



# Manage BGP peer groups

## ONTAP 9.15.1 REST API reference

NetApp  
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# Manage BGP peer groups

## Network IP BGP peer-groups endpoint overview

### Overview

The following operations are supported:

- Creation: POST `network/ip/bgp/peer-groups`
- Collection Get: GET `network/ip/bgp/peer-groups`
- Instance Get: GET `network/ip/bgp/peer-groups/{uuid}`
- Instance Patch: PATCH `network/ip/bgp/peer-groups/{uuid}`
- Instance Delete: DELETE `network/ip/bgp/peer-groups/{uuid}`

### Retrieving network BGP sessions information

The IP BGP peer-groups GET API retrieves and displays relevant information pertaining to the BGP peer-groups configured in the cluster. The response can contain a list of multiple BGP peer-groups or a specific peer-group. Each BGP peer-group represents a BGP session configured between a local interface and a peer router.

### Examples

#### Retrieving all BGP peer-groups in the cluster

The following example shows the list of all BGP peer-groups configured in a cluster.

---

```
# The API:
/api/network/ip/bgp/peer-groups

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ip/bgp/peer-groups" -H "accept:
application/hal+json"

# The response:
{
  "records": [
    {
      "uuid": "5f22ae9d-87b2-11e9-a3a6-005056bb81a4",
      "name": "pg1",
      "_links": {
        "self": {
          "href": "/api/network/ip/bgp/peer-groups/5f22ae9d-87b2-11e9-a3a6-
005056bb81a4"
        }
      }
    },
    {
      "uuid": "5fd08be3-87b2-11e9-952f-005056bb2170",
      "name": "pg2",
      "_links": {
        "self": {
          "href": "/api/network/ip/bgp/peer-groups/5fd08be3-87b2-11e9-952f-
005056bb2170"
        }
      }
    }
  ],
  "num_records": 2,
  "_links": {
    "self": {
      "href": "/api/network/ip/bgp/peer-groups"
    }
  }
}
```

---

### Retrieving a specific BGP peer-group

The following example shows the response when a specific BGP peer-group is requested. The system returns an error when there is no peer-group with the requested UUID.

```
# The API:
/api/network/ip/bgp/peer-groups/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/network/ip/bgp/peer-groups/5fd08be3-87b2-11e9-952f-005056bb2170" -H "accept: application/hal+json"

# The response:
{
  "uuid": "5fd08be3-87b2-11e9-952f-005056bb2170",
  "name": "pg2",
  "ipspace": {
    "uuid": "84fd3375-879a-11e9-a3a6-005056bb81a4",
    "name": "Default",
    "_links": {
      "self": {
        "href": "/api/network/ipspaces/84fd3375-879a-11e9-a3a6-005056bb81a4"
      }
    }
  },
  "local": {
    "interface": {
      "uuid": "5e76a305-87b2-11e9-952f-005056bb2170",
      "name": "bgp2",
      "ip": {
        "address": "10.10.10.2"
      }
    },
    "port": {
      "uuid": "f8ff73de-879a-11e9-952f-005056bb2170",
      "name": "e0h",
      "node": {
        "name": "node1"
      }
    }
  },
  "peer": {
    "address": "10.10.10.1",
    "asn": 65501
  },
  "state": "up",
  "_links": {
    "self": {
      "href": "/api/network/ip/bgp/peer-groups/5fd08be3-87b2-11e9-952f-005056bb2170"
    }
  }
}
```

```
}  
}  
}
```

## Retrieving specific fields and limiting the output using filters

The following example shows the response when a filter is applied (`location.port.node.name=node1`) and only certain fields are requested. Filtered fields are in the output in addition to the default fields and requested fields.

```
# The API:  
/api/network/ip/bgp/peer-groups  
  
# The call:  
curl -X GET "https://<mgmt-ip>/api/network/ip/bgp/peer-  
groups?local.port.node.name=node1&fields=local.interface.ip,peer" -H  
"accept: application/hal+json"  
  
# The response:  
{  
  "records": [  
    {  
      "uuid": "5f22ae9d-87b2-11e9-a3a6-005056bb81a4",  
      "name": "pg1",  
      "local": {  
        "interface": {  
          "ip": {  
            "address": "10.10.10.1"  
          }  
        },  
        "port": {  
          "node": {  
            "name": "node1"  
          }  
        }  
      },  
      "peer": {  
        "address": "10.10.10.2",  
        "asn": 65501  
      },  
      "_links": {  
        "self": {  
          "href": "/api/network/ip/bgp/peer-groups/5f22ae9d-87b2-11e9-a3a6-
```

```
005056bb81a4"
    }
  }
},
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/network/ip/bgp/peer-
groups?local.port.node.name=node1&fields=local.interface.ip,peer"
  }
}
}
```

---

## Creating a BGP peer-group

The BGP peer-group POST API is used to create a peer-group as shown in the following examples.

---

### Examples

#### Creating a BGP peer-group with an existing interface

The following example shows how to create a BGP peer-group between an existing interface "bgp1" and peer router with the address "10.10.10.10". The local interface "bgp1" needs to support the management-bgp service, otherwise the system returns an error.

```
# The API:
/api/network/ip/bgp/peer-groups

# The call:
curl -X POST "https://<mgmt-ip>/api/network/ip/bgp/peer-
groups?return_records=true" -d'{"name": "newPg", "ipspace.name":"Default",
"local.interface.name": "bgp1", "peer.address":"10.10.10.10"}'

# The response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "e3faacc6-87cb-11e9-a3a6-005056bb81a4",
      "name": "newPg",
      "ipspace": {
        "name": "Default"
      },
      "local": {
        "interface": {
          "name": "bgp1"
        }
      },
      "peer": {
        "address": "10.10.10.10"
      },
      "_links": {
        "self": {
          "href": "/api/network/ip/bgp/peer-groups/e3faacc6-87cb-11e9-a3a6-
005056bb81a4"
        }
      }
    }
  ]
}
```

---

## Creating a BGP peer-group and provisioning a new local interface

The following example shows how to create a BGP peer-group with any local interface. If the local interface doesn't exist, the system will create it first before creating the peer-group.

---



```
# The API:
/api/network/ip/bgp/peer-groups

# The call:
curl -X POST "https://<mgmt-ip>/api/network/ip/bgp/peer-
groups?return_records=true" -d'{"name": "newPg1",
"ipospace.name":"Default", "local": {"interface": {"name": "newlif"}, "ip":
{"address": "9.9.9.9", "netmask": "24"}, "port": {"name": "e0f", "node":
{"name": "node1"}}}, "peer.address":"10.10.10.10"}'

# The response:
{
"num_records": 1,
"records": [
  {
    "uuid": "c292f069-8872-11e9-a3a6-005056bb81a4",
    "name": "newPg1",
    "ipospace": {
      "name": "Default"
    },
    "local": {
      "interface": {
        "name": "newlif"
      },
      "port": {
        "name": "e0f",
        "node": {
          "name": "node1"
        }
      }
    },
    "peer": {
      "address": "10.10.10.10"
    },
    "_links": {
      "self": {
        "href": "/api/network/ip/bgp/peer-groups/c292f069-8872-11e9-a3a6-
005056bb81a4"
      }
    }
  }
]
}
```

## Updating BGP peer-groups

The BGP peer-groups PATCH API is used to update attributes of a peer-group.

---

### Examples

#### Updating the peer router address

The following example shows how the PATCH request changes the peer router IP address.

---

```
# The API:
/api/network/ip/bgp/peer-groups/{uuid}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/network/ip/bgp/peer-groups/80d271c9-1f43-11e9-803e-005056a7646a" -H "accept: application/hal+json" -d '{"peer.address": "10.10.10.20" }'
```

#### Updating the peer-group to a new name

The following example shows how the PATCH request renames the peer-group.

---

```
# The API:
/api/network/ip/bgp/peer-groups/{uuid}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/network/ip/bgp/peer-groups/80d271c9-1f43-11e9-803e-005056a7646a" -H "accept: application/hal+json" -d '{"name": "NewName" }'
```

## Deleting BGP peer-groups

The BGP peer-groups DELETE API is used to delete an BGP peer-group.

---

## Example

### Deleting a BGP peer-group

The following DELETE request deletes a BGP peer-group.

```
# The API:
/api/network/ip/bgp/peer-group/{uuid}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/network/ip/bgp/peer-groups/80d271c9-
1f43-11e9-803e-005056a7646a"
{
}
```

## Retrieve all BGP peer group details for VIP

GET /network/ip/bgp/peer-groups

**Introduced In:** 9.7

Retrieves the details of all BGP peer groups for VIP.

### Related ONTAP Commands

- `network bgp peer-group show`

### Parameters

Name	Type	In	Required	Description
local.port.name	string	query	False	Filter by local.port.name
local.port.node.name	string	query	False	Filter by local.port.node.name
local.port.uuid	string	query	False	Filter by local.port.uuid
local.interface.uuid	string	query	False	Filter by local.interface.uuid

Name	Type	In	Required	Description
local.interface.ip.address	string	query	False	Filter by local.interface.ip.address
local.interface.name	string	query	False	Filter by local.interface.name
state	string	query	False	Filter by state
peer.is_next_hop	boolean	query	False	Filter by peer.is_next_hop  • Introduced in: 9.9
peer.address	string	query	False	Filter by peer.address
peer.asn	integer	query	False	Filter by peer.asn
ipspace.uuid	string	query	False	Filter by ipspace.uuid
ipspace.name	string	query	False	Filter by ipspace.name
name	string	query	False	Filter by name
uuid	string	query	False	Filter by uuid
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned.  • Default value: 1

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">bgp_peer_group</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "ipstack": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "Default",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "local": {
        "interface": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "ip": {
            "address": "10.10.10.7"
          },
          "name": "lif1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "ip": {
          "address": "10.10.10.7",
          "netmask": "24"
        },
        "port": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          }
        }
      }
    }
  ],
}
```

```

    "name": "e1b",
    "node": {
      "name": "node1"
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "name": "bgpv4peer",
  "peer": {
    "address": "10.10.10.7"
  },
  "state": "string",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
]
}

```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">returned_error</a>	

## Example error

```

{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

# Definitions



## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

ipspace

Either the UUID or name is supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information

Name	Type	Description
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

ip

IP information to create a new interface.

Name	Type	Description
address	string	IPv4 or IPv6 address
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always the netmask length.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
node	<a href="#">node</a>	
uuid	string	

local

Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.

Name	Type	Description
interface	<a href="#">interface</a>	A network interface. Either UUID or name may be supplied on input.
ip	<a href="#">ip</a>	IP information to create a new interface.
port	<a href="#">port</a>	Port UUID along with readable names. Either the UUID or both names may be supplied on input.

## peer

Information describing the router to peer with

Name	Type	Description
address	string	Peer router address
asn	integer	Autonomous system number of peer
is_next_hop	boolean	Use peer address as next hop.

## bgp\_peer\_group

A BGP peer group between a local network interface and a router, for the purpose of announcing VIP interface locations for SVMs in this IPspace.

Name	Type	Description
ipspace	<a href="#">ipspace</a>	Either the UUID or name is supplied on input.
local	<a href="#">local</a>	Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.
name	string	Name of the peer group
peer	<a href="#">peer</a>	Information describing the router to peer with

Name	Type	Description
state	string	State of the peer group
uuid	string	UUID of the peer group

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create a new BGP peer group for VIP

POST /network/ip/bgp/peer-groups

**Introduced In:** 9.7

Creates a new BGP peer group for VIP. Multipath-routing is turned on cluster-wide automatically if the peer group being created results in multiple paths being available for an existing or future VIP interface.

### Required properties

- name - Name of the peer-group to create.
- ipspace.name or ipspace.uuid or local.port
  - Required with local.interface.name or local.ip.address to identify a local interface
  - Optional when local.interface.uuid is specified
- local.interface.uuid or local.interface.name or local.ip.address
  - Required when specifying an existing local interface.

- `local.ip` and `local.port`
  - Required to create a new local interface.
- `peer.address` - IP address of the peer router

## Default property values

If not specified in POST, the following default property values are assigned:

- `is_next_hop` - *false*

## Related ONTAP commands

- `network bgp peer-group create`

## Parameters

Name	Type	In	Required	Description
<code>return_records</code>	boolean	query	False	The default is false. If set to true, the records are returned. <ul style="list-style-type: none"> <li>• Default value:</li> </ul>

## Request Body

Name	Type	Description
<code>ipspace</code>	<a href="#">ipspace</a>	Either the UUID or name is supplied on input.
<code>local</code>	<a href="#">local</a>	Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.
<code>name</code>	string	Name of the peer group
<code>peer</code>	<a href="#">peer</a>	Information describing the router to peer with
<code>state</code>	string	State of the peer group
<code>uuid</code>	string	UUID of the peer group

## Example request

```
{
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "Default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "local": {
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "ip": {
      "address": "10.10.10.7",
      "netmask": "24"
    },
    "port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "e1b",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "name": "bgpv4peer",
  "peer": {
    "address": "10.10.10.7"
  },
}
```

```
"state": "string",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 201, Created

## Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

## Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
1376963	Duplicate IP address is specified.
1966133	Since masking an address with a netmask represents an entire IP subnet, the masked and unmasked IP addresses cannot be the same.
1966267	IPv6 addresses must have a prefix length of 64.
1966269	IPv4 addresses must have a netmask length between 1 and 32.
1967082	IPspace name and UUID must match if both are given.
1967155	The specified local.port.name does not match the location.port.name for the specified local.interface.
1967156	The specified local.port.node.name does not match the location.port.node.name for the specified local.interface.
1967157	The specified local.port.uuid does not match the location.port.uuid for the specified local.interface.
1967158	The specified local.interface.name does not exist in the associated IPspace. local.ip.address and local.ip.netmask are required to create a new LIF.

<b>Error Code</b>	<b>Description</b>
1967159	local.interface does not support management-bgp service.
1967160	The specified local.interface.name does not match the specified interface name of local.interface.uuid.
1967161	The specified local.interface.uuid does not exist in the specified IPspace.
1967162	Either local.interface or local.ip and local.port are required to specify a local LIF.
1967163	The specified local.port.name does not match the specified port name of local.port.uuid.
1967164	The specified local.port.node.name does not match the specified node name of local.port.uuid.
1967165	The specified local.port does not exist.
1967166	ipspace.uuid or ipspace.name must be provided with local.interface.name together to identify a LIF.
1967167	Internal error. Failed to update BGP configuration for node. Retry the command, if necessary.
1967168	Internal error. Failed to create a VIP port for IPspace on node. Retry the command, if necessary.
1967169	Internal error. BGP configuration changed during the operation. Retry the command, if necessary.
1967170	Internal error. VIP port configuration changed during the operation. Retry the command, if necessary.
1967171	Internal error. Fail to access or update BGP peer group. Retry the command, if necessary.
1967172	Peer group could not be updated because IPspace does not exist. Retry the command, if necessary.
1967173	The specified local.ip.address does not match the address for the specified local.interface.
1967174	The specified local.ip.netmask does not match the netmask for the specified local.interface.
1967176	The specified local.interface.name does not exist in the associated IPspace. local.port.name, local.port.node.name, or local.port.uuid is required to create a new LIF.
1967177	Internal error. Failed to access the local interface. Retry the command, if necessary.
1967178	The IPv6 address specified with local.ip.address is not supported because it is link-local, multicast, v4-compatible, v4-mapped, loopback or "::".



Error Code	Description
1967179	The IPv4 address specified with local.ip.address is not supported because it is multicast, loopback or 0.0.0.0.
1967187	Configuring 4 bytes peer.asn requires an effective cluster version of 9.9.1 or later.
1967188	Configuring peer address as a next hop requires an effective cluster version of 9.9.1 or later.
1967189	The parameter peer.asn can't be zero.
53281985	Internal error. Failed to update BGP peer group because BGP LIF moved during the operation. Wait a few minutes and try the command again.
53282006	BGP peer group could not be updated to use a peer address because the value provided is not a valid peer address. If necessary, try the command again with a routable host address.
53282007	BGP peer group could not be updated to use a peer address because the address represents a different address family to the address of the associated BGP LIF. If necessary, try the command again with a matching address family.
53282018	Failed to create BGP peer group because an existing peer group has already established a BGP session between LIF and peer address. If necessary, try the command again with a different BGP LIF or a different peer address.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

Name	Type	Description
error	<a href="#">returned_error</a>	

## Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

ipspace

Either the UUID or name is supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

ip

IP information to create a new interface.

Name	Type	Description
address	string	IPv4 or IPv6 address
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always the netmask length.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
node	<a href="#">node</a>	
uuid	string	

local

Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.

Name	Type	Description
interface	<a href="#">interface</a>	A network interface. Either UUID or name may be supplied on input.
ip	<a href="#">ip</a>	IP information to create a new interface.

Name	Type	Description
port	port	Port UUID along with readable names. Either the UUID or both names may be supplied on input.

peer

Information describing the router to peer with

Name	Type	Description
address	string	Peer router address
asn	integer	Autonomous system number of peer
is_next_hop	boolean	Use peer address as next hop.

bgp\_peer\_group

A BGP peer group between a local network interface and a router, for the purpose of announcing VIP interface locations for SVMs in this IPspace.

Name	Type	Description
ipspace	ipspace	Either the UUID or name is supplied on input.
local	local	Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.
name	string	Name of the peer group
peer	peer	Information describing the router to peer with
state	string	State of the peer group
uuid	string	UUID of the peer group

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Delete a BGP peer group for VIP

DELETE /network/ip/bgp/peer-groups/{uuid}

Introduced In: 9.7

Deletes a BGP peer group for VIP.

### Related ONTAP commands

- `network bgp peer-group delete`

### Parameters

Name	Type	In	Required	Description
uuid	string	path	True	UUID of the peer group

### Response

Status: 200, Ok

### Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
53282019	Internal error. Failed to remove BGP peer group on node. Wait a few minutes and try the command again.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

Name	Type	Description
error	<a href="#">returned_error</a>	

### Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Retrieve details of a BGP peer group for VIP

GET /network/ip/bgp/peer-groups/{uuid}

**Introduced In:** 9.7

Retrieves details of a BGP peer group for VIP.

### Related ONTAP commands

- `network bgp peer-group show`

### Parameters

Name	Type	In	Required	Description
uuid	string	path	True	UUID of the peer group
fields	array[string]	query	False	Specify the fields to return.



## Response

Status: 200, Ok

Name	Type	Description
ipspace	<a href="#">ipspace</a>	Either the UUID or name is supplied on input.
local	<a href="#">local</a>	Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.
name	string	Name of the peer group
peer	<a href="#">peer</a>	Information describing the router to peer with
state	string	State of the peer group
uuid	string	UUID of the peer group

## Example response

```
{
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "Default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "local": {
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "ip": {
      "address": "10.10.10.7",
      "netmask": "24"
    },
    "port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "e1b",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "name": "bgpv4peer",
  "peer": {
    "address": "10.10.10.7"
  },
}
```

```
"state": "string",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Error

Status: Default, Error

Name	Type	Description
error	<a href="#">returned_error</a>	

## Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

ipspace

Either the UUID or name is supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

ip

IP information to create a new interface.

Name	Type	Description
address	string	IPv4 or IPv6 address
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always the netmask length.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
node	<a href="#">node</a>	
uuid	string	

local

Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.

Name	Type	Description
interface	<a href="#">interface</a>	A network interface. Either UUID or name may be supplied on input.
ip	<a href="#">ip</a>	IP information to create a new interface.

Name	Type	Description
port	<a href="#">port</a>	Port UUID along with readable names. Either the UUID or both names may be supplied on input.

peer

Information describing the router to peer with

Name	Type	Description
address	string	Peer router address
asn	integer	Autonomous system number of peer
is_next_hop	boolean	Use peer address as next hop.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Update a BGP peer group for VIP

PATCH /network/ip/bgp/peer-groups/{uuid}

**Introduced In:** 9.7

Updates a BGP peer group for VIP.

## Related ONTAP commands

- `network bgp peer-group modify`
- `network bgp peer-group rename`

## Parameters

Name	Type	In	Required	Description
uuid	string	path	True	UUID of the peer group

## Request Body

Name	Type	Description
ipspace	<a href="#">ipspace</a>	Either the UUID or name is supplied on input.
local	<a href="#">local</a>	Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.
name	string	Name of the peer group
peer	<a href="#">peer</a>	Information describing the router to peer with
state	string	State of the peer group
uuid	string	UUID of the peer group

## Example request

```
{
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "Default",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "local": {
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "ip": {
      "address": "10.10.10.7",
      "netmask": "24"
    },
    "port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "e1b",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "name": "bgpv4peer",
  "peer": {
    "address": "10.10.10.7"
  },
}
```



```
"state": "string",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 200, Ok

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
1967171	Internal error. Fail to access or update BGP peer group. Retry the command, if necessary.
1967188	Configuring peer address as a next hop requires an effective cluster version of 9.9.1 or later.
53281998	Failed to rename the BGP peer group because that name is already assigned to a different peer group in the IPspace.
53282006	BGP peer group could not be updated to use a peer address because the value provided is not a valid peer address. If necessary, try the command again with a routable host address.
53282007	BGP peer group could not be updated to use a peer address because the address represents a different address family to the address of the associated BGP LIF. If necessary, try the command again with a matching address family.
53282018	Failed to create BGP peer group because an existing peer group has already established a BGP session between LIF and peer address. If necessary, try the command again with a different BGP LIF or a different peer address.
53282020	To utilize the peer as the next hop, the peer IP address must be within the same subnet as the BGP LIF.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

Name	Type	Description
error	<a href="#">returned_error</a>	

### Example error

```
{
  "error": {
    "arguments": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

### Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

ipspace

Either the UUID or name is supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	IPspace name
uuid	string	IPspace UUID

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

A network interface. Either UUID or name may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
ip	<a href="#">ip</a>	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

ip

IP information to create a new interface.

Name	Type	Description
address	string	IPv4 or IPv6 address
netmask	string	Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, the default value is 64 with a valid range of 1 to 127. Output is always the netmask length.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port UUID along with readable names. Either the UUID or both names may be supplied on input.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	
node	<a href="#">node</a>	
uuid	string	

local

Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.

Name	Type	Description
interface	<a href="#">interface</a>	A network interface. Either UUID or name may be supplied on input.
ip	<a href="#">ip</a>	IP information to create a new interface.

Name	Type	Description
port	port	Port UUID along with readable names. Either the UUID or both names may be supplied on input.

peer

Information describing the router to peer with

Name	Type	Description
address	string	Peer router address
asn	integer	Autonomous system number of peer
is_next_hop	boolean	Use peer address as next hop.

bgp\_peer\_group

A BGP peer group between a local network interface and a router, for the purpose of announcing VIP interface locations for SVMs in this IPspace.

Name	Type	Description
ipspace	ipspace	Either the UUID or name is supplied on input.
local	local	Information describing the local interface that is being used to peer with a router using BGP. On a POST operation, an existing BGP interface is used by specifying the interface, or create a new one by specifying the port and IP address.
name	string	Name of the peer group
peer	peer	Information describing the router to peer with
state	string	State of the peer group
uuid	string	UUID of the peer group

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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