no** form of this command.

default-metric value

no default-metric [value]

| Syntax Description | value                                                                                                                                                                                                                                                                                                                                                                                                                          | Default metric value. The range is from 1 to 15.                          |  |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|
| Command Default    | value: 1                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                           |  |
| Command Modes      | Router address-family configuration mode                                                                                                                                                                                                                                                                                                                                                                                       |                                                                           |  |
| Command History    | Release                                                                                                                                                                                                                                                                                                                                                                                                                        | Modification                                                              |  |
|                    | 5.2(1)N1(1)                                                                                                                                                                                                                                                                                                                                                                                                                    | This command was introduced.                                              |  |
| Usage Guidelines   | Use the <b>default-metric</b> command with the <b>redistribute</b> command to use the same metric value for all redistributed routes. A default metric helps to solve the problem of redistributing routes with incompatible metrics. Whenever external metrics do not convert to RIP metrics, you can use a default metric to provide a reasonable substitute to the external metric and enable the redistribution to proceed |                                                                           |  |
| Examples           | This example shows how to advertise Open Shortest Path First (OSPF) routes using RIP and assign the OSPF-derived routes with a RIP metric of 10:<br>switch(config)# router rip Enterprise<br>switch(config-router)# address-family ipv4 unicast<br>switch(config-router-af)# default-metric 10<br>switch(config-router-af)# redistribute ospf 109 route-map FilterOSPF<br>switch(config-router-af)#                            |                                                                           |  |
| Related Commands   | Command                                                                                                                                                                                                                                                                                                                                                                                                                        | Description                                                               |  |
|                    | address-family                                                                                                                                                                                                                                                                                                                                                                                                                 | Enters address-family configuration mode.                                 |  |
|                    | copy running-config<br>startup-config                                                                                                                                                                                                                                                                                                                                                                                          | Saves the configuration to the startup configuration file.                |  |
|                    | default-information originate                                                                                                                                                                                                                                                                                                                                                                                                  | Generates a default route for routes redistributed into RIP.              |  |
|                    | redistribute                                                                                                                                                                                                                                                                                                                                                                                                                   | Redistributes routes from one routing domain into another routing domain. |  |
|                    | show ip rip route                                                                                                                                                                                                                                                                                                                                                                                                              | Displays the routes in RIP table.                                         |  |
|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                           |  |

## distance (RIP)

To define the administrative distance assigned to routes discovered by the Routing Information Protocol (RIP), use the **distance** command. To remove the distance and restore the system to its default condition, use the **no** form of this command.

**distance** *admin-distance* 

no distance admin-distance

| Syntax Description | admin-distance                                                                                                                                                                                                                                                                                                                                            | Administrative distance to be assigned to RIP routes. The range is from 1 to 255. |  |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|
| Command Default    | admin-distance: 120                                                                                                                                                                                                                                                                                                                                       |                                                                                   |  |
| Command Modes      | Router address-family configuration mode                                                                                                                                                                                                                                                                                                                  |                                                                                   |  |
| Command History    | Release                                                                                                                                                                                                                                                                                                                                                   | Modification                                                                      |  |
|                    | 5.2(1)N1(1)                                                                                                                                                                                                                                                                                                                                               | This command was introduced.                                                      |  |
| Usage Guidelines   | Use the <b>distance</b> command to change the preference of RIP routes over other protocol routes.<br>Numerically, an administrative distance is an integer from 1 to 255. In general, a higher value in<br>a lower trust rating. An administrative distance of 255 means that the routing information source<br>be trusted at all and should be ignored. |                                                                                   |  |
| Examples           | This example shows how to set the administrative distance for RIP:<br>switch(config)# router rip Enterprise<br>switch(config-router)# address-family ipv4 unicast<br>switch(config-router-af)# distance 85<br>switch(config-router-af)#                                                                                                                   |                                                                                   |  |
| Related Commands   | Command                                                                                                                                                                                                                                                                                                                                                   | Description                                                                       |  |
|                    | address-family                                                                                                                                                                                                                                                                                                                                            | Enters address-family configuration mode.                                         |  |
|                    | redistribute                                                                                                                                                                                                                                                                                                                                              | Redistributes routes from one routing domain into RIP.                            |  |
|                    | show ip rip                                                                                                                                                                                                                                                                                                                                               | Displays a summary of RIP information for all RIP instances.                      |  |