



## 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		
<b>always</b>	(Optional)	Generates the default route if the route is not in the RIP routing information base.
<b>route-map</b> <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** This example shows how to originate a default route (0.0.0.0/0) to all routes that pass the Condition route map:

```
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)#
```

Related Commands	Command	Description
	<b>address-family</b>	Enters address-family configuration mode.
	<b>default-metric</b>	Sets the metric for routes redistributed into RIP.
	<b>redistribute</b>	Redistributes routes from other routing protocols into RIP.
	<b>show ip rip route</b>	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	<i>value</i> : 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 <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:
----------	--

```
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
	<b>address-family</b>	Enters address-family configuration mode.
	<b>copy running-config startup-config</b>	Saves the configuration to the startup configuration file.
	<b>default-information originate</b>	Generates a default route for routes redistributed into RIP.
	<b>redistribute</b>	Redistributes routes from one routing domain into another routing domain.
	<b>show ip rip route</b>	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*

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

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

<b>Command Modes</b>	Router address-family configuration mode
----------------------	--

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	6.0(2)N1(1)	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>distance</b> 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.
-------------------------	--

<b>Examples</b>	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)#
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>address-family</b>	Enters address-family configuration mode.
	<b>redistribute</b>	Redistributes routes from one routing domain into RIP.
	<b>show ip rip</b>	Displays a summary of RIP information for all RIP instances.