

Configuring RIP (NSM Procedure)

Routing Information Protocol (RIP) is an interior gateway protocol (IGP) typically used in small, homogeneous networks. RIP uses distance-vector routing to route information through IP networks. Distance-vector routing requires that each device simply informs its neighbors of its routing table. For each network path, the receiving device picks the neighbor advertising the lowest metric, then adds this entry into its routing table for readvertisement. Any host that uses RIP is assumed to have interfaces to one or more networks. These networks are considered to be directly connected networks. RIP relies on access to certain information about each of these networks. The most important information is the network's metric. RIP uses the hop count as the metric (also known as cost) to compare the value of different routes. The hop count is the number of devices that data packets must traverse between RIP networks.

To configure RIP in NSM:

1. In the navigation tree select **Device Manager > Devices** .
2. In the **Devices** list, double click the device to select it.
3. Click the **Configuration** tab.
4. In the configuration tree, expand **Protocols** and select **Rip**.
5. Add/Modify the parameters under the respective tabs as specified in Table 1.
6. Click one:
 - **OK**—To save the changes.
 - **Cancel**—To cancel the modifications.
 - **Apply** — To apply the protocol settings.



NOTE: After you make changes to a device configuration, you must push that updated device configuration to the physical security device for those changes to take effect. You can update multiple devices at one time. See [Updating Devices](#) for more information.

Table 1: RIP Configuration Fields

Option	Function	Your Action
RIP		

Table 1: RIP Configuration Fields (continued)

Option	Function	Your Action
Comment	Specifies the comment for RIP.	1. Enter the comment.
Metric In	Specifies the metric to add to incoming routes when advertising into RIP routes that were learned from other protocols.	1. Specify the metric to add incoming routes.
Message Size	Specifies the number of route entries to be included in every RIP update message.	1. Enter the message size or select from the list.
Hold Down	Time period the expired route is retained in the routing table before being removed.	1. Enter the hold down value or select from the list.
Route Timeout	Specifies the route timeout interval for RIP.	1. Enter the route timeout or select from the list.
Update Interval	Enables you to configure an update time interval to periodically send out routes learned by RIP to neighbors.	1. Enter the update interval or select from the list.
Authentication Type	The type of authentication for RIP route queries received on an interface.	1. Select authentication type from the list.
Authentication Key	Authentication key for RIP route queries received on an interface.	1. Enter the authentication key.
Graceful Restart	Enables you to specify the graceful restart parameters for RIP.	1. Expand the RIP tree and select Graceful Restart . 2. Enable the feature and set up the graceful restart parameters.
Group	RIP neighbors that share an export policy and metric. The export policy and metric govern what routes to advertise to neighbors in a given group.	1. Expand the RIP tree and select Group . 2. Click the New button or select a group and click Edit button. 3. Set up the Bfd Liveness Detection , Export, Import and Neighbor for RIP.
Import	Enables you to specify the import policies to be configured on the peer.	1. Expand the RIP tree and select Import . 2. Specify the import policies.
Receive	Enables you to configure RIP receive options.	1. Expand the RIP tree and select Receive . 2. Specify the receive options.

Table 1: RIP Configuration Fields (continued)

Option	Function	Your Action
RIB Group	The routing table group.	<ol style="list-style-type: none">1. Expand the RIP tree and select Rib Group.2. Specify the comment and ribgroup name.
Send	Enables you to configure RIP send options.	<ol style="list-style-type: none">1. Expand the RIP tree and select Send.2. Specify the send options.
Traceoptions	Enables you to configure RIP protocol level tracing options.	<ol style="list-style-type: none">1. Expand the RIP tree and select Traceoptions.2. Expand the Traceoptions tree and set up the file and flag parameters.

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