



D Commands

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

Review Draft -- Cisco Confidential

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 <i>map-name</i>	(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 configuration mode	
Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.
Examples	<p>This example shows how to originate a default route (0.0.0.0/0) to all routes that pass the Condition route map:</p> <pre>switch(config)# router rip Enterprise switch(config-router)# address-family ipv4 unicast switch(config-router-af)# default-information originate route-map Condition switch(config-router-af)#</pre>	
Related Commands	Command	Description
	address-family	Enters address-family configuration mode.
	default-metric	Sets the metric for routes redistributed into RIP.
	redistribute	Redistributes routes from other routing protocols into RIP.
	show ip rip route	Displays the routes in RIP table.

Review Draft -- Cisco Confidential

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

<i>value</i>	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
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

Use the **default-metric** command with the **redistribute** 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:

```
switch(config)# router rip Enterprise
switch(config-router)# address-family ipv4 unicast
switch(config-router-af)# default-metric 10
switch(config-router-af)# redistribute ospf 109 route-map FilterOSPF
switch(config-router-af)#
```

Related Commands

Command	Description
address-family	Enters address-family configuration mode.
copy running-config 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.

Review Draft -- Cisco Confidential

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	<i>admin-distance</i>	Administrative distance to be assigned to RIP routes. The range is from 1 to 255.
--------------------	-----------------------	---

Command Default	<i>admin-distance</i> : 120
-----------------	-----------------------------

Command Modes	Router address-family configuration mode
---------------	--

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

Usage Guidelines	Use the distance command to change the preference of RIP routes over other protocol routes. Numerically, an administrative distance is an integer from 1 to 255. In general, a higher value indicates a lower trust rating. An administrative distance of 255 means that the routing information source cannot be trusted at all and should be ignored.
------------------	--

Examples	This example shows how to set the administrative distance for RIP:
----------	--

```
switch(config)# router rip Enterprise
switch(config-router)# address-family ipv4 unicast
switch(config-router-af)# distance 85
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.