Show Commands

This chapter describes the Cisco NX-OS Border Gateway Protocol (BGP) **show** commands.

show bgp

To display Border Gateway Protocol (BGP) routes, use the **show bgp** command.

show bgp {**all** | **ipv4** {**unicast** | **multicast**} [*addr* | *prefix* [**longer-prefixes**]] [**vrf** *vrf-name* | **all**]}

Syntax Description

all	Displays BGP information for all address families.
ipv4	Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
addr	(Optional) Network from the selected address family. The format is A.B.C.D for IPv4.
prefix	(Optional) Prefix from the selected address family. The format is A.B.C.D/length for IPv4.
longer-prefixes	(Optional) Displays the prefix and any more specific routes.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies all VRF.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   Use the **show bgp** command to display information about BGP.

This command requires the LAN Enterprise Services license.

Examples   This example shows how to display an entry in the BGP table:

```
switch# show bgp ipv4 multicast
BGP routing table information for VRF default, address family IPv4 Multicast
BGP table version is 5, local router ID is 2.2.2.3
Status: s-suppressed, x-deleted, S-stale, d-dampened, h-history, *-valid, >-best
Path type: i-internal, e-external, c-confed, l-local, a-aggregate, r-redist
Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath

   Network          Next Hop          Metric     LocPrf     Weight Path
   192.168.1.3      0.0.0.0                          100      32768 i
switch#
```

Related Commands	Command	Description
	clear bgp	Clears entries in the BGP table.

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show bgp community

To display Border Gateway Protocol (BGP) routes that match a community, use the **show bgp community** command.

show bgp {{**ip** | **ipv4**} {**unicast** | **multicast**}} **community** [*as-number*] [**no-advertise**] [**no-export**] [**no-export-subconfed**] [**exact-match**]} [**vrf** *vrf-name*]

Syntax Description

ip	Displays BGP information for the IPv4 address family.
ipv4	Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
as-number	(Optional) AS number. The AS number can be a 16-bit integer or a 32-bit integer in the form of <higher 16-bit decimal number>.<lower 16-bit decimal number>.
no-advertise	(Optional) Displays the no-advertise community.
no-export	(Optional) Displays the no-export community.
no-export-subconfed	(Optional) Displays the no-export-subconfed community.
exact-match	(Optional) Displays an exact match of the community.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

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

Command History

Usage Guidelines

This command requires the LAN Enterprise Services license.

Examples

This example shows how to display the routes that match a community:

```
switch# show bgp ip multicast community no-advertise
```

Related Commands

Command	Description
ip community-list	Creates a community list.

show bgp community-list

To display Border Gateway Protocol (BGP) routes that match a community list, use the **show bgp community-list** command.

> show bgp {{**ip** | **ipv4**} {**unicast** | **multicast**}} **community-list** *commlist-name* [**exact-match**] [**vrf** *vrf-name*]

Syntax Description

ip	Displays BGP information for the IPv4 address family.
ipv4	Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
commlist-name	Name of a community-list. The commlist-name can be any case-sensitive, alphanumeric string up to 63 characters.
exact-match	(Optional) Displays an exact match of the communities.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

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

Usage Guidelines

This command requires the LAN Enterprise Services license.

Examples

This example shows how to display the routes that match a community list:

```
switch(config)# show bgp ip unicast community-list test1
```

Related Commands

Command	Description
ip community-list	Creates a community list.

show bgp extcommunity

To display Border Gateway Protocol (BGP) routes that match an extended community, use the **show bgp extcommunity** command.

show bgp {{**ip** | **ipv4**} {**unicast** | **multicast**}} **extcommunity 4byteas-generic** {**non-transitive** | **transitive**} [*as4-number*] [**exact-match**] [**vrf** *vrf-name*]

Syntax Description

ip	Displays BGP information for the IPv4 address family.
ipv4	Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
4byteas-generic	Displays the routes that match the generic specifice extended communities.
non-transitive	Displays the routes that match the nontransitive extended communities.
transitive	Displays the routes that match the transitive extended communities.
as4-number	AS number. The *as4-number* is a 32-bit integer in the form of a plaintext integer or <higher 16-bit decimal number>.<lower 16-bit decimal number> .
exact-match	(Optional) Displays an exact match of the extended community.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) context name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

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

Usage Guidelines

This command requires the LAN Enterprise Services license.

Examples

This example shows how to display the routes that match an extended community:

```
switch(config)# show bgp ip unicast extcommunity 4byteas-generic transitive 1.3:30
```

Related Commands

Command	Description
ip extcommunity-list	Creates an extended community list.

show bgp extcommunity-list

To display Border Gateway Protocol (BGP) routes that match an extended community list, use the **show bgp extcommunity-list** command.

> show bgp {{**ip** | **ipv4**} {**unicast** | **multicast**}} **extcommunity-list** *commlist-name* [**exact-match**] [**vrf** *vrf-name*]

Syntax Description

ip	Displays BGP information for the IPv4 address family.
ipv4	Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
commlist-name	Name of an extended community-list. The *commlist-name* can be any case-sensitive, alphanumeric string up to 63 characters.
exact-match	(Optional) Displays an exact match of the extended communities.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

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

Usage Guidelines

This command requires the LAN Enterprise Services license.

Examples

This example shows how to display the routes that match a community list:

```
switch(config)# show bgp ipv4 unicast extcommunity-list test1
```

Related Commands

Command	Description
ip extcommunity-list	Creates an extended community list.

show bgp neighbors

To display Border Gateway Protocol (BGP) neighbors, use the **show bgp neighbors** command.

show bgp {**ip** | **ipv4**} {**unicast** | **multicast**} **neighbors** [*addr* [**advertised-routes** | **flap-statistics** | **paths** | **received-routes** | **routes** [**advertised** | **dampened** | **received**]]] [**vrf** {**all** | *vrf-name*}]

Syntax Description

ip	Displays the IPv4 neighbor information.
ipv4	Displays the IPv4 neighbor information.
unicast	Displays the unicast neighbor information.
multicast	Displays the multicast neighbor information.
addr	IPv4 address. The format is x.x.x.x
advertised-routes	(Optional) Displays all the routes advertised to this neighbor.
flap-statistics	(Optional) Displays flap statistics for the routes received from this neighbor.
paths	(Optional) Displays AS paths learned from this neighbor.
received-routes	(Optional) Displays all the routes received from this neighbor.
routes	(Optional) Displays the routes received or advertised to or from this neighbor.
advertised	(Optional) Displays all the routes advertised for this neighbor.
dampened	(Optional) Displays all dampened routes received from this neighbor.
received	(Optional) Displays all the routes received from this neighbor.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	Specifies all VRF.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP neighbors:

```
switch(config)# show bgp ip unicast neighbors
```

Related Commands	Command	Description
	show ip bgp neighbors	Displays the IPv4 BGP information.

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show bgp sessions

To display Border Gateway Protocol (BGP) sessions, use the **show bgp sessions** command.

show bgp sessions [**vrf** *vrf-name*]

Syntax Description

vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP sessions:

```
switch# show bgp sessions
Total peers 2, established peers 0
ASN 102
VRF default, local ASN 102
peers 2, established peers 0, local router-id 2.2.2.3
State: I-Idle, A-Active, O-Open, E-Established, C-Closing, S-Shutdown

Neighbor        ASN    Flaps LastUpDn|LastRead|LastWrit St Port(L/R)  Notif(S/R)
10.0.0.100      64497 0     01:31:58|never   |never    I  0/0         0/0
192.168.1.3        0 0     00:03:25|never   |never    I  0/0         0/0
switch#
```

Related Commands

Command	Description
clear bgp	Clears BGP sessions.

show bgp statistics

To display Border Gateway Protocol (BGP) traffic statistics, use the **show bgp statistics** command.

show bgp statistics

Syntax Description   This command has no argument or keywords.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP traffic statistics:

```
switch# show bgp statistics

Neighbor aggregated statistics (sent/received)
 Msgs                Bytes               Opens               Updates

 0/0                 0/0                 0/0                 0/0


 Keepalives          Notifications       Route-refresh       Capabilities

 0/0                 0/0                 0/0                 0/0


BGP I/O Information
Active Open attempts             : 0
Passive Open attempts            : 0
BGP I/O Open loops               : 117
BGP I/O Open calls               : 0
BGP I/O Open recv calls          : 0
BGP I/O Send calls               : 0
BGP I/O Recv calls               : 0
BGP I/O Write calls              : 0
BGP I/O Write loops              : 1
BGP I/O Write loop yields        : 0
BGP I/O Read calls               : 0
BGP I/O Read loops               : 117
BGP I/O Read loop yields         : 0
BGP I/O process nlri yields      : 0
BGP I/O process withdraw yields  : 0
BGP Read time exceeded           : 0
```

```
BGP Update send pending       : 0
BGP Update buffer not available : 0
BGP Update walk suspended     : 0
BGP Yielded in updates        : 0
BGP Yielded in packing        : 0
BGP No sendbuf for peer       : 0
BGP No withdraw buf for peer  : 0
BGP Yields in update peer loop : 0
No updates pending or no buffers : 1
No data to write              : 1
Msg queue recv errors         : 0
Sockets create/accept/close   : 2/0/0
Sockets create retries/failures : 0/0
switch#
```

Related Commands	Command	Description
	clear bgp	Clears BGP sessions.

show ip bgp

To display entries in the Border Gateway Protocol (BGP) table, use the **show ip bgp** command.

show ip bgp [*ip-addr | ip-prefix* [**longer-prefixes**]] [**received-paths**] [**regexp** *expression*]
[**route-map** *map-name*] [**summary**] [**vrf** *vrf-name*]

Syntax Description

ip-addr	(Optional) Network from the BGP route table. The format is x.x.x.x.
ip-prefix	(Optional) Prefix from the BGP route table. The format is x.x.x.x/length.
longer-prefixes	(Optional) Displays the prefix and any more specific routes.
received-paths	(Optional) Displays paths stored for soft reconfiguration.
regexp *expression*	(Optional) Displays information that matches the regular expression.
route-map *map-name*	(Optional) Displays routes that match the route map. The map name can be any case-sensitive, alphanumeric string up to 63 characters.
summary	(Optional) Displays the summary of the routes.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

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

Usage Guidelines

This command requires the LAN Enterprise Services license.

Examples

This example shows how to display the BGP route table:

```
switch(config-router)# show ip bgp
```

Related Commands

Command	Description
clear ip bgp	Clears entries in the BGP route table.

show ip bgp all

To display the Border Gateway Protocol (BGP) entries for all address families, use the **show ip bgp all** command.

show ip bgp all [*ip-addr* | *ip-prefix* [**longer-prefixes**]] [**filter-list** *list-name*] [**community-list** *commlist-name* [**exact-match**]] [**flap-statistics**] [**nexthop-database**] [**received-paths**] [**regexp** *expression*][**route-map** *map-name*] [**summary**] [**vrf** {*vrf-name* | **all**}]

show ip bgp all community [*comm-name*] [{{**internet** | **no-advertise** | **no-export** | **no-export-subconfed**} | **exact-match**}] [**vrf** {*vrf-name* | **all**}]

show ip bgp all extcommunity 4byteas-generic {**non-transitive** | **transitive**} [*as4-number*] [**exact-match**] [**vrf** {*vrf-name* | **all**}]

show ip bgp all dampening {**dampened-paths** [**regexp** *expression*] | **flap-statistics** | **history-paths** [**regexp** *expression*] | **parameters**} [**vrf** {*vrf-name* | **all**}]

show ip bgp all neighbors [*ip-addr* [**advertised-routes** | **flap-statistics** | **paths** | **received-routes** | **routes** [**advertised** | **dampened** | **received**]]] [**vrf** {*vrf-name* | **all**}]

Syntax Description		
ip-addr	(Optional) Network from the BGP route table. The format is x.x.x.x.	
ip-prefix	(Optional) Prefix from the BGP route table. The format is x.x.x.x/length.	
longer-prefixes	(Optional) Displays the prefix and any more specific routes.	
filter-list	(Optional) Displays BGP routes that match a filter list.	
list-name	Name of a filter list. The name can be any case-sensitive, alphanumeric string up to 63 characters.	
community-list *commlist-name*	(Optional) Display routes matching the community-list. The *commlist-name* can be any case-sensitive, alphanumeric string up to 63 characters.	
exact-match	(Optional) Displays an exact match of the communities.	
flap-statistics	Displays flap statistics for routes.	
nexthop-database	(Optional) Displays the BGP next-hop database.	
received-paths	(Optional) Displays paths stored for soft reconfiguration.	
regexp *expression*	(Optional) Displays information that matches the regular expression.	
route-map *map-name*	(Optional) Displays routes that match the route map. The map name can be any case-sensitive, alphanumeric string up to 63 characters.	
summary	(Optional) Displays the summary of the routes.	
community	Displays BGP routes that match a community list.	
community-number	(Optional) Community number. Valid value is a community number in the range from 1 to 4294967200, or **AA**:**NN** (autonomous system-community number/2-byte number).	
no-export	(Optional) Displays routes with this community that are advertised to only peers in the same autonomous system or to only other subautonomous systems within a confederation.	
no-advertise	(Optional) Displays routes that are not advertise to any peer (internal or external).	

no-export-subconfed	(Optional) Displays routes that are part of the well-known community no-export-subconfed.
internet	(Optional) Displays routes that are part of the well-known community internet community.
extcommunity	Displays routes that match an extended community.
4byteas-generic	(Optional) Displays the routes that match the generic specifice extended communities.
non-transitive	(Optional) Displays the routes that match the non-transitive extended communities.
transitive	(Optional) Displays the routes that match the transitive extended communities.
as4-number	(Optional) AS number. The *as4-number* is a 32-bit integer in the form of a plaintext integer or <higher 16-bit decimal number>.<lower 16-bit decimal number> .
exact-match	(Optional) Displays an exact match of the extended community.
dampening	Displays all dampening information.
dampened-paths	(Optional) Displays all dampened paths.
regexp *expression*	(Optional) Display information that matches the regular expression.
history-paths	(Optional) Displays all history paths.
parameters	(Optional) Displays all dampening parameters.
neighbors	Displays all BGP neigbors.
advertised-routes	(Optional) Displays all the routes advertised to this neighbor.
flap-statistics	(Optional) Displays flap statistics for the routes received from this neighbor.
paths	(Optional) Displays AS paths learned from this neighbor.
received-routes	(Optional) Displays all the routes received from this neighbor.
routes	(Optional) Displays the routes received or advertised to or from this neighbor.
advertised	(Optional) Displays all the routes advertised for this neighbor.
dampened	(Optional) Displays all dampened routes received from this neighbor.
received	(Optional) Displays all the routes received from this neighbor.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies the VFR reserved all name.

Command Default None

Command Modes Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP entries for all address families:

```
switch# show ip bgp all
BGP routing table information for VRF default, address family IPv4 Multicast
BGP table version is 5, local router ID is 2.2.2.3
Status: s-suppressed, x-deleted, S-stale, d-dampened, h-history, *-valid, >-best
Path type: i-internal, e-external, c-confed, l-local, a-aggregate, r-redist
Origin codes: i - IGP, e - EGP, ? - incomplete, | - multipath

   Network           Next Hop          Metric     LocPrf    Weight Path
   192.168.1.3/2       0.0.0.0                       100      32768 i
switch#
```

This example shows how to display a summary of the state of the BGP route table:

```
switch# show ip bgp all summary
BGP summary information for VRF default, address family IPv4 Multicast
BGP router identifier 2.2.2.3, local AS number 102
BGP table version is 5, IPv4 Multicast config peers 2, capable peers 0
1 network entries and 1 paths using 104 bytes of memory
BGP attribute entries [1/124], BGP AS path entries [0/0]
BGP community entries [0/0], BGP clusterlist entries [0/0]

Neighbor        V    AS MsgRcvd MsgSent   TblVer  InQ OutQ Up/Down  State/PfxRcd
10.0.0.100      4 64497       0       0        0    0    0 03:20:10 Idle
192.168.1.3     4     0       0       0        0    0    0 01:51:38 Idle
switch#
```

Related Commands

Command	Description
clear ip bgp	Clears entries in the BGP route table.

show ip bgp community

To display Border Gateway Protocol (BGP) routes that match a community list, use the **show ip bgp community** command.

show ip bgp community {*community-number*] [{**internet** | **no-advertise** | **no-export** | **no-export-subconfed**}} [**vrf** {*vrf-name* | **all**}]

Syntax Description		
	community-number	Community number. Valid value is a community number in the range from 1 to 4294967200, or **AA**:**NN** (autonomous system-community number/2-byte number).
	internet	Displays routes that are part of the well-known community internet community.
	no-advertise	Displays routes that are not advertise to any peer (internal or external).
	no-export	Displays routes with this community that are advertised to only peers in the same autonomous system or to only other subautonomous systems within a confederation.
	no-export-subconfed	Displays routes that are part of the well-known community no-export-subconfed.
	vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance. The name can be any case-sensitive, alphanumeric string up to 32 characters.
	all	(Optional) Specifies the reserved all VRF.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the routes that are part of the 201 BGP community:

```
switch# show ip bgp community 201
```

This example shows how to display the routes that are part of the no-advertise BGP community and all VRF:

```
switch# show ip bgp community no-advertise
```

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Related Commands	Command	Description
	set community	Sets the attributes for BGP communities.
	show ip bgp community-list	Displays BGP routes that are permitted by the BGP community list.
	show ip bgp community exact-match	Displays the routes that have exactly the same specified BGP communities.

show ip bgp community exact-match

To display routes that matches a specific Border Gateway Protocol (BGP) community, use the **show ip bgp community exact-match** command.

show ip bgp community *community-number* **exact-match** [**vrf** {**all** | *vrf-name*}]

Syntax Description

community-number	Community number. Valid value is a community number in the range from 1 to 4294967200, or **AA**:**NN** (autonomous system-community number/2-byte number).
exact-match	Displays only routes that have exactly the same specified communities.
all	(Optional) Specifies the reserved all VRF.
vrf *vrf-name*	(Optional) Specifies the virtual routing and forwarding (VRF) instance. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the routes that have exactly the same specified BGP communities:

```
switch# show ip bgp community 201 exact-match
```

Related Commands

Command	Description
set community	Sets the attributes for BGP communities.
show ip bgp community	Displays the BGP routes that match a community list.
show ip bgp community-list	Displays BGP routes that are permitted by the BGP community list.

show ip bgp community-list

To display Border Gateway Protocol (BGP) routes that are permitted by the BGP community list, use the **show ip bgp community-list** command.

show ip bgp [**ipv4** {**unicast** | **multicast**} | **all**] **community-list** *commlist-name* [**exact-match**]} [**vrf** *vrf-name*]

Syntax Description

ipv4	(Optional) Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
all	Displays BGP information for all address families.
community-list *commlist-name*	Display routes matching the community-list. The *commlist-name* can be any case-sensitive, alphanumeric string up to 63 characters.
exact-match	(Optional) Displays an exact match of the communities.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display routes that match a community list:

```
switch(config)# show ip bgp community-list test1
```

Related Commands

Command	Description
ip community-list	Creates a community list.

show ip bgp dampening

To display Border Gateway Protocol (BGP) dampening information, use the **show ip bgp dampening** command.

show ip bgp [**ipv4** {**unicast** | **multicast**} | **all**] **dampening** {**dampened-paths** [**regexp** *expression*] | **flap-statistics** | **history-paths** [**regexp** *expression*] | **parameters**} [**vrf** *vrf-name*]

Syntax Description

ipv4	(Optional) Displays BGP information for the IPv4 address family.
unicast	Displays BGP information for the unicast address family.
multicast	Displays BGP information for the multicast address family.
all	(Optional) Displays BGP information for all address families.
dampened-paths	Displays all dampened paths.
regexp *expression*	(Optional) Display information that matches the regular expression.
flap-statistics	Displays flap statistics for routes.
history-paths	Displays all history paths.
parameters	Displays all dampening parameters.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the dampening information:

```
switch(config)# show ip bgp dampening dampened-paths
```

Related Commands

Command	Description
address-family (BGP router)	Configures BGP parameters.
dampening (BGP)	Configures the route flap dampening.

show ip bgp extcommunity

To display Border Gateway Protocol (BGP) routes that match an extended community, use the **show ip bgp extcommunity** command.

show ip bgp extcommunity generic {**non-transitive** | **transitive**} [*as4-number*] [**exact-match**] [**vrf** *vrf-name*]

Syntax Description		
generic	Displays the routes that match the generic specifice extended communities.	
non-transitive	Displays the routes that match the non-transitive extended communities.	
transitive	Displays the routes that match the transitive extended communities.	
as4-number	(Optional) AS number. The *as4-number* is a 32-bit integer in the form of a plaintext integer or <higher 16-bit decimal number>.<lower 16-bit decimal number> .	
exact-match	(Optional) Displays an exact match of the extended community.	
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.	

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display routes that match an extended community:

```
switch(config)# show ip bgp extcommunity generic transitive 1.3:30
```

Related Commands

Command	Description
ip extcommunity-list	Creates an extended community list.

show ip bgp extcommunity-list

To display Border Gateway Protocol (BGP) routes that match an extended community list, use the **show ip bgp extcommunity-list** command.

show ip bgp extcommunity-list *commlist-name* [**exact-match**] [**vrf** *vrf-name*]

Syntax Description

commlist-name	Name of an extended community-list. The *commlist-name* can be any case-sensitive, alphanumeric string up to 63 characters.
exact-match	(Optional) Displays an exact match of the extended communities.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display routes that match a community list:

```
switch(config)# show ip bgp extcommunity-list test1
```

Related Commands

Command	Description
ip extcommunity-list	Creates an extended community list.

show ip bgp filter-list

To display Border Gateway Protocol (BGP) routes that match a filter list, use the **show ip bgp filter-list** command.

show ip bgp filter-list *list-name* [**exact-match**] [**vrf** *vrf-name*]

Syntax Description

list-name	Name of a filterlist. The name can be any case-sensitive, alphanumeric string up to 63 characters.
exact-match	(Optional) Displays an exact match of the filter.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display routes that match a filter list:

```
switch(config)# show ip bgp filter-list test1
```

Related Commands

Command	Description
filter-list	Assigns an autonomous system (AS) path filter to a BGP peer.
show ip bgp all	Displays the BGP entries for all address families.

show ip bgp flap-statistics

To display Border Gateway Protocol (BGP) flap statistics, use the **show ip bgp flap-statistics** command.

show ip bgp flap-statistics [**vrf** *vrf-name*]

Syntax Description

vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the flap statistics:

```
switch(config)# show ip bgp flap-statistics
```

Related Commands

Command	Description
clear bgp flap-statistics	Clears BGP route flap statistics.

show ip bgp neighbors

To display Border Gateway Protocol (BGP) neighbors, use the **show ip bgp neighbors** command.

show ip bgp neighbors [*addr* [**advertised-routes** | **flap-statistics** | **paths** | **received-routes** | **routes** [**advertised** | **dampened** | **received**]]] [**vrf** {**all** | *vrf-name*}]

Syntax Description

addr	(Optional) IPv4 address. The format is x.x.x.x
advertised-routes	(Optional) Displays all the routes advertised to this neighbor.
flap-statistics	(Optional) Displays flap statistics for the routes received from this neighbor.
paths	(Optional) Displays AS paths learned from this neighbor.
received-routes	(Optional) Displays all the routes received from this neighbor.
routes	(Optional) Displays the routes received or advertised to or from this neighbor.
advertised	(Optional) Displays all the routes advertised for this neighbor.
dampened	(Optional) Displays all dampened routes received from this neighbor.
received	(Optional) Displays all the routes received from this neighbor.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies all VRF.

Command Default

None

Command Modes

Any command mode

Command History

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

Usage Guidelines

This command requires the LAN Enterprise Services license.

Examples

This example shows how to display the BGP neighbors:

```
switch(config)# show ip bgp neighbors
```

Related Commands

Command	Description
neighbor	Configures BGP neighbors.

show ip bgp nexthop

To display Border Gateway Protocol (BGP) next-hop information, use the **show ip bgp nexthop** command.

show ip bgp nexthop *addr* [**vrf** *vrf-name*]

Syntax Description	*addr*	IPv4 address. The format is x.x.x.x
	vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP next-hop information:

```
switch(config)# show ip bgp nexthop 192.0.2.1
```

Related Commands

Command	Description
show ip bgp neighbors	Displays BGP neighbor information.

show ip bgp nexthop-database

To display Border Gateway Protocol (BGP) next-hop database, use the **show ip bgp nexthop-database** command.

show ip bgp nexthop-database [**vrf** *vrf-name*]

Syntax Description

vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP next-hop database:

```
switch(config)# show ip bgp nexthop-database
```

Related Commands

Command	Description
show ip bgp neighbors	Displays BGP neighbor information.

show ip bgp paths

To display all the Border Gateway Protocol (BGP) paths in the database, use the **show ip bgp paths** command.

show ip bgp paths

Syntax Description   This command has no arguments or keywords.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP paths in the database:

```
switch(config)# show ip bgp paths
Address    Hash Refcount    Metric Path
0x5a5e46bc 2001        1         0 i
switch#
```

Related Commands

Command	Description
maximum-paths	Controls the maximum number of parallel routes that the Border Gateway Protocol (BGP) can support.
show ip bgp	Displays the BGP table information.
show ip bgp neighbors	Displays BGP neighbor information.

show ip bgp peer-policy

To display Border Gateway Protocol (BGP) peer policy template information, use the **show ip bgp peer-policy** command.

show ip bgp peer-policy *name*

Syntax Description

name	Name of a BGP template. The name can be any case-sensitive, alphanumeric string up to 63 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Command History

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP peer policy:

```
switch(config)# show ip bgp peer-policy test1
```

Related Commands

Command	Description
inherit peer-policy	Inherits a peer policy template for a neighbor.
template peer-policy	Configures a peer policy template.

show ip bgp peer-session

To display Border Gateway Protocol (BGP) peer session template information, use the **show ip bgp peer-session** command.

> **show ip bgp peer-session** *name*

Syntax Description

name	Name of a BGP template. The name can be any case-sensitive, alphanumeric string up to 63 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP peer session:

```
switch(config)# show ip bgp peer-session test1
```

Related Commands

Command	Description
inherit peer-session	Inherits a peer session template for a neighbor.
template peer-session	Configures a peer session template.

show ip bgp peer-template

To display Border Gateway Protocol (BGP) peer template information, use the **show ip bgp peer-template** command.

show ip bgp peer-template *name*

Syntax Description	*name* Name of a BGP template. The name can be any case-sensitive, alphanumeric string up to 63 characters.

Command Default None

Command Modes Any command mode

Command History

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

Usage Guidelines This command requires the LAN Enterprise Services license.

Examples This example shows how to display the BGP peer template:

```
switch(config)# show ip bgp peer-template peer1
```

Related Commands

Command	Description
inherit peer-template	Inherits a peer template for a neighbor.
template peer	Configures a peer template.

show ip bgp prefix-list

To display Border Gateway Protocol (BGP) routes that match a prefix list, use the **show ip bgp prefix-list** command.

show ip bgp prefix-list *list-name* [**exact-match**] [**vrf** *vrf-name*]

Syntax Description

list-name	Name of a prefix list. The commlist-name can be any case-sensitive, alphanumeric string up to 63 characters.
exact-match	(Optional) Displays an exact match of the filter.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display routes that match a prefix list:

```
switch(config)# show ip bgp prefix-list test1
```

Related Commands

Command	Description
maximum-prefix	Controls the number of prefixes that can be received from a BGP neighbor.

show ip bgp received-paths

To display the routes received from a Border Gateway Protocol (BGP) peer, use the **show ip bgp received-paths** command.

show ip bgp received-paths [**vrf** *vrf-name* | **all**]

Syntax Description

vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies all VRF.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the received routes from a BGP peer:

```
switch(config)# show ip bgp received-paths
```

Related Commands

Command	Description
show ip bgp neighbors	Displays BGP neighbor information.

show ip bgp route-map

To display the Border Gateway Protocol (BGP) route maps from the BGP table, use the **show ip bgp route-map** command.

show ip bgp route-map *route-map-name* [**vrf** *vrf-name* | **all**]

Syntax Description

route-map-name	Route map name.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies all VRF.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the BGP route maps from the BGP table:

```
switch(config)# show ip bgp route-map
```

Related Commands

Command	Description
route-map	Creates route maps.
clear ip bgp	Clear BGP routes from the BGP table.

show ip bgp summary

To display the status of all Border Gateway Protocol (BGP) connections, use the **show ip bgp summary** command.

show ip bgp summary [**vrf** *vrf-name* | **all**]

Syntax Description

vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies all VRF.

Command Default   None

Command Modes   Any command mode

Command History

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

Usage Guidelines   This command requires the LAN Enterprise Services license.

Examples   This example shows how to display the status of BGP connections:

```
switch(config)# show ip bgp summary
```

Related Commands

Command	Description
maximum-prefix	Controls the number of prefixes that can be received from a BGP neighbor.
router bgp	Assigns an autonomous system (AS) number to a router.

show ip community-list

To display community lists for the Border Gateway Protocol (BGP), use the **show ip community-list** command.

show ip community-list [*name*]

Syntax Description

name	(Optional) Name of the community list. The name can be any case-sensitive, alphanumeric string up to 63 characters.

Command Default   None

Command Modes   Any command mode

Command History

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

show ip prefix-list

To display prefix lists for the Border Gateway Protocol (BGP), use the **show ip prefix-list** command.

show ip prefix-list [*name*]

Syntax Description	*name*	(Optional) Name of community list. The name can be any case-sensitive, alphanumeric string up to 63 characters.

Command Default   None

Command Modes   Any command mode

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

Examples   This example shows how to display the prefix lists:

```
switch(config)# show ip prefix-list
```

Related Commands	Command	Description
	ip prefix-list	Configures a BGP prefix list.

show mac-list

To display the entries in a MAC list, use the **show mac-list** command.

show mac-list [*name*]

Syntax Description

name	(Optional) MAC list name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

No match values are defined.

Command Modes

Any command mode

Command History

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

Usage Guidelines

This command requires the LAN Enterprise license.

Examples

This example shows how to display information about the Red MAC list:

```
switch(config)# show mac-list Red
```

Related Commands

Command	Description
mac-list	Creates a MAC list.
match mac-list	Matches a MAC address in a MAC list.

show vrf

To display the virtual routing and forwarding (VRF) instances, use the **show vrf** command.

show vrf

Syntax Description
This command has no arguments or keywords.

Command Default
None

Command Modes
EXEC mode

Command History

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

Usage Guidelines
This command does not require a license.

Examples
This example shows how to display the VRF instances configured on the switch:

```
switch# show vrf
VRF-Name                         VRF-ID State   Reason
default                               1 Up      --
management                            2 Up      --
switch#
```

Related Commands

Command	Description
vrf	Configures a VRF instance.
vrf context	Creates a VRF instance.
vrf member	Adds an interface to a VRF.

show vrf detail

To display the detailed information of virtual routing and forwarding (VRF) instances, use the **show vrf detail** command.

> **show vrf detail**

Syntax Description   This command has no arguments or keywords.

Command Default   None

Command Modes   EXEC mode

Command History

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

Usage Guidelines   By default, this command displays the detailed information of the default VRF and management VRF.

This command does not require a license.

Examples   This example shows how to display the detailed information of VRF instances configured on the switch:

```
switch# show vrf detail
VRF-Name: default, VRF-ID: 1, State: Up
    Table-ID: 0x80000001, AF: IPv6, Fwd-ID: 0x80000001, State: Up
    Table-ID: 0x00000001, AF: IPv4, Fwd-ID: 0x00000001, State: Up

VRF-Name: management, VRF-ID: 2, State: Up
    Table-ID: 0x80000002, AF: IPv6, Fwd-ID: 0x80000002, State: Up
    Table-ID: 0x00000002, AF: IPv4, Fwd-ID: 0x00000002, State: Up

switch#
```

Related Commands

Command	Description
vrf	Configures a VRF instance.
vrf context	Creates a VRF instance.
vrf member	Adds an interface to a VRF.

show vrf interface

To display the virtual routing and forwarding (VRF) information for interfaces, use the **show vrf interface** command.

show vrf interface [**mgmt** *mgmt-number* | **vlan** *vlan-ID*]

Syntax Description		
mgmt *mgmt-number*	(Optional) Displays the management interfaces that are added to a VRF. The management interface number is 0.	
vlan *vlan-ID*	(Optional) Displays the VLAN interfaces that are added to a VRF. The VLAN interface range is from 1 to 4094.	

Command Default   All interfaces

Command Modes   EXEC mode

Command History

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

Usage Guidelines   This command does not require a license.

Examples   This example shows how to display the VRF information for all configured interfaces:

```
switch# show vrf interface
Interface                VRF-Name                    VRF-ID
Vlan1                    default                          1
Vlan5                    default                          1
loopback1                default                          1
mgmt0                    management                       2
switch#
```

This example shows how to display the VRF information for management interfaces:

```
switch# show vrf interface mgmt 0
Interface                VRF-Name                    VRF-ID
mgmt0                    management                       2
switch#
```

This example shows how to display the VRF information for VLAN interfaces:

```
switch# show vrf interface vlan 1
Interface                VRF-Name                    VRF-ID
Vlan1                    default                          1
switch#
```

R e v i e w   D r a f t   - -   C i s c o   C o n f i d e n t i a l

Related Commands	Command	Description
	vrf member	Adds an interface to a VRF.

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