Chapter 9
RIP Commands

default-metric

Defines the global default-metric value that will be assigned to all external routes imported into RIP for redistribution.

RIP must be active on the routing switch for this command to be operational.

EXAMPLE:

To assign a default metric of 4 to all routes imported as RIP, enter the following:

```
HP9300(config-rip-router)# def 4
```

Syntax: default-metric <value>

Possible values: 1 – 15

Default value: 1

deny redistribute

Defines the route types upon which you *do not* want to perform RIP redistribution.

RIP must be active on the routing switch for this command to be operational. RIP is enabled by default.

EXAMPLE:

To deny redistribution on all incoming routes received from the 207.92.0.0 network, enter the following:

```
HP9300(config-rip-router)# deny redis 2 all  207.92.0.0 255.255.0.0
```

Syntax: deny redistribute <index> all | ospf | static address <ip-addr> <ip-mask>
[match-metric <value> | set-metric <value>]

EXAMPLE:Possible values:

all	apply redistribution to all route types
ospf	apply redistribution to OSPF routes only
static	apply redistribution to the static route only
ip address	apply redistribution to a specific network and sub-net address
match-metric	apply redistribution to those routes with a specific metric value; possible *v*alues are 1 – 15
set-metric	N/A to **deny redistribute** command

Default value: N/A

end

Moves activity to the privileged EXEC level from any level of the CLI except the user EXEC level.

EXAMPLE:

To move to the privileged level, enter the following from any level of the CLI.

```
HP9300(config-rip-router)# end
HP9300#
```

Syntax: end

Possible values: N/A

Default value: N/A

exit

Moves activity up one level from the current level. In this case, activity will be moved to the global level.

EXAMPLE:

```
HP9300(config-rip-router)# exit
HP9300(config)#
```

Syntax: exit

Possible values: N/A

Default value: N/A

filter

Defines which IP/RIP network numbers the router will learn from the RIP protocol and store in its IP routing table. Once RIP filters are defined, you can assign these filters to individual interfaces with the **filter-group** command at the Interface Level of CLI.

To define an IP/RIP filter, you must first enable RIP on the router using the **router rip** command to access the RIP Router Level of the CLI.

NOTE: A filter defines for inbound routes what routes it will permit to be stored in its IP routing table. For outbound routes, the filter defines what routes are allowed to be advertised through a given interface. You can also specify all routes by using the value, **any**, instead of specifying a specific route.

An IP address and mask define a route.

EXAMPLE:

To define filters with respect to network traffic from 192.53.41, 192.53.5.1, 192.53.6.1 and 192.53.7.1, enter the following:

```
HP9300(config-rip-router)# filter 1 permit 192.53.4.1 255.255.255.0
HP9300(config-rip-router)# filter 2 permit 192.53.5.1 255.255.255.0
HP9300(config-rip-router)# filter 3 permit 192.53.6.1 255.255.255.0
HP9300(config-rip-router)# filter 4 deny 192.53.7.1 255.255.255.0
```

EXAMPLE:

To enable logging on filter 1 and apply the filter to interface 1/2:

```
HP9300(config-rip-router)# filter 1 deny any any log
HP9300(config-rip-router)# int e 1/2
HP9300(config-if-e1000-1/2)# ip rip filter-g in 1
HP9300(config-if-e1000-1/2)# ip rip filter-g out 1
```

Syntax: filter <filter-num> permit | deny <source-ip-addr> | any <source-ip-mask> | any [log]

When the RIP filter causes packets to be denied, the following messages appear in the syslog:

```
00d00h00m00s:W:rip filter list 1 in V1 denied 0.0.0.0, 1 packets
00d00h00m00s:W:rip filter list 1 out V1 denied 0.0.0.0, 1 packets
```

The format of the syslog message is as follows:

<time>:W:rip filter list <list-num> <direction> V1 | V2 denied <ip-addr>, <num> packets

The <list-num> is the ID of the filter list.

The <direction> indicates whether the filter was applied to incoming packets or outgoing packets. The value can be one of the following:

- in
- out

The V1 or V2 value specifies the RIP version (RIPv1 or RIPv2).

The <ip-addr> indicates the network number in the denied updates.

The <num> indicates how many packets matching the values above were dropped during the five-minute interval represented by the log entry.

Possible values: Filter ID: 1 to 64

Default value: N/A

filter-group

Assigns a group of defined RIP filters on either a global or interface basis. Assignments to interfaces are done at the interface level of the CLI.

EXAMPLE:

```
HP9300(config-rip-router)# filter-group out 1 3 6 9
```

Syntax: filter-group in | out <1-64> [<1-64>]

Possible values: 1 – 64 (filter index value)

Default value: N/A

learn-default

This feature allows a routing switch to learn and advertise default IP/RIP routes. This command can be applied on a global or interface basis. This example shows the feature enabled at the global level.

EXAMPLE:

```
HP9300(config-rip-router)# learn-default
```

Syntax: learn-default

Possible values: N/A

Default value: N/A

neighbor

Specifies those routing switches from which a routing switch will receive RIP routes.

In the example below, no RIP routes will be learned from any neighbor router. By default, RIP routes will be learned from all neighbors.

EXAMPLE:

To configure a routing switch so that no RIP routes are learned from its neighbor routers, enter the following:

```
HP9300(config-rip-router)# neighbor 1 deny any
```

Syntax: neighbor <number> permit | deny <ip-addr> | any

Possible values: 1 – 64

Default value: N/A

no

Disables other commands. To disable a command, place the word **no** before the command.

permit redistribute

Allows you to define the route types upon which you want to perform RIP redistribution.

EXAMPLE:

To allow (permit) redistribution of all routes received from network 192.147.72.0, enter the following:

```
HP9300(config-rip-router)# permit redis 1 all 192.147.72.0 255.255.255.0
```

Syntax: permit | deny redistribute <filter-num> all | bgp | ospf | static <ip-addr> <ip-mask> [match-metric<value> | set-metric <value>]

EXAMPLE:Possible values:

The **all** parameter applies redistribution to all route types.

The **bgp** parameter applies redistribution to BGP4 routes only.

The **ospf** parameter applies redistribution to OSPF routes only.

The **static** parameter applies redistribution to the static route only.

The <ip-addr> <ip-mask> parameters apply redistribution to the specified network and sub-net address.

The **match-metric** <value> parameter applies redistribution to those routes with a specific metric value; possible values are from 1 – 15.

The **set-metric** <value> parameter sets the RIP metric value that will be applied to those routes imported into RIP.

Default value: N/A

quit

Returns you from any level of the CLI to the User EXEC mode.

EXAMPLE:

```
HP9300(config-rip-router)# quit

HP9300>
```

Syntax: quit

Possible values: N/A

Default value: N/A

redistribution

Enables RIP route redistribution on a routing switch. When enabled, RIP will import external routes (OSPF or Static Routes) into the RIP domain. Do this prior to setting up the redistribution table using the **permit** and **deny** commands.

EXAMPLE:

To enable RIP redistribution on the routing switch, enter the following within the Router RIP Level.

```
HP9300(config-rip-router)# redistribution
```

Syntax: redistribution

Possible values: N/A

Default value: disabled

show

Displays a variety of configuration and statistical information about the switch or routing switch. See “Show Commands” on page 20-1.

update-time

Sets the time interval that will exist between the transmission of regular RIP response packets. This parameter is set to 30 seconds by default. RIP must be enabled and active on the routing switch for this command to be operational.

EXAMPLE:

To modify the default update time value to 120 seconds, enter the following:

```
HP9300(config-rip-router)# update 120
```

Syntax: update-time <value>

Possible values: 1 – 1,000 seconds

Default value: 30 seconds

use-vrrp-path

Prevents Backup VRRP routers from advertising route information for the backed up interface, by enabling suppression of the advertisements. To suppress RIP advertisements for a backed up interface, enter the following command on the VRRP Backup router:

```
HP9300(config-rip-router)# use-vrrp-path
```

Syntax: use-vrrp-path

Possible values: N/A

Default value: N/A

write memory

Saves the running configuration into the startup-config file.

EXAMPLE:

```
HP9300(config-rip-router)# wr mem
```

Syntax: write memory

Possible values: N/A

Default value: N/A

write terminal

Displays the running configuration of the HP switch or routing switch on the terminal screen.

NOTE: This command is equivalent to the **show running-config** command.

EXAMPLE:

```
HP9300# wr term
```

Syntax: write terminal

Possible values: N/A

Default value: N/A