

# Configuring Active-Active VRRP

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## Procedure

**Step1** Configure VLAN.

a) Configure VLAN ID.

```
set vlans vlan-id <vlan-id>
```

b) Configure the interface to VLAN.

```
set interface gigabit-ethernet <port> family ethernet-switching native-vlan-id <vlan-id>
```

c) Configure the IP address of the VLAN.

```
set l3-interface vlan-interface <interface-name> address <address> prefix-length <number>
```

d) Associate a Layer 3 interface with a VLAN.

```
set vlans vlan-id <vlan-id> l3-interface <interface-name>
```

**Step2** Create a VRRP group.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id>
```

### NOTE:

- Two devices in a VRRP group must be configured with the same VRID.
- One chassis switch supports a maximum of 128 VRRP groups. Please set the number of VRRP group based on device performance.
- It is recommended that VRRP groups on different VLAN interfaces of a device should be configured with different VRIDs.
- Currently, VRRP can be configured only on the VLAN interface.

**Step3** Configure the VRRP version number.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> version <2 | 3>
```

By default, the system uses VRRPv2.

**Step4** Enable the VRRP function.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> disable <true | false>
```

By default, the VRRP function is enabled. Currently, VRRP can be configured only on the VLAN interface.

**Step5** Enable the Active-Active VRRP function.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> load-balance disable <true | false>
```

### NOTE:

- By default, the Active-Active VRRP function is disabled.
- The Active-Active VRRP mode must be enabled or disabled on both devices of VRRP group.

**Step6** Configure a virtual IP address for the VRRP group.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> ip <ipv4-address>
```

**NOTE:**

- One VRRP group supports a maximum of 254 virtual IPv4 addresses, and 64 virtual IPv6 addresses.
- For IPv4, the virtual IPv4 address of the VRRP group and the IPv4 address of the interface should be configured in the same network segment to ensure that the VRRP group can work normally.
- The IP address of the virtual router can be either an unassigned IP address in the network segment where the VRRP group resides or the IP address of an interface on a router in the VRRP group. A router whose interface IP address is the same as the virtual IP address is called an "IP address owner".
- The virtual IPv4 address of the VRRP group cannot be all zeros, broadcast address (255.255.255.255), network address or network broadcast address of the segment where the virtual IP address resides, loopback address, non-A / B / C address or any other illegal IP Address (e.g., 0.0.0.1).
- For IPv6, the global virtual IPv6 address of the VRRPv3 group and the global IPv6 address of the interface should be configured in the same network segment to ensure that the VRRPv3 group can work normally.
- In one VRRP group, IPv4 and IPv6 networks cannot be mixed. That is, the configured virtual IP addresses in the same VRRP group could either be IPv4 addresses or IPv6 addresses.
- For IPv6, configure at least one link-local IPv6 address in a VRRPv3 group which will be used as the gateway address for the hosts, the format is FE80::/10.
- Virtual IP address list on both devices of VRRP group must be the same.
- Configure one or more global virtual IPv6 addresses, for the purpose of configuring global addresses via stateless address autoconfiguration of the downstream host refer to RFC2462 IPv6 Stateless Address Autoconfiguration.

**Step7** (Optional) Configure the interval of sending VRRP advertisement packets.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> interval <interval-value>
```

**NOTE:**

- By default, the value is one second.
- The configurations of the interval of sending VRRP advertisement packets on both devices of VRRP group must be the same.

**Step8** (Optional) Configure VRRP preemptive mode.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> preempt enable <true | false>
```

By default, preemptive mode is enabled.

**Step9** (Optional) Configure the interval of updating the virtual MAC.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> load-balance virtual-MAC time-interval <interval-value>
```

**Step10** (Optional) Configure the priority of the device in a VRRP group.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> priority <priority-value>
```

By default, the priority of the device in a VRRP group is 100.

**Step11** (Optional) Configure an authentication mode and authentication key for a VRRP group. Note that VRRP authentication is only supported by VRRPv2, which is not supported by VRRPv3.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> authentication type <none | md5 | simple>
```

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> authentication simple-key <simple-key>
```

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> authentication md5-key <md5-key>
```

**Step12** (Optional) Enable accept mode.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> accept disable <true | false>
```

**NOTE:**

- Accept mode is only supported in VRRPv3.
- By default, accept mode is disabled.

**Step13** (Optional) Configure the parameters for sending router advertisement messages.

```
set protocols vrrp interface <interface-name> vrid <virtual-router-id> ipv6-nd xx
```