



# **network bgp commands**

## **ONTAP 9.7 commands**

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# network bgp commands

## network bgp config create

Create BGP configuration

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

The `network bgp config create` command is used to create the border gateway protocol (BGP) configuration for a node. It can be used to override the BGP parameters defined in the global BGP defaults.

### Parameters

**-node {<nodename>|local} - Node**

This parameter specifies the node on which configuration details will be created.

**-asn <integer> - Autonomous System Number**

This parameter specifies the autonomous system number (ASN). The ASN attribute is a non-negative 16-bit integer. It should typically be chosen from RFC6996 "Autonomous System (AS) Reservation for Private Use" or the AS number assigned to the operator's organization.

**-hold-time <integer> - Hold Time**

This parameter specifies the hold time in seconds. The default value is 180.

**-router-id <IP Address> - Router ID**

This parameter specifies the local router ID. The router-id value takes the form of an IPv4 address. The default router-id will be initialized using a local IPv4 address in admin vserver.

### Examples

```
cluster1::> network bgp config create -node node1 -asn 10 -hold-time 180  
-router-id 10.0.1.112
```

## network bgp config delete

Delete BGP configuration

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

The `network bgp config delete` command deletes a node's border gateway protocol (BGP) configuration. A BGP configuration cannot be deleted if there are BGP peer groups configured on the associated node.

## Parameters

**-node {<nodename>|local} - Node**

This parameter specifies the node for which the BGP configuration will be deleted.

## Examples

```
cluster1::> network bgp config delete -node node1
```

## network bgp config modify

Modify BGP configuration

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

The `network bgp config modify` command is used to modify a node's border gateway protocol (BGP) configuration.

## Parameters

**-node {<nodename>|local} - Node**

This parameter specifies the node on which BGP configuration will be modified.

**[-asn <integer>] - Autonomous System Number**

This parameter specifies the autonomous system number (ASN). The ASN attribute is a non-negative 16-bit integer. It should typically be chosen from RFC6996 "Autonomous System (AS) Reservation for Private Use" or the AS number assigned to the operator's organization.

**[-hold-time <integer>] - Hold Time**

This parameter specifies the hold time in seconds.

**[-router-id <IP Address>] - Router ID**

This parameter specifies the local router ID. The router-id value takes the form of an IPv4 address.

## Examples

```
cluster1::> network bgp config modify -node node1 -router-id 1.1.1.1 -asn  
20
```

## network bgp config show

Display BGP configuration

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `network bgp config show` command displays the border gateway protocol (BGP) configuration for each node.

## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>`, ... parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-node {<nodename>|local}] - Node**

This parameter selects the BGP configurations that match the specified node.

**[-asn <integer>] - Autonomous System Number**

This parameter selects the BGP configurations that match the specified autonomous system number.

**[-hold-time <integer>] - Hold Time**

This parameter selects BGP configurations that match the specified hold time.

**[-router-id <IP Address>] - Router ID**

This parameter selects the BGP configurations that match the specified router ID.

## Examples

```
cluster1::> network bgp config show
Autonomous
System      Hold Time
Node        Number      (seconds)  Router ID
-----
node1       10          180         10.0.1.112
```

## network bgp defaults modify

Modify BGP defaults

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

The `network bgp defaults modify` command modifies the global defaults for border gateway protocol (BGP) configurations.

## Parameters

### **[-asn <integer>] - Autonomous System Number**

This parameter specifies the autonomous system number (ASN). The ASN attribute is a non-negative 16-bit integer. It should typically be chosen from RFC6996 "Autonomous System (AS) Reservation for Private Use", or the AS number assigned to the operator's organization. The default ASN is 65501.

### **[-hold-time <integer>] - Hold Time**

This parameter specifies the hold time in seconds. The default value is 180.

## Examples

```
cluster1::> network bgp defaults modify -asn 20
```

## network bgp defaults show

Display BGP defaults

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `network bgp defaults show` command displays the global defaults for border gateway protocol (BGP) configurations.

### Examples

```
cluster1::> network bgp defaults show
Autonomous
System Number   Hold Time
      (Seconds)
-----
10             180
```

## network bgp peer-group create

Create a new BGP peer group

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `network bgp peer-group create` command is used to create a border gateway protocol (BGP) peer group. A BGP peer group will advertise VIP routes for the list of vservers in the peer group's `vserver-list` using the BGP LIF of the peer group. A BGP peer group will advertise VIP routes to a peer router using the border gateway protocol. The address of the peer router is identified by the `peer-address` value.

## Parameters

### **-ip-space <IPspace> - IPspace Name**

This parameter specifies the IPspace of the peer group being created.

### **-peer-group <text> - Peer Group Name**

This parameter specifies the name of the peer group being created.

### **-bgp-lif <lif-name> - BGP LIF**

This parameter specifies the BGP interface (BGP LIF) of the peer group being created.

### **-peer-address <IP Address> - Peer Router Address**

This parameter specifies the IP address of the peer router for the peer group being created.

### **[-peer-asn <integer>] - Peer Router Autonomous number**

This parameter specifies the peer router autonomous system number (ASN) in the peer group being created. The default value is the value of the local node's ASN.

### **-route-preference <integer> - Route Preference**

This parameter specifies the preference field in BGP update messages for VIP routes. If a router receives multiple VIP route announcements for the same VIP LIF from different BGP LIFs, it will install the one that has the highest preference value. The default route preference value is 100.

## Examples

```
cluster1::> network bgp peer-group create -peer-group group1 -ip-space
Default -bgp-lif bgp_lif -peer-address 10.0.1.112
```

## network bgp peer-group delete

Delete a BGP peer group

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

## Description

The `network bgp peer-group delete` command is used to delete border gateway protocol (BGP) peer group configuration.

## Parameters

### **-ip-space <IPspace> - IPspace Name**

This parameter specifies the IPspace of the BGP peer group being deleted.

### **-peer-group <text> - Peer Group Name**

This parameter specifies the name of the BGP peer group being deleted.

## Examples

```
cluster1::> network bgp peer-group delete -ip-space Default -peer-group group1
```

## network bgp peer-group modify

Modify a BGP peer group

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `network bgp peer-group modify` command is used to modify a border gateway protocol (BGP) peer group configuration.

### Parameters

**-ip-space <IPspace> - IPspace Name**

This parameter specifies the IPspace of the peer group being modified.

**-peer-group <text> - Peer Group Name**

This parameter specifies the name of the peer group being modified.

**[-peer-address <IP Address>] - Peer Router Address**

This parameter specifies an updated value for the IP address of the peer router.

## Examples

```
cluster1::> network bgp peer-group modify -ip-space Default -peer-group peer1 -peer-address 10.10.10.10
```

## network bgp peer-group rename

Rename a BGP peer group

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

The `network bgp peer-group rename` command is used to assign a new name to a BGP peer group.

### Parameters



**-ip-space <IPspace> - IPspace Name**

This parameter specifies the IPspace of the peer group being renamed.

**-peer-group <text> - Peer Group Name**

The name of the peer group to be updated.

**-new-name <text> - New Name**

The new name for the peer group.

## Examples

```
cluster1::> network bgp peer-group rename -peer-group old_name -new-name
new_name
```

## network bgp peer-group show

Display BGP peer groups information

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `network bgp peer-group show` command displays the BGP peer groups configuration.

### Parameters

{ [-fields <fieldname>,...]

If you specify the `-fields <fieldname>`, ... parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

| [-instance ] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-ip-space <IPspace>] - IPspace Name

This parameter selects peer groups that match the specified IPspace.

[-peer-group <text>] - Peer Group Name

This parameter selects peer groups that match the specified name.

[-bgp-lif <lif-name>] - BGP LIF

This parameter selects peer groups that match the specified BGP Interface.

[-peer-address <IP Address>] - Peer Router Address

This parameter selects peer groups that match the specified peer router address.

### **[`-peer-asn <integer>`] - Peer Router Autonomous number**

This parameter selects peer groups that match the specified autonomous system number.

### **[`-state <BGP Session State>`] - Peer Group State**

This parameter selects peer groups that match the specified BGP session state.

### **[`-bgp-node <nodename>`] - BGP LIF Node**

This parameter selects peer groups that match the specified `bgp-node` value. This value is calculated based on the current node of the corresponding BGP LIF.

### **[`-bgp-port <netport>`] - BGP LIF Port**

This parameter selects peer groups that match the specified `bgp-port` value. This value is calculated based on the current port of the associated BGP LIF.

### **[`-route-preference <integer>`] - Route Preference**

This parameter selects peer groups that match the specified route preference value.

## Examples

```
cluster1::> network bgp peer-group show
IPspace: Default
Peer          Local BGP Peer router      Autonomous
Group        Interface Address/subnet  state      Number      Node
Port
-----
gp1          bgp_lif1  10.0.5.37      up          10
node1 e1a
gp2          bgp_lif2  10.0.6.38      up          12
node1 e2a
```

## network bgp vserver-status show

Display Vserver BGP status

**Availability:** This command is available to *cluster* administrators at the *admin* privilege level.

### Description

The `network bgp vserver-status show` command displays the per-node border gateway protocol (BGP) status for each vserver. The BGP status for a particular vserver is "up" when at least one BGP peer group supporting that vserver is able to communicate with its peer router.

### Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**| [-instance ]}**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-node {<nodename>|local}] - Node**

This parameter selects the BGP status that match the specified node.

**[-vserver <vserver name>] - Vserver**

This parameter selects the BGP status for specified vservers.

**[-ipv4-status {unknown|unconfigured|up|down}] - IPv4 status**

This parameter selects the BGP status that matches the specified status for IPv4 address family.

**[-ipv6-status {unknown|unconfigured|up|down}] - IPv6 status**

This parameter selects the BGP status that matches the specified status for IPv6 address family.

## Examples

```
cluster1::> network bgp vserver-status show
Node                vserver    IPv4 status IPv6 status
-----
node1               vs1        up           up
```

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