Contents

Configuring routing policies

Overview

Routing policies control routing paths by filtering and modifying routing information. This chapter describes both IPv4 and IPv6 routing policies.

Routing policies can filter advertised, received, and redistributed routes, and modify attributes for specific routes.

To configure a routing policy:

1. Configure filters based on route attributes, such as destination address and the advertising router's address.
2. Create a routing policy and apply filters to the routing policy.

Filters

Routing policies can use the following filters to match routes.

ACL

ACLs include IPv4 ACLs and IPv6 ACLs. An ACL can match the destination or next hop of routes.

For more information about ACLs, see *ACL and QoS Configuration Guide*.

IP prefix list

IP prefix lists include IPv4 prefix lists and IPv6 prefix lists.

An IP prefix list matches the destination address of routes. You can use the **gateway** option to receive routes only from specific routers. For more information about the **gateway** option, see "Configuring RIP" and "Configuring OSPF."

An IP prefix list can contain multiple items that specify prefix ranges. Each destination IP address prefix of a route is compared with these items in ascending order of their index numbers. A prefix matches the IP prefix list if it matches one item in the list.

AS path list

An AS path list matches the AS_PATH attribute of BGP routes.

For more information about AS path lists, see "Configuring BGP."

Community list

A community list matches the COMMUNITY attribute of BGP routes.

For more information about community lists, see "Configuring BGP."

Extended community list

An extended community list matches the extended community attribute (Route-Target for VPN and Site of Origin) of BGP routes.

For more information about extended community lists, see *MCE Configuration Guide*.

Routing policy

A routing policy can contain multiple nodes, which are in a logical OR relationship. A node with a smaller number is matched first. A route matches the routing policy if it matches one node (except the node configured with the **continue** clause) in the routing policy.

Each node has a match mode of **permit** or **deny**.

- **permit**—Specifies the **permit** match mode for a routing policy node. If a route meets all the **if-match** clauses of the node, it is handled by the **apply** clauses of the node. The route is not compared with the next node unless the **continue** clause is configured. If a route does not meet all the **if-match** clauses of the node, it is compared with the next node.
- **deny**—Specifies the **deny** match mode for a routing policy node. The **apply** and **continue** clauses of a deny node are never executed. If a route meets all the **if-match** clauses of the node, it is denied without being compared with the next node. If a route does not meet all the **if-match** clauses of the node, it is compared with the next node.

A node can contain a set of **if-match**, **apply**, and **continue** clauses.

- **if-match** clauses—Specify the match criteria that match the attributes of routes. The **if-match** clauses are in a logical AND relationship. A route must meet all the **if-match** clauses to match the node.
- **apply** clauses—Specify the actions to be taken on permitted routes, such as modifying a route attribute.
- **continue** clause—Specifies the next node. A route that matches the current node (permit node) must match the specified next node in the same routing policy. The **continue** clause combines the **if-match** and **apply** clauses of the two nodes to improve flexibility of the routing policy.

Follow these guidelines when you configure **if-match**, **apply**, and **continue** clauses:

- If you only want to filter routes, do not configure **apply** clauses.
- If you do not configure any **if-match** clauses for a permit node, the node will permit all routes.
- Configure a permit node containing no **if-match** or **apply** clauses following multiple deny nodes to allow unmatched routes to pass.

Configuring filters

Configuration prerequisites

Determine the IP prefix list name, matching address range, and community list number.

Configuring an IP prefix list

Configuring an IPv4 prefix list

If all the items are set to **deny** mode, no routes can pass the IPv4 prefix list. To permit unmatched IPv4 routes, you must configure the **permit** 0.0.0.0 0 **less-equal** 32 item following multiple **deny** items.

To configure an IPv4 prefix list:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Configure an IPv4 prefix list.	**ip prefix-list** *prefix-list-name* [**index** *index-number*] { **deny** | **permit** } *ip-address mask-length* [**greater-equal** *min-mask-length*] [**less-equal** *max-mask-length*]	By default, no IPv4 prefix lists exist.

Configuring an IPv6 prefix list

If all items are set to **deny** mode, no routes can pass the IPv6 prefix list. To permit unmatched IPv6 routes, you must configure the **permit** :: 0 **less-equal** 128 item following multiple **deny** items.

To configure an IPv6 prefix list:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Configure an IPv6 prefix list.	**ipv6 prefix-list** *prefix-list-name* [**index** *index-number*] { **deny** | **permit** } *ipv6-address* { *prefix-length* | **inverse** *inverse-prefix-length* [**greater-equal** *min-prefix-length*] [**less-equal** *max-prefix-length*] }	By default, no IPv6 prefix lists exist.

Configuring an AS path list

You can configure multiple items for an AS path list that is identified by a number. The relationship between the items is logical OR. A route matches the AS path list if it matches one item in the list.

To configure an AS path list:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Configure an AS path list.	**ip as-path** *as-path-number* { **deny** | **permit** } *regular-expression*	By default, no AS path lists exist.

Configuring a community list

You can configure multiple items for a community list that is identified by a number. The relationship between the items is logical OR. A route matches the community list if it matches one item in the list.

To configure a community list:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Configure a community list.	• Configure a basic community list: **ip community-list** { *basic-comm-list-num* | **basic** *basic-comm-list-name* } { **deny** | **permit** } [*community-number*&<1-32> | *aa:nn*&<1-32>] [**internet** | **no-advertise** | **no-export** | **no-export-subconfed**] * • Configure an advanced community list: **ip community-list** { *adv-comm-list-num* | **advanced** *adv-comm-list-name* } { **deny** | **permit** } *regular-expression*	By default, no community lists exist.

Configuring an extended community list

You can configure multiple items for an extended community list that is identified by a number. The relationship between the items is logical OR. A route matches the extended community list if it matches one item in the list.

To configure an extended community list:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Configure an extended community list.	**ip extcommunity-list** *ext-comm-list-number* { **deny** | **permit** } { **rt** *route-target* | **soo** *site-of-origin* }&<1-32>	By default, no extended community lists exist.

Configuring a routing policy

Configuration prerequisites

Configure filters and routing protocols, and determine the routing policy name, node numbers, match criteria, and the attributes to be modified.

Creating a routing policy

For a routing policy that has more than one node, configure a minimum of one permit node. A route that does not match any node cannot pass the routing policy. If all the nodes are in **deny** mode, no routes can pass the routing policy.

To create a routing policy:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Create a routing policy and a node, and enter routing policy node view.	**route-policy** *route-policy-name* { **deny** | **permit** } **node** *node-number*	By default, no routing policies exist.

Configuring if-match clauses

You can either specify no **if-match** clauses or multiple **if-match** clauses for a routing policy node. If no **if-match** clause is specified for a permit node, all routes can pass the node. If no **if-match** clause is specified for a deny node, no routes can pass the node.

The **if-match** clauses of a routing policy node have a logical AND relationship. A route must meet all **if-match** clauses before it can be executed by the **apply** clauses of the node. If an **if-match** command exceeds the maximum length, multiple **if-match** clauses of the same type are generated. These clauses have a logical OR relationship. A route only needs to meet one of them.

To configure **if-match** clauses:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Enter routing policy node view.	**route-policy** *route-policy-name* { **deny** | **permit** } **node** *node-number*	N/A
3. Match routes whose destination, next hop, or source address matches an ACL or prefix list.	• Match IPv4 routes whose destination, next hop, or source address matches an ACL or IPv4 prefix list: **if-match ip** { **address** | **next-hop** | **route-source** } { **acl**	By default, no ACL or prefix list match criterion is configured. If the ACL used by an **if-match** clause does not exist, the clause is always

Step	Command	Remarks
	ipv4-acl-number | **prefix-list** *prefix-list-name* } • Match IPv6 routes whose destination, next hop, or source address matches an ACL or IPv6 prefix list: **if-match ipv6** { **address** | **next-hop** | **route-source** } { **acl** *ipv6-acl-number* | **prefix-list** *prefix-list-name* }	matched. If no rules of the specified ACL are matched or the match rules are inactive, the clause is not matched. The ACL specified in an **if-match** clause must be a non-VPN ACL. All IPv6 routes match a node if the **if-match** clauses of the node use only IPv4 ACLs. All IPv4 routes match a node if the **if-match** clauses of the node use only IPv6 ACLs.
4. Match BGP routes whose AS_PATH attribute matches a specified AS path list.	**if-match as-path** *as-path-number*&<1-32>	By default, no AS path match criterion is configured.
5. Match BGP routes whose COMMUNITY attribute matches a specified community list.	**if-match community** { { *basic-community-list-number* | **name** *comm-list-name* } [**whole-match**] | *adv-community-list-number* }&<1-32>	By default, no COMMUNITY match criterion is matched.
6. Match routes having the specified cost.	**if-match cost** *cost-value*	By default, no cost match criterion is configured.
7. Match BGP routes whose extended community attribute matches a specified extended community list.	**if-match extcommunity** *ext-comm-list-number*&<1-32>	By default, no extended community list match criterion is configured.
8. Match routes having the specified output interface.	**if-match interface** { *interface-type interface-number* }&<1-16>	By default, no output interface match criterion is configured. This command is not supported by BGP.
9. Match BGP routes having the specified local preference.	**if-match local-preference** *preference*	By default, no local preference is configured for BGP routes.
10. Match routes having MPLS labels.	**if-match mpls-label**	By default, no MPLS label match criterion is configured.
11. Match routes having the specified route type.	if-match route-type { **bgp-evpn-imet** | **bgp-evpn-ip-prefix** | **bgp-evpn-mac-ip** | **external-type1** | **external-type1or2** | **external-type2** | **internal** | **is-is-level-1** | **is-is-level-2** | **nssa-external-type1** | **nssa-external-type1or2** | **nssa-external-type2** } *	By default, no route type match criterion is configured.
12. Match IGP routes having the specified tag value.	**if-match tag** *tag-value*	By default, no tag match criterion is configured.
13. Match IPv6 route prefixes of the specified length whose last bit is an odd number.	**if-match ipv6 odd-prefix-length** *prefix-length*	By default, no match criterion is configured to match the length and last bit of IPv6 route prefixes. This command is supported

Step	Command	Remarks
		in Release 2612P06 and later.
14. Match IPv6 route prefixes of the specified length whose last bit is an even number.	**if-match ipv6 even-prefix-length** *prefix-length*	By default, no match criterion is configured to match the length and last bit of IPv6 route prefixes. This command is supported in Release 2612P06 and later.

Configuring apply clauses

Except for the **apply** commands used for setting the next hop for IPv4 and IPv6 routes, all **apply** commands are the same for IPv4 and IPv6 routing.

To configure **apply** clauses:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Enter routing policy node view.	**route-policy** *route-policy-name* { **deny** | **permit** } **node** *node-number*	N/A
3. Set the AS_PATH attribute for BGP routes.	**apply as-path** *as-number*&<1-32> [**replace**]	By default, no AS_PATH attribute is set for BGP routes.
4. Delete the specified COMMUNITY attribute for BGP routes.	**apply comm-list** { *comm-list-number* | *comm-list-name* } **delete**	By default, no COMMUNITY attribute is deleted for BGP routes.
5. Set the specified COMMUNITY attribute for BGP routes.	**apply community** { **none** | **additive** | { *community-number*&<1-32> | *aa:nn*&<1-32> | **internet** | **no-advertise** | **no-export** | **no-export-subconfed** } ***** [**additive**] }	By default, no community attribute is set for BGP routes.
6. Set a cost for routes.	**apply cost** [**+** | **-**] *cost-value*	By default, no cost is set for routes.
7. Set a cost type for routes.	**apply cost-type** { **external** | **internal** | **type-1** | **type-2** }	By default, no cost type is set for routes.
8. Set the RT extended community attribute for BGP routes.	**apply extcommunity** { **rt** *route-target* }&<1-32> [**additive**]	By default, no RT extended community attribute is set for BGP routes.
15. Set the SoO extended community attribute for BGP routes.	**apply extcommunity soo** { *site-of-origin* }&<1-32> [**additive**]	By default, no SoO extended community attribute is set for BGP routes.
16. Set the next hop for routes.	• Set the next hop for IPv4 routes: **apply ip-address next-hop** *ip-address* [**public** | **vpn-instance** *vpn-instance-name*] • Set the next hop for IPv6 routes: **apply ipv6 next-hop**	By default, no next hop is set for IPv4 or IPv6 routes. The **apply ip-address next-hop** and **apply ipv6 next-hop** commands do not apply to redistributed IPv4 and IPv6 routes.

Step	Command	Remarks
	ipv6-address	
17. Set an IP precedence for matching routes.	**apply ip-precedence** { *value* | **clear** }	By default, no IP precedence is set.
18. Redistribute routes to the specified IS-IS level.	**apply isis** { **level-1** | **level-1-2** | **level-2** }	By default, routes are not redistributed into the specified IS-IS level.
19. Set a local preference for BGP routes.	**apply local-preference** *preference*	By default, no local preference is set for BGP routes.
20. Set MPLS labels.	**apply mpls-label**	By default, no MPLS label is set.
21. Set the ORIGIN attribute for BGP routes.	**apply origin** { **egp** *as-number* | **igp** | **incomplete** }	By default, no ORIGIN attribute is set for BGP routes.
22. Set a preference.	**apply preference** *preference*	By default, no preference is set.
23. Set a preferred value for BGP routes.	**apply preferred-value** *preferred-value*	By default, no preferred value is set for BGP routes.
24. Set a prefix priority.	**apply prefix-priority** { **critical** | **high** | **medium** }	By default, no prefix priority is set, which means the prefix priority is low.
25. Set a local QoS ID for matching routes.	**apply qos-local-id** { *local-id-value* | **clear** }	By default, no local QoS ID is set.
26. Set a tag value for IGP routes.	**apply tag** *tag-value*	By default, no tag value is set for IGP routes.
27. Set a traffic index for BGP routes.	**apply traffic-index** { *value* | **clear** }	By default, no traffic index is set for BGP routes.
28. Set a backup link for fast reroute (FRR).	• Set an IPv4 backup link for FRR: **apply fast-reroute** { **backup-interface** *interface-type interface-number* [**backup-nexthop** *ip-address*] | **backup-nexthop** *ip-address* } • Set an IPv6 backup link for FRR: **apply ipv6 fast-reroute** { **backup-interface** *interface-type interface-number* [**backup-nexthop** *ipv6-address*] | **backup-nexthop** *ipv6-address* }	By default, no backup link is set for FRR.

Configuring the continue clause

Follow these guidelines when you configure the **continue** clause to combine multiple nodes:

- If you configure an **apply** clause that sets different attribute values on all the nodes, the **apply** clause of the node configured most recently takes effect.
- If you configure the following **apply** clauses on all the nodes, the **apply** clause of each node takes effect:

  - **apply as-path** without the **replace** keyword.
  - **apply cost** with the **+** or **–** keyword.
  - **apply community** with the **additive** keyword.
  - **apply extcommunity** with the **additive** keyword.
- The **apply comm-list delete** clause configured on the current node cannot delete the community attributes set by the **apply community** clauses of the preceding nodes.

To configure the **continue** clause:

Step	Command	Remarks
1. Enter system view.	**system-view**	N/A
2. Enter routing policy node view.	**route-policy** *route-policy-name* { **deny** | **permit** } **node** *node-number*	N/A
3. Specify the next node to be matched.	**continue** [*node-number*]	By default, no continue clause is configured. The specified next node must have a larger number than the current node.

Displaying and maintaining the routing policy

Execute **display** commands in any view and **reset** commands in user view.

Task	Command
Display BGP AS path list information.	**display ip as-path** [*as-path-number*]
Display BGP community list information.	**display ip community-list** [*basic-community-list-number* | *adv-community-list-number* | **name** *comm-list-name*]
Display BGP extended community list information.	**display ip extcommunity-list** [*ext-comm-list-number*]
Display IPv4 prefix list statistics.	**display ip prefix-list** [**name** *prefix-list-name*]
Display IPv6 prefix list statistics.	**display ipv6 prefix-list** [**name** *prefix-list-name*]
Display routing policy information.	**display route-policy** [**name** *route-policy-name*]
Clear IPv4 prefix list statistics.	**reset ip prefix-list** [*prefix-list-name*]
Clear IPv6 prefix list statistics.	**reset ipv6 prefix-list** [*prefix-list-name*]

Routing policy configuration examples

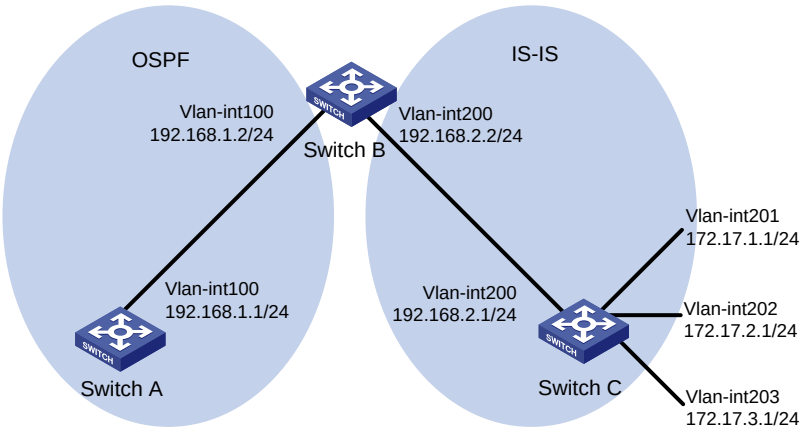
Routing policy configuration example for IPv4 route redistribution

Network requirements

As shown in Figure 1, Switch B exchanges routing information with Switch A by using OSPF and with Switch C by using IS-IS.

On Switch B, enable route redistribution from IS-IS to OSPF. Use a routing policy to set the cost of route 172.17.1.0/24 to 100 and the tag of route 172.17.2.0/24 to 20.

Figure 1 Network diagram



Configuration procedure

1. Specify IP addresses for interfaces. (Details not shown.)
2. Configure IS-IS:

   # Configure Switch C.

```
<SwitchC> system-view
[SwitchC] isis
[SwitchC-isis-1] is-level level-2
[SwitchC-isis-1] network-entity 10.0000.0000.0001.00
[SwitchC-isis-1] quit
[SwitchC] interface vlan-interface 200
[SwitchC-Vlan-interface200] isis enable
[SwitchC-Vlan-interface200] quit
[SwitchC] interface vlan-interface 201
[SwitchC-Vlan-interface201] isis enable
[SwitchC-Vlan-interface201] quit
[SwitchC] interface vlan-interface 202
[SwitchC-Vlan-interface202] isis enable
[SwitchC-Vlan-interface202] quit
[SwitchC] interface vlan-interface 203
[SwitchC-Vlan-interface203] isis enable
[SwitchC-Vlan-interface203] quit
```

   # Configure Switch B.

```
<SwitchB> system-view
[SwitchB] isis
[SwitchB-isis-1] is-level level-2
[SwitchB-isis-1] network-entity 10.0000.0000.0002.00
[SwitchB-isis-1] quit
[SwitchB] interface vlan-interface 200
[SwitchB-Vlan-interface200] isis enable
[SwitchB-Vlan-interface200] quit
```

3. Configure OSPF and route redistribution:

Configure OSPF on Switch A.

```
<SwitchA> system-view
[SwitchA] ospf
[SwitchA-ospf-1] area 0
[SwitchA-ospf-1-area-0.0.0.0] network 192.168.1.0 0.0.0.255
[SwitchA-ospf-1-area-0.0.0.0] quit
[SwitchA-ospf-1] quit
```

On Switch B, configure OSPF and enable route redistribution from IS-IS to OSPF.

```
[SwitchB] ospf
[SwitchB-ospf-1] area 0
[SwitchB-ospf-1-area-0.0.0.0] network 192.168.1.0 0.0.0.255
[SwitchB-ospf-1-area-0.0.0.0] quit
[SwitchB-ospf-1] import-route isis 1
[SwitchB-ospf-1] quit
```

Display the OSPF routing table on Switch A to view redistributed routes.

```
[SwitchA] display ospf routing

          OSPF Process 1 with Router ID 192.168.1.1
                   Routing Tables

 Routing for Network
 Destination        Cost     Type    NextHop        AdvRouter     Area
 192.168.1.0/24     1        Stub    192.168.1.1    192.168.1.1   0.0.0.0

 Routing for ASEs
 Destination        Cost     Type    Tag        NextHop        AdvRouter
 172.17.1.0/24      1        Type2   1          192.168.1.2    192.168.2.2
 172.17.2.0/24      1        Type2   1          192.168.1.2    192.168.2.2
 172.17.3.0/24      1        Type2   1          192.168.1.2    192.168.2.2

 Total Nets: 4
 Intra Area: 1  Inter Area: 0  ASE: 3  NSSA: 0
```

4. Configure filtering lists:

Configure IPv4 basic ACL 2002 to permit route 172.17.2.0/24.

```
[SwitchB] acl basic 2002
[SwitchB-acl-ipv4-basic-2002] rule permit source 172.17.2.0 0.0.0.255
[SwitchB-acl-ipv4-basic-2002] quit
```

Configure IP prefix list **prefix-a** to permit route 172.17.1.0/24.

```
[SwitchB] ip prefix-list prefix-a index 10 permit 172.17.1.0 24
```

5. Configure a routing policy.

```
[SwitchB] route-policy isis2ospf permit node 10
[SwitchB-route-policy-isis2ospf-10] if-match ip address prefix-list prefix-a
[SwitchB-route-policy-isis2ospf-10] apply cost 100
[SwitchB-route-policy-isis2ospf-10] quit
[SwitchB] route-policy isis2ospf permit node 20
[SwitchB-route-policy-isis2ospf-20] if-match ip address acl 2002
[SwitchB-route-policy-isis2ospf-20] apply tag 20
[SwitchB-route-policy-isis2ospf-20] quit
```

```
[SwitchB] route-policy isis2ospf permit node 30
[SwitchB-route-policy-isis2ospf-30] quit
```

6. Apply the routing policy to route redistribution:

   # On Switch B, enable route redistribution from IS-IS to OSPF and apply the routing policy.

```
[SwitchB] ospf
[SwitchB-ospf-1] import-route isis 1 route-policy isis2ospf
[SwitchB-ospf-1] quit
```

   # Display the OSPF routing table on Switch A.

```
[SwitchA] display ospf routing

          OSPF Process 1 with Router ID 192.168.1.1
                  Routing Tables

 Routing for Network
 Destination        Cost     Type    NextHop         AdvRouter     Area
 192.168.1.0/24     1        Transit 192.168.1.1     192.168.1.1   0.0.0.0

 Routing for ASEs
 Destination        Cost     Type    Tag         NextHop       AdvRouter
 172.17.1.0/24      100      Type2   1           192.168.1.2   192.168.2.2
 172.17.2.0/24      1        Type2   20          192.168.1.2   192.168.2.2
 172.17.3.0/24      1        Type2   1           192.168.1.2   192.168.2.2

 Total Nets: 4
 Intra Area: 1  Inter Area: 0  ASE: 3  NSSA: 0
```

   The output shows that the cost of route 172.17.1.0/24 is 100 and the tag of route 172.17.2.0/24 is 20.

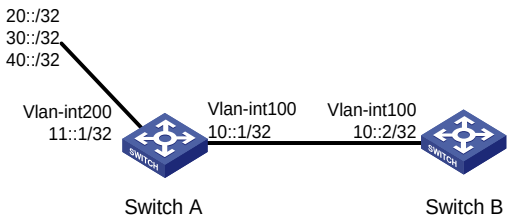
Routing policy configuration example for IPv6 route redistribution

Network requirements

As shown in Figure 2:

- Run RIPng on Switch A and Switch B.
- Configure three static routes on Switch A.
- On Switch A, apply a routing policy to redistribute static routes 20::/32 and 40::/32 and deny route 30::/32.

Figure 2 Network diagram



Configuration procedure

1. Configure Switch A:

Configure IPv6 addresses for VLAN-interface 100 and VLAN-interface 200.

```
<SwitchA> system-view
[SwitchA] interface vlan-interface 100
[SwitchA-Vlan-interface100] ipv6 address 10::1 32
[SwitchA-Vlan-interface100] quit
[SwitchA] interface vlan-interface 200
[SwitchA-Vlan-interface200] ipv6 address 11::1 32
[SwitchA-Vlan-interface200] quit
```

Enable RIPng on VLAN-interface 100.

```
[SwitchA] interface vlan-interface 100
[SwitchA-Vlan-interface100] ripng 1 enable
[SwitchA-Vlan-interface100] quit
```

Configure three static routes with next hop 11::2, and make sure the static routes are active.

```
[SwitchA] ipv6 route-static 20:: 32 11::2
[SwitchA] ipv6 route-static 30:: 32 11::2
[SwitchA] ipv6 route-static 40:: 32 11::2
```

Configure a routing policy.

```
[SwitchA] ipv6 prefix-list a index 10 permit 30:: 32
[SwitchA] route-policy static2ripng deny node 0
[SwitchA-route-policy-static2ripng-0] if-match ipv6 address prefix-list a
[SwitchA-route-policy-static2ripng-0] quit
[SwitchA] route-policy static2ripng permit node 10
[SwitchA-route-policy-static2ripng-10] quit
```

Enable RIPng and apply the routing policy to static route redistribution.

```
[SwitchA] ripng
[SwitchA-ripng-1] import-route static route-policy static2ripng
```

2. Configure Switch B:

Configure the IPv6 address for VLAN-interface 100.

```
<SwitchB> system-view
[SwitchB] interface vlan-interface 100
[SwitchB-Vlan-interface100] ipv6 address 10::2 32
```

Enable RIPng.

```
[SwitchB] ripng
[SwitchB-ripng-1] quit
```

Enable RIPng on VLAN-interface 100.

```
[SwitchB] interface vlan-interface 100
[SwitchB-Vlan-interface100] ripng 1 enable
[SwitchB-Vlan-interface100] quit
```

Verifying the configuration

Display the RIPng routing table on Switch B.

```
[SwitchB] display ripng 1 route
   Route Flags: A - Aging, S - Suppressed, G - Garbage-collect
 ----------------------------------------------------------------

 Peer FE80::7D58:0:CA03:1 on Vlan-interface 100
```

```
Destination 20::/32,
    via FE80::7D58:0:CA03:1, cost 1, tag 0, A, 8 secs
Destination 40::/32,
    via FE80::7D58:0:CA03:1, cost 1, tag 0, A, 3 secs
Local route
Destination 10::/32,
    via ::, cost 0, tag 0, DOF
```