



## P Commands

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This chapter describes the Cisco NX-OS Virtual Router Redundancy Protocol (VRRP) commands that begin with P.

# preempt (VRRP)

To enable a high-priority backup virtual router to preempt the low-priority master virtual router, use the **preempt** command. To disable a high-priority backup virtual router from preempting the low-priority master virtual router, use the **no** form of this command.

- preempt**
- no preempt**

**Syntax Description** This command has no arguments or keywords.


**Command Default** Enabled

**Command Modes** VRRP configuration mode

Command History	Release	Modification
	6.0(2)N1(1)	This command was introduced.


**Usage Guidelines** VRRP enables you to preempt a virtual router backup that has taken over for a failing virtual router master with a high-priority virtual router backup that has become available.

By default, a preemptive scheme is enabled. A backup high-priority virtual router that becomes available takes over for the backup virtual router that was elected to become the virtual router master. If you disable preemption, the backup virtual router that is elected to become the virtual router master remains the master until the original virtual router master recovers and becomes the master again.

 **Note** This preemption does not apply to the primary IP address.

If the virtual IP address is also the IP address for the interface, then preemption is applied.

This command does not require a license.

 **Note** Make sure the LAN Base Services license is installed on the switch to enable Layer 3 interfaces.

**Examples** This example shows how to enable the backup high-priority virtual router to preempt the low-priority master virtual router:

```
switch# configure terminal
switch(config)# interface ethernet 2/1
switch(config-if)# no switchport
switch(config-if)# vrrp 250
switch(config-if-vrrp)# preempt
switch(config-if-vrrp)#
```

**Related Commands**

Command	Description
<b>clear vrrp</b>	Clears all the software counters for the specified virtual router.
<b>show vrrp</b>	Displays VRRP configuration information.
<b>vrrp</b>	Configures a VRRP group.

## priority (VRRP)

To set the priority for the Virtual Router Redundancy Protocol (VRRP), use the **priority** command. To revert to the default value, use the **no** form of this command.

**priority** *level* [**forwarding-threshold** **lower** *lower-value* **upper** *upper-value*]

**no priority** *level* [**forwarding-threshold** **lower** *lower-value* **upper** *upper-value*]

### Syntax Description

<i>level</i>	Interface priority for a virtual router. The range of values is from 1 to 254. If this router is the owner of the IP addresses, then the value is automatically set to 254. The default is 100.
<b>forwarding-threshold</b>	(Optional) Sets the threshold used by a virtual port channel (vPC) to determine when to fail over to the vPC trunk.
<b>lower</b> <i>lower-value</i>	(Optional) Sets the low threshold value. The range is from 1 to 254. The default is 1.
<b>upper</b> <i>upper-value</i>	(Optional) Sets the upper threshold value. The range is from 1 to 254. The default is 254.

### Command Default

The default value is 100. For switches whose interface IP address is the same as the primary virtual IP address, the default value is 254.

### Command Modes

VRRP configuration mode

### Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

### Usage Guidelines

The priority determines whether or not a VRRP router functions as a virtual router backup, the order of ascendancy for the VRRP router to become a virtual router master if the virtual router master fails, the role that each VRRP router plays, and what happens if the virtual router master fails.

If a VRRP router owns the IP address of the virtual router and the IP address of the physical interface, then this router functions as a virtual router master.

By default, a preemptive scheme is enabled. A backup high-priority virtual router that becomes available takes over for the backup virtual router that was elected to become the virtual router master. If you disable preemption, then the backup virtual router that is elected to become the virtual router master remains the master until the original virtual router master recovers and becomes the master again.

This command does not require a license.

### Examples

This example shows how to specify the priority for a virtual router:

```
switch# configure terminal
switch(config)# interface ethernet 2/1
```

```
switch(config-if)# no switchport
switch(config-if)# vrrp 250
switch(config-if-vrrp)# priority 2
switch(config-if-vrrp)#
```

**Related Commands**

Command	Description
<b>feature vrrp</b>	Enables VRRP.
<b>preempt</b>	Enables preemption on the virtual router.
<b>show vrrp</b>	Displays VRRP configuration information.
<b>shutdown (VRRP)</b>	Disables the VRRP configuration.
<b>vrrp</b>	Configures a VRRP group.

