



## F Commands

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This chapter describes the Cisco NX-OS unicast routing commands that begin with the letter F.

### feature bgp

To enable the Border Gateway Protocol (BGP), use the **feature bgp** command. To disable BGP, use the **no** form of this command.

**feature bgp**

**no feature bgp**

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

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**Defaults** Disabled

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**Command Modes** Configuration mode

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**SupportedUserRoles** Superuser  
VDC administrator

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<b>Command History</b>	<b>Release</b>	<b>Modified</b>
	4.0(1)	This command was introduced.

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**Usage Guidelines** You must enable the BGP feature before you can configure BGP.  
This command requires the Enterprise Services license.

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**Examples**

The following example shows how to enable a BGP configuration:

```
switch(config)# feature bgp
```

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**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show bgp</b>	Displays BGP configuration information.
<b>router bgp</b>	Creates a BGP instance.

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## feature eigrp

To enable the Enhanced Interior Gateway Protocol (EIGRP), use the **feature eigrp** command. To disable EIGRP, use the **no** form of this command.

**feature eigrp**

**no feature eigrp**

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

**Defaults** Disabled

**Command Modes** Configuration mode

**SupportedUserRoles** Superuser  
VDC administrator

Command History	Release	Modified
	4.0(1)	This command was introduced.

**Usage Guidelines** You must enable the EIGRP feature before you can configure EIGRP.  
This command requires the Enterprise Services license.

**Examples** The following example shows how to enable the EIGRP feature:

```
switch(config)# feature eigrp
```

Related Commands	Command	Description
	<b>show eigrp</b>	Displays EIGRP configuration information.
	<b>router eigrp</b>	Creates a EIGRP instance.

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## feature glbp

To enable the Gateway Load Balancing Protocol (GLBP), use the **feature glbp** command. To disable GLBP, use the **no** form of this command.

**feature glbp**

**no feature glbp**

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

**Defaults** Disabled

**Command Modes** Global configuration

**SupportedUserRoles** Network Administrator  
VDC Administrator

Command History	Release	Modification
	4.0(1)	This command was introduced.

**Usage Guidelines** You must globally enable GLBP before you can configure any GLBP options or create a GLBP group. This command does not require a license.

**Examples** The following example shows how to enable GLBP:

```
switch(config)# feature glbp
```

Related Commands	Command	Description
	<b>authentication</b>	Configures an authentication string for the GLBP group.
	<b>forwarder preempt</b>	Configures a gateway to take over as AVF for a GLBP group if it has a higher priority than the current AVF.
	<b>ip (GLBP)</b>	Activates the GLBP group.
	<b>load-balancing</b>	Specifies the load-balancing method used by the AVG of GLBP.
	<b>preempt</b>	Configures the gateway to take over as AVG for a GLBP group if it has a higher priority than the current AVG.
	<b>priority</b>	Sets the priority level of the gateway within a GLBP group.
	<b>show glbp</b>	Displays GLBP information.

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<b>Command</b>	<b>Description</b>
<b>timers</b>	Configures the time between hello packets sent by the GLBP gateway and the time for which the virtual gateway and virtual forwarder information is considered valid.
<b>timers redirect</b>	Configures the time during which the AVG for a GLBP group continues to redirect clients to a secondary AVF.
<b>track</b>	Configures an interface to be tracked where the GLBP weighting changes are based on the state of the interface.
<b>weighting</b>	Specifies the initial weighting value of the GLBP gateway.
<b>weighting track</b>	Specifies a tracking object where the GLBP weighting changes are based on the availability of the object being tracked.

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## feature hsrp

To enter Hot Standby Router Protocol (HSRP) configuration mode and enable HSRP, use the **feature hsrp** command. To disable HSRP, use the **no** form of this command.

**feature hsrp**

**no feature hsrp**

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

**Defaults** Disabled

**Command Modes** Global configuration

**SupportedUserRoles** Superuser  
VDC administrator

Command History	Release	Modification
	4.0(1)	This command was introduced.

**Usage Guidelines** Use the **feature hsrp** command to enter HSRP configuration mode and enable HSRP. This command does not require a license.

**Examples** The following example shows how to enable HSRP on Ethernet interface 1/1:

```
switch# config t
switch(config)# feature hsrp
switch(config-hsrp)#
```

Related Commands	Command	Description
	<b>hsrp group</b>	Creates and activates an HSRP group.
	<b>show hsrp</b>	Displays HSRP information.

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## feature isis

To enable the Intermediate System to Intermediate System Protocol (IS-IS), use the **feature isis** command. To disable ISIS, use the **no** form of this command.

**feature isis**

**no feature isis**

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

**Defaults** Disabled

**Command Modes** Configuration mode

**SupportedUserRoles** Superuser  
VDC administrator

Command History	Release	Modified
	4.0(1)	This command was introduced.

**Usage Guidelines** You must enable the IS-IS feature before you can configure IS-IS.  
This command requires the Enterprise Services license.

**Examples** The following example shows how to enable the IS-IS feature:

```
switch(config)# feature isis
```

Related Commands	Command	Description
	<b>show isis</b>	Displays IS-IS configuration information.
	<b>router isis</b>	Creates an IS-IS instance.

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## feature ospf

To enable the Open Shortest Path First Protocol (OSPF), use the **feature ospf** command. To disable OSPF, use the **no** form of this command.

**feature ospf**

**no feature ospf**

---

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

---

**Defaults** Disabled

---

**Command Modes** Configuration mode

---

**SupportedUserRoles** Superuser  
VDC administrator

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Command History	Release	Modified
	4.0(1)	This command was introduced.

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**Usage Guidelines** You must enable the OSPF feature before you can configure OSPF.  
This command requires the Enterprise Services license.

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**Examples** The following example shows how to enable the OSPF feature:

```
switch(config)# feature ospf
```

---

Related Commands	Command	Description
	<b>show ospf</b>	Displays OSPF configuration information.
	<b>router ospf</b>	Creates an OSPF instance.

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## feature ospfv3

To enable the Open Shortest Path First version 3 Protocol(OSPFv3), use the **feature ospfv3** command. To disable OSPFv3, use the **no** form of this command.

**feature ospfv3**

**no feature ospfv3**

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

**Defaults** Disabled

**Command Modes** Configuration mode

**SupportedUserRoles** Superuser  
VDC administrator

Command History	Release	Modified
	4.0(1)	This command was introduced.

**Usage Guidelines** You must enable the OSPFv3 feature before you can configure OSPFv3. This command requires the Enterprise Services license.

**Examples** The following example shows how to enable the OSPv3 feature:

```
switch(config)# feature ospfv3
```

Related Commands	Command	Description
	<b>show ospfv3</b>	Displays OSPFv3 configuration information.
	<b>router ospfv3</b>	Creates an OSPFv3 instance.

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## feature pbr

To enable the policy-based routing (PBR) feature, use the **feature pbr** command. To disable PBR, use the **no** form of this command.

**feature pbr**

**no feature pbr**

---

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

---

**Defaults** Disabled

---

**Command Modes** Configuration mode

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**SupportedUserRoles** Superuser  
VDC administrator

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Release	Modified
4.0(1)	This command was introduced.

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**Usage Guidelines** You must enable the PBR feature before you can configure policy-based routing.  
This command requires the Enterprise Services license.

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**Examples** The following example shows how to enable the PBR feature:

```
switch(config)# feature pbr
```

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Command	Description
<b>ip policy route-map</b>	Assigns a policy-based route map to an interface.
<b>show ip policy</b>	Displays information about policy-based routing.

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# feature rip

To enable throttling Information Protocol (RIP), use the **feature rip** command. To disable RIP, use the **no** form of this command.

**feature rip**

**no feature rip**

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

**Defaults** Disabled

**Command Modes** Configuration mode

**SupportedUserRoles** Superuser  
VDC administrator

Command History	Release	Modified
	4.0(1)	This command was introduced.

**Usage Guidelines** You must enable the RIP feature before you can configure RIP.  
This command does not require a license.

**Examples** The following example shows how to enable the RIP feature:

```
switch(config)# feature rip
```

Related Commands	Command	Description
	<b>show rip</b>	Displays RIP configuration information.
	<b>router rip</b>	Creates a RIP instance.

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## feature vrrp

To enable the Virtual Router Redundancy Protocol (VRRP), use the **feature vrrp** command. To disable VRRP, use the **no** form of this command.

**feature vrrp**

**no feature vrrp**

---

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

---

**Defaults** Disabled

---

**Command Modes** Configuration mode

---

**SupportedUserRoles** Superuser  
VDC administrator

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Release	Modified
4.0(1)	This command was introduced.

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**Usage Guidelines** You must enable the VRRP feature before you can configure VRRP.  
This command does not require a license.

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**Examples** The following example shows how to enable the VRRP feature:

```
switch(config)# feature vrrp
```

---

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

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## flush-routes (OSPF)

To flush routes on a nongraceful controlled restart for the Open Shortest Path First (OSPF) protocol, use the **flush-routes** command. To disable this feature, use the **no** form of this command.

**flush-routes**

**no flush-routes**

---

**Syntax Description** None

---

**Defaults** Disabled

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**Command Modes** Router configuration

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**SupportedUserRoles** network-admin  
vdc-admin

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Command History	Release	Modification
	4.0(1)	This command was introduced.

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**Usage Guidelines** Use the **flush-routes** command when the OSPF Graceful Restart feature is not enabled.

This commands causes OSPF to unregister from the unicast RIB when OSPF shuts down. The unicast RIB removes all the routes associated with this ospf instance. If you do not configure the **flush-routes** command, OSPF will not unregister and the OSPF routes will be stale. The OSPF routs are eventually removed from the unicast RIB after a timeout period. If OSPF comes back up in p in graceful restart mode, the routes will be refreshed in the unicast RIB.

This command requires the Enterprise Services license.

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**Examples** The following example shows how to flush routes for a nongraceful restart:

```
switch(config)# router ospf 202
switch(config-router)# flush-routes
```

---

Related Commands	Command	Description
	<b>graceful-restart</b>	Enables OSPF Graceful Restart.

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## flush-routes (OSPFv3)

To flush routes on a nongraceful controlled restart for the Open Shortest Path First version 3 (OSPFv3) protocol, use the **flush-routes** command. To disable this feature, use the **no** form of this command.

**flush-routes**

**no flush-routes**

### Syntax Description

None

### Defaults

Disabled

### Command Modes

Router configuration

### Supported User Roles

network-admin  
vdc-admin

### Command History

Release	Modification
4.0(1)	This command was introduced.

### Usage Guidelines

Use the **flush-routes** command when the OSPFv3 Graceful Restart feature is not enabled.

This command causes OSPF to unregister from the unicast RIB when OSPFv3 shuts down. The unicast RIB removes all the routes associated with this ospf instance. If you do not configure the **flush-routes** command, OSPFv3 will not unregister and the OSPFv3 routes will be stale. The OSPFv3 routes are eventually removed from the unicast RIB after a timeout period. If OSPFv3 comes back up in graceful restart mode, the routes will be refreshed in the unicast RIB.

This command requires the Enterprise Services license.

### Examples

This example shows how to flush routes for a nongraceful restart:

```
switch(config)# router ospfv3 202
switch(config-router)# flush-routes
```

### Related Commands

Command	Description
<b>graceful-restart</b>	Enables OSPFv3 Graceful Restart.

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## forwarder preempt

To configure a gateway to take over as the active virtual forwarder (AVF) for a Gateway Load Balancing Protocol (GLBP) group if the current AVF falls below its low weighting threshold, use the **forwarder preempt** command. To disable this function, use the **no** form of this command.

**forwarder preempt** [**delay minimum** *seconds*]

**no forwarder preempt** [**delay minimum** *seconds*]

<b>Syntax Description</b>	<b>delay minimum</b> <i>seconds</i>	(Optional) Specifies a minimum number of seconds that the gateway delays before taking over the role of AVF. The range is from 0 to 3600 seconds with a default delay of 30 seconds.
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<b>Command Default</b>	Forwarder preemption is enabled with a default delay of 30 seconds.
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<b>Command Modes</b>	GLBP configuration
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<b>SupportedUserRoles</b>	network-admin VDC Administrator
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	4.0(1)	This command was introduced.

<b>Usage Guidelines</b>	This command does not require a license.
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<b>Examples</b>	The following example shows how to configure a gateway to preempt the current AVF when the current AVF falls below its low weighting threshold. If the gateway preempts the current AVF, it waits 60 seconds before taking over the role of the AVF.
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```
switch(config)# interface ethernet 1/1
switch(config-if)# glbp 2
switch(config-glbp)# forwarder preempt delay minimum 60
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>glbp</b>	Enters GLBP configuration mode and creates a GLBP group.

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