



Manage BGP peer groups

ONTAP 9.12.1 REST API reference

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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.interface.uuid | string | query | False | Filter by local.interface.uuid |
| local.interface.name | string | query | False | Filter by local.interface.name |
| local.interface.ip.address | string | query | False | Filter by local.interface.ip.address |
| local.port.uuid | string | query | False | Filter by local.port.uuid |

| 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 |
| 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 |
| uuid | string | query | False | Filter by uuid |
| ipspace.uuid | string | query | False | Filter by ipspace.uuid |
| ipspace.name | string | query | False | Filter by ipspace.name |
| state | string | query | False | Filter by state |
| name | string | query | False | Filter by name |
| 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"> • Default value: 1 • Max value: 120 • Min value: 0 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|---|-------------------|
| _links | _links | |
| num_records | integer | Number of records |
| records | array[bgp_peer_group] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "ipSPACE": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "exchange",
      "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": "elb",

```

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

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

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 | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

ipspace

Either the UUID or name is supplied on input.

| Name | Type | Description |
|--------|------------------------|--------------|
| _links | _links | |
| name | string | IPspace name |
| uuid | string | IPspace UUID |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

| Name | Type | Description |
|--------|------------------------|----------------|
| _links | _links | |
| ip | ip | 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 netmask length. |

node

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

port

| Name | Type | Description |
|------------------------|------------------------|-------------|
| _links | _links | |
| name | string | |
| node | node | |
| 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 | interface | |

| Name | Type | Description |
|------|------|---|
| ip | ip | IP information to create a new interface. |
| port | port | |

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 |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | 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`
 - Required with `local.interface.name` to identify a local interface
 - Optional when `local.interface.uuid` is specified
- `local.interface.uuid` or `local.interface.name`
 - Required when specifying an existing local interface.
- `local.interface.name`, `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 |
|----------------|---------|-------|----------|--|
| return_records | boolean | query | False | The default is false. If set to true, the records are returned. <ul style="list-style-type: none"> • Default value: |

Request Body

| 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 |

Example request

```
{
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "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": "up",
"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. |

| Error Code | Description |
|------------|---|
| 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. |

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

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 | href | |

ipspace

Either the UUID or name is supplied on input.

| Name | Type | Description |
|--------|------------------------|--------------|
| _links | _links | |
| name | string | IPspace name |
| uuid | string | IPspace UUID |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| ip | ip | 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 netmask length. |

node

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

port

| Name | Type | Description |
|------------------------|------------------------|-------------|
| _links | _links | |
| name | string | |
| node | node | |
| 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 | interface | |
| ip | ip | IP information to create a new interface. |
| port | port | |

peer

Information describing the router to peer with

| Name | Type | Description |
|---------|--------|---------------------|
| address | string | Peer router address |

| Name | Type | Description |
|-------------|---------|----------------------------------|
| 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 |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |

| Name | Type | Description |
|---------|--------|---|
| 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. |

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

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 |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | 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 | 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 |

Example response

```
{
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "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": "up",
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

Error

Status: Default, Error

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

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 | href | |

ipspace

Either the UUID or name is supplied on input.

| Name | Type | Description |
|--------|------------------------|--------------|
| _links | _links | |
| name | string | IPspace name |
| uuid | string | IPspace UUID |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| ip | ip | 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 netmask length. |

node

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

port

| Name | Type | Description |
|------------------------|------------------------|-------------|
| _links | _links | |
| name | string | |
| node | node | |
| 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 | interface | |
| ip | ip | IP information to create a new interface. |
| port | port | |

peer

Information describing the router to peer with

| Name | Type | Description |
|---------|--------|---------------------|
| address | string | Peer router address |

| Name | Type | Description |
|-------------|---------|----------------------------------|
| 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 |

error

| Name | Type | Description |
|-----------|--|---|
| arguments | array[error_arguments] | 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 | 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 |

Example request

```
{
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "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": "up",
"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. |

| Name | Type | Description |
|-------|-------|-------------|
| error | error | |

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 | href | |

ipspace

Either the UUID or name is supplied on input.

| Name | Type | Description |
|--------|------------------------|--------------|
| _links | _links | |
| name | string | IPspace name |
| uuid | string | IPspace UUID |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| ip | ip | 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 netmask length. |

node

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

port

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| name | string | |
| node | node | |
| 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 | interface | |
| ip | ip | IP information to create a new interface. |
| port | port | |

peer

Information describing the router to peer with

| Name | Type | Description |
|---------|--------|---------------------|
| address | string | Peer router address |

| Name | Type | Description |
|-------------|---------|----------------------------------|
| 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 |

error

| Name | Type | Description |
|-----------|--|-------------------|
| arguments | array[error_arguments] | Message arguments |

| Name | Type | Description |
|-------------|-------------|---|
| code | string | Error code |
| message | string | Error message |
| target | string | The target parameter that caused the error. |

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