Manage cluster peers

REST API reference

NetApp
February 13, 2026

Table of Contents

Manage cluster peers

Manage cluster peers

Cluster peer operations

Cluster peering allows administrators of ONTAP systems to establish relationships between two or more independent clusters. Once a relationship exists between two clusters, they may then exchange user data, configuration information and coordinate operations. The /cluster/peers endpoint supports operations such as create, get, modify and delete using GET, PATCH and POST HTTP requests.

Creating a cluster peer

A new cluster peer relationship can be set up by issuing a POST request to /cluster/peers. Parameters in the POST body define the settings of the peering relationship. A successful POST request that succeeds in creating a peer returns a HTTP status code, code 201, along with the details of the created peer such as peer UUID, name, authentication information. A failed POST request returns an HTTP error code along with a message indicating the reason for the error. This can include malformed request and invalid operations.

Sample request

```
curl -X POST 'https://<mgmt-ip>/api/cluster/peers/' -d
'{"authentication":{"expiry_time":"12/25/2018
12:34:56","generate_passphrase":true}}'
```

Examples

```
# Create - no params
body = {}

# Create with a peer address and a passphrase
body =
{
  "remote":
    {
        "ip_addresses":["1.2.3.4"]
    }
}

# Create with a peer name and a generated passphrase that is true
body =
{
  "name":"cp_xyz123",
  "authentication":
    {
        "generate_passphrase":true
    }
}

# Create with a name, a peer address, and a passphrase
body =
{
  "name":"cp_xyz123",
  "remote":
    {
        "ip_addresses": ["1.2.3.4"]
    },
  "authentication":
    {
        "passphrase":"xyz12345"
    }
 }

# Create with a proposed encryption protocol
body =
{
  "encryption":
    {
        "proposed":"tls-psk"
    }
}
```

Creating local intercluster LIFs

The local cluster must have an intercluster LIF on each node for the correct operation of cluster peering. If no local intercluster LIFs exist, you can optionally specify LIFs to be created for each node in the local cluster. These local interfaces, if specified, are created on each node before proceeding with the creation of the cluster peering relationship. Cluster peering relationship would be established if there is an error preventing the LIFs from being created. Local interfaces, once created, should not be specified for subsequent cluster peering relationships.

Local LIF creation fields

- local_network.ip_addresses - list of IP addresses to assign, one per node in the local cluster
- local_network.netmask - IPv4 mask or netmask length
- local_network.broadcast_domain - Broadcast domain that is in use within the IPspace.
- local_network.gateway - The IPv4 or IPv6 address of the default router.

Additional information on network routes

It might happen that when creating LIFs the network route discovery mechanism could take additional time (1-5 seconds) to become visible in the network outside of the cluster. This delay in publishing the routes might cause an initial cluster peer "create" request to fail. This error disappears with a retry of the same request.

Example

```
curl -X POST "https://<mgmt-ip>/api/cluster/peers" -d body
```

where "<mgmt-ip>" is replaced by the IP address of the cluster management LIF, and "body" is replaced by the JSON body of the POST, containing the fields for the new peering relationship and local LIFs.</mgmt-ip>

Example POST body

To create 4 intercluster LIFs on a 4-node cluster before creating a cluster peer relationship:

```
{
  "local_network":
  {
      "interfaces": [
          {"ip_address":"1.2.3.4"},
          {"ip_address":"1.2.3.5"},
          {"ip_address":"1.2.3.6"}
          ],
      "netmask": "255.255.0.0",
      "broadcast_domain": "Default",
      "gateway": "1.2.0.1"
  }
  "remote.ip_addresses": ["1.2.9.9"],
  "authentication.passphrase": "xyz12345"
}
```

Retrieve a cluster peer

Peers in a cluster can be retrieved by issuing a GET request to /cluster/peers. It is also possible to retrieve a specific peer when qualified by its UUID to /cluster/peers/{uuid}.

Overview of fields used for retrieving a cluster peer

A GET request might have no query parameters or a valid cluster UUID. The former retrieves all records while the latter retrieves the record for the cluster peer with that UUID.

Required fields

There are no required fields for GET requests.

Optional fields

The following fields are optional for GET requests

- UUID - uuid of the cluster peer

Examples

```
curl -X GET "https://<mgmt-ip>/api/cluster/peers/"
curl -X GET "https://<mgmt-ip>/api/cluster/peers/{uuid}"
curl -X GET "https://<mgmt-ip>/api/cluster/peers/{uuid}?fields=*"
```

Update a cluster peer

A cluster peer relationship can be updated by issuing a PATCH request to /cluster/peers/{uuid}. As in the CLI mode, you can toggle the proposed encryption protocol, update the passphrase, or specify a new set of stable addresses. All PATCH requests take the parameters that are to be updated in the request body. If the generate_passphrase is 'true', the passphrase is returned in the PATCH response.

Fields overview

This sections highlights the parameters that control the modification of an existing cluster peering relationship.

Required fields

A PATCH request with an empty body has no effect on the cluster peer instance. All other fields and the combinations in which they are valid are indicated below:

- `encryption_proposed` - Toggle the proposed encryption protocol (from 'none' to 'tls-psk' or otherwise). Authentication must be true and a passphrase must be present in body.
- `passphrase`
- `passphrase` or `generate passphrase`
- `remote.ip_addresses`

Optional fields

- `expiration time` - Set the expiration time of the passphrase

Examples

```
# Update with an empty body
body = {}

# Update the proposed encryption protocol from tls-psk to none
body =
{
  "authentication":
    {
        "passphrase":"xyz12345",
        "in_use":"ok"
    },
  "encryption":
    {
        "proposed":"none"
    }
}

# Update the passphrase
body =
{
  "authentication":
   {
       "passphrase":"xyz12345",
       "in_use":"ok"
   }
}

# Set an auto-generated passphrase
body =
{
  "authentication":
   {
       "generate_passphrase": true,
       "in_use":"ok"
   }
}

# Update remote IP addresses
body =
{
  "remote":
    {
        "ip_addresses":["10.224.65.30"]
    }
}
```

Sample requests

```
# Set a passphrase
curl -X PATCH 'https://<mgmt-ip>/api/cluster/peers/73123071-d0b9-11e8-
a686-005056a7179a' -d
'{"authentication":{"passphrase":"xyz12345","in_use":"ok"}}'

# Update a peer address
curl -X PATCH 'https://<mgmt-ip>/api/cluster/peers/73123071-d0b9-11e8-
a686-005056a7179a' -d '{"remote":{"ip_addresses":["1.2.3.4"]}}'
```

Delete a cluster peer

This interface allows you to delete a cluster peer using the HTTP DELETE request.

Required fields

All delete operations must be performed on a valid peer UUID. Deleting an invalid peer returns 'HTTP 404' indicating an error.

Optional fields

The DELETE operation has no optional fields.

Request format

DELETE "https://<mgmt-ip>/api/cluster/peers/{uuid}"</mgmt-ip>

Examples

The request -

```
curl -X DELETE "https://<mgmt-ip>/api/cluster/peers/8becc0d4-c12c-11e8-
9ceb-005056bbd143"
```

deletes a peer with peer UUID '8becc0d4-c12c-11e8-9ceb-005056bbd143'

Retrieve the collection of cluster peers

learn more

- [`doc /cluster/peers`](#docs-cluster-cluster_peers)

GET `/cluster/peers`

Retrieve the collection of cluster peers.

Learn more

- DOC /cluster/peers

Parameters

Name	Type	In	Required	Description
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.
return_timeout	integer	query	False	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.
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[cluster_peer]	

Example response


```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "interfaces": {
          "href": "/api/resourcelink"
        },
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "authentication": {
        "expiry_time": "P1DT2H3M4S or '2017-01-25T11:20:13Z'",
        "in_use": "string",
        "passphrase": "string",
        "state": "string"
      },
      "encryption": {
        "proposed": "string",
        "state": "string"
      },
      "initial_allowed_svms": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "svm1",
          "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        }
      ],
      "ipspace": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
```

```
            }
          },
          "name": "exchange",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "name": "cluster2",
        "remote": {
          "ip_addresses": [
            "10.10.10.7"
          ],
          "name": "cluster2",
          "serial_number": "4048820-60-9"
        },
        "status": {
          "state": "available",
          "update_time": "2017-01-25 11:20:13 UTC"
        },
        "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
interfaces	href	
self	href	

authentication

Name	Type	Description
expiry_time	string	The time when the passphrase will expire, in ISO 8601 duration format or date and time format. The default is 1 hour.
generate_passphrase	boolean	Auto generate a passphrase when true.
in_use	string	
passphrase	string	A password to authenticate the cluster peer relationship.
state	string	

encryption

Name	Type	Description
proposed	string	
state	string	

_links

Name	Type	Description
self	href	

initial_allowed_svms

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

ipspace

The IPspace of the local intercluster LIFs

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

interfaces

Name	Type	Description
ip_address	string	IPv4 or IPv6 address

local_network

Cluster peering requires an intercluster LIF on each local node. These can be optionally created by specifying a list of IP addresses corresponding to each node.

Name	Type	Description
broadcast_domain	string	Broadcast domain that is in use within the IPspace.
gateway	string	The IPv4 or IPv6 address of the default router.
interfaces	array[interfaces]	
netmask	string	IPv4 mask or netmask length.

remote

Name	Type	Description
ip_addresses	array[string]	The IPv4 addresses, IPv6 addresses, or hostnames of the peers.
name	string	The name of the remote cluster.
serial_number	string	The serial number of the remote cluster.

status

Name	Type	Description
state	string	
update_time	string	The last time the state was updated.

cluster_peer

Name	Type	Description
_links	_links	
authentication	authentication	
encryption	encryption	
initial_allowed_svms	array[initial_allowed_svms]	The local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
ipspace	ipspace	The IPspace of the local intercluster LIFs
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster.
remote	remote	
status	status	

Name	Type	Description
uuid	string	UUID of the cluster peer relationship. For anonymous cluster peer offers, the UUID will change when the remote cluster accepts the relationship.

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.

Creates a peering relationship and, optionally, the ip interfaces it will use there are two ways to create a peering relationship

provide remote ip

here the user provides the remote ip address creating a new cluster peer relationship with a specific remote cluster requires at least one remote intercluster ip address from that cluster # required properties * `remoteip_addresses` - addresses of the remote peers the local peer must be able to reach and connect to these addresses for the request to succeed in creating a peer * either set `generate_passphrase` to true or provide a passphrase in the body of the request; only one of them is required # optional properties the following fields are optional for a post on /cluster/peer/ all fields must follow the structure in the cluster peer api definition * `name` - name of the peering relationship * `passphrase` - user generated passphrase for use in authentication * `generate_passphrase` (true/false) - when this option is true, ontap automatically generates a passphrase to authenticate cluster peers * `ipspace` - ipspace of the local intercluster lifs assumes default ipspace if not provided * `initial_allowed_svms` - the local svms allowed to peer with the peer clusters svms this list can be modified until the remote cluster accepts this cluster peering relationship * `local_network` - fields to create a local intercluster lif see section on "creating local intercluster lifs" *

`expiry_time` - duration in iso 8601 format for which the user-supplied or auto-generated passphrase is valid expiration time must not be greater than seven days into the future iso 8601 duration format is "pndtnhnmns" or "pnw" where n is a positive integer the nd, nh, nm and ns fields can be dropped if zero "p" should always be present and "t" should be present if there are any hours, minutes or seconds fields * `encryption_proposed` (none/tls-psk) - encryption mechanism of the communication channel between the two peers # do not provide remote ip this method is used when the remote ip address is not provided this method is used when the filer is ready to accept peering request from foreign clusters # required properties * `generate_passphrase` (true) - this option must be set to true ontap automatically generates a passphrase to authenticate cluster peers either set generate_passphrase to true or provide a passphrase in the body of the request; only one of them is required # optional properties the following fields are optional for a post on /cluster/peer/ all fields must follow the structure in the cluster peer api definition * `name` - name of the remote peer * `ipspace` - ipspace of the local intercluster lifs assumes default ipspace if not provided * `initial_allowed_svms` - local svms allowed to peer with the peer clusters svms this list can be modified until the remote cluster accepts this cluster peering relationship * `local_network` - fields to create a local intercluster lif see section on "creating local intercluster lifs" * `expiry_time` - duration in iso 8601 format for which the user-supplied or auto-generated passphrase is valid expiration time must not be greater than seven days into the future iso 8601 duration format is "pndtnhnmns" or "pnw" where n is a positive integer the nd, nh, nm and ns fields can be dropped if zero "p" should always be present and "t" should be present if there are any hours, minutes or seconds fields * `encryption_proposed` (none/tls-psk) - encryption mechanism of the communication channel between the two peers additional information as with creating a cluster peer through the cli, the combinations of options must be valid in order for the create operation to succeed the following list shows the combinations that will succeed and those that will fail: * a passphrase only (fail) * a peer ip address (fail) * a passphrase with an expiration time > 7 days into the future (fail) * peer ip address and a passphrase (ok) * generate_passphrase=true (ok) * any proposed encryption protocol (ok) * an ipspace name or uuid (ok) * a passphrase, peer ip address, and any proposed encryption protocol (ok) * a non empty list initial allowed vserver peer names or uuids (ok) ## learn more * [`doc /cluster/peers`](#docs-cluster-cluster_peers)

learn more

- [`doc /cluster/peers`](#docs-cluster-cluster_peers)

POST `/cluster/peers`

Creates a peering relationship and, optionally, the IP interfaces it will use. There are two ways to create a peering relationship.

Provide remote IP

Here the user provides the remote IP address. Creating a new cluster peer relationship with a specific remote cluster requires at least one remote intercluster IP address from that cluster.

Required properties

- `remote.ip_addresses` - Addresses of the remote peers. The local peer must be able to reach and connect to these addresses for the request to succeed in creating a peer.
- Either set `generate_passphrase` to true or provide a passphrase in the body of the request; only one of them is required.

Optional properties

The following fields are optional for a POST on /cluster/peer/. All fields must follow the structure in the cluster peer API definition.

- `name` - Name of the peering relationship.
- `passphrase` - User generated passphrase for use in authentication.
- `generate_passphrase` (true/false) - When this option is true, ONTAP automatically generates a passphrase to authenticate cluster peers.
- `ipspace` - IPspace of the local intercluster LIFs. Assumes Default IPspace if not provided.
- `initial_allowed_svms` - the local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
- `local_network` - fields to create a local intercluster LIF. See section on "Creating local intercluster lifs".
- `expiry_time` - Duration in ISO 8601 format for which the user-supplied or auto-generated passphrase is valid. Expiration time must not be greater than seven days into the future. ISO 8601 duration format is "PnDTnHnMnS" or "PnW" where n is a positive integer. The nD, nH, nM and nS fields can be dropped if zero. "P" should always be present and "T" should be present if there are any hours, minutes or seconds fields.
- `encryption_proposed` (none/tls-psk) - Encryption mechanism of the communication channel between the two peers.

Do not provide remote IP

This method is used when the remote IP address is not provided. This method is used when the filer is ready to accept peering request from foreign clusters.

Required properties

- `generate_passphrase` (true) - This option must be set to true. ONTAP automatically generates a passphrase to authenticate cluster peers. Either set generate_passphrase to true or provide a passphrase in the body of the request; only one of them is required.

Optional properties

The following fields are optional for a POST on /cluster/peer/. All fields must follow the structure in the cluster peer API definition.

- `name` - Name of the remote peer.
- `ipspace` - IPspace of the local intercluster LIFs. Assumes Default IPspace if not provided.
- `initial_allowed_svms` - Local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
- `local_network` - Fields to create a local intercluster LIF. See section on "Creating local intercluster lifs".
- `expiry_time` - Duration in ISO 8601 format for which the user-supplied or auto-generated passphrase is valid. Expiration time must not be greater than seven days into the future. ISO 8601 duration format is "PnDTnHnMnS" or "PnW" where n is a positive integer. The nD, nH, nM and nS fields can be dropped if zero. "P" should always be present and "T" should be present if there are any hours, minutes or seconds fields.
- `encryption_proposed` (none/tls-psk) - Encryption mechanism of the communication channel between the two peers.

Additional information

As with creating a cluster peer through the CLI, the combinations of options must be valid in order for the create operation to succeed. The following list shows the combinations that will succeed and those that will fail:

- a passphrase only (fail)
- a peer IP address (fail)
- a passphrase with an expiration time > 7 days into the future (fail)
- peer IP address and a passphrase (OK)
- generate_passphrase=true (OK)
- any proposed encryption protocol (OK)
- an IPspace name or UUID (OK)
- a passphrase, peer IP address, and any proposed encryption protocol (OK)
- a non empty list initial allowed vserver peer names or UUIDs. (OK)

Learn more

- DOC /cluster/peers

Learn more

- DOC /cluster/peers

Request Body

Name	Type	Description
_links	_links	
authentication	authentication	
encryption	encryption	
initial_allowed_svms	array[initial_allowed_svms]	The local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
ipspace	ipspace	The IPspace of the local intercluster LIFs
local_network	local_network	Cluster peering requires an intercluster LIF on each local node. These can be optionally created by specifying a list of IP addresses corresponding to each node.

Name	Type	Description
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster.
remote	remote	
status	status	
uuid	string	UUID of the cluster peer relationship. For anonymous cluster peer offers, the UUID will change when the remote cluster accepts the relationship.

Example request


```
{
  "_links": {
    "interfaces": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication": {
    "expiry_time": "P1DT2H3M4S or '2017-01-25T11:20:13Z'",
    "in_use": "string",
    "passphrase": "string",
    "state": "string"
  },
  "encryption": {
    "proposed": "string",
    "state": "string"
  },
  "initial_allowed_svms": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  ],
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "local_network": {
    "broadcast_domain": "bd1",
    "gateway": "10.1.1.1",
    "interfaces": [
      {
```

```
        "ip_address": "10.10.10.7"
      }
    ],
    "netmask": "255.255.0.0"
  },
  "name": "cluster2",
  "remote": {
    "ip_addresses": [
      "10.10.10.7"
    ],
    "name": "cluster2",
    "serial_number": "4048820-60-9"
  },
  "status": {
    "state": "available",
    "update_time": "2017-01-25 11:20:13 UTC"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```


Response

```
Status: 201, Created
```

Name	Type	Description
_links	_links	
authentication	authentication	
ip_address	string	IPv4 or IPv6 address
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster, or a temporary name may be autogenerated for anonymous cluster peer offers.

Example response


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication": {
    "expiry_time": "2017-01-25 11:20:13 UTC",
    "passphrase": "string"
  },
  "ip_address": "10.10.10.7",
  "name": "cluster2"
}
```


Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
4656069	Specifying a passphrase without remote IP addresses is not supported.
4656070	The encryption protocol is meaningful only with authenticated cluster peer relationships.
4656071	Cannot peer with a cluster bearing the same name as the local cluster.
4656072	The name must conform to the same rules as a cluster name.
4656074	Cannot check whether all nodes of this cluster support encryption.
4656077	Specify either remote IP addresses or generate_passphrase.
4656075	Cannot specify encryption: this operation requires an ECV of 9.6.0 or later.
4656079	No cluster nodes were found. Check your cluster configuration.
4656085	Cannot create an intercluster LIF with an empty list of local IP addresses.

Error Code	Description
4656087	The number of local intercluster IP addresses must be less than or equal to the number of available nodes.
4656086	Creating an intercluster LIF requires a broadcast domain that is in use within the IPspace.
4653365	IPspaces are unavailable with cluster peering: {ipspace}.
4656088	Found no ports matching the IPspace and the broadcast domain.
4656089	Found no matching entry for IPspace.
4656090	The given IPspace differs from the IPspace entry found.
4656091	Creating an intercluster LIF requires a network mask or a network mask length.
4656081	Creating an intercluster LIF requires a list of local IP addresses.
1966366	The System SVM of the cluster IPspace hosts Cluster LIFs only.
4656096	Creating an intercluster LIF requires an IPv4 or IPv6 address of the default router.

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
interfaces	href	
self	href	

authentication

Name	Type	Description
expiry_time	string	The time when the passphrase will expire, in ISO 8601 duration format or date and time format. The default is 1 hour.
generate_passphrase	boolean	Auto generate a passphrase when true.
in_use	string	
passphrase	string	A password to authenticate the cluster peer relationship.
state	string	

encryption

Name	Type	Description
proposed	string	
state	string	

_links

Name	Type	Description
self	href	

initial_allowed_svms

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

ipspace

The IPspace of the local intercluster LIFs

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

interfaces

Name	Type	Description
ip_address	string	IPv4 or IPv6 address

local_network

Cluster peering requires an intercluster LIF on each local node. These can be optionally created by specifying a list of IP addresses corresponding to each node.

Name	Type	Description
broadcast_domain	string	Broadcast domain that is in use within the IPspace.
gateway	string	The IPv4 or IPv6 address of the default router.
interfaces	array[interfaces]	
netmask	string	IPv4 mask or netmask length.

remote

Name	Type	Description
ip_addresses	array[string]	The IPv4 addresses, IPv6 addresses, or hostnames of the peers.

Name	Type	Description
name	string	The name of the remote cluster.
serial_number	string	The serial number of the remote cluster.

status

Name	Type	Description
state	string	
update_time	string	The last time the state was updated.

cluster_peer

Name	Type	Description
_links	_links	
authentication	authentication	
encryption	encryption	
initial_allowed_svms	array[initial_allowed_svms]	The local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
ipspace	ipspace	The IPspace of the local intercluster LIFs
local_network	local_network	Cluster peering requires an intercluster LIF on each local node. These can be optionally created by specifying a list of IP addresses corresponding to each node.
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster.
remote	remote	
status	status	

Name	Type	Description
uuid	string	UUID of the cluster peer relationship. For anonymous cluster peer offers, the UUID will change when the remote cluster accepts the relationship.

authentication

Name	Type	Description
expiry_time	string	The date and time the passphrase will expire. The default expiry time is one hour.
passphrase	string	A password to authenticate the cluster peer relationship.

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.

Deletes a cluster peer

learn more

- [`doc /cluster/peers`](#docs-cluster-cluster_peers)

DELETE `/cluster/peers/{uuid}`

Deletes a cluster peer.

Learn more

- DOC /cluster/peers

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	

Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
4663070	Unable to delete cluster peer relationship due to an ongoing vserver migration.

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.

Retrieves a specific cluster peer instance

learn more

- [`doc /cluster/peers`](#docs-cluster-cluster_peers)

GET `/cluster/peers/{uuid}`

Retrieves a specific cluster peer instance.

Learn more

- DOC /cluster/peers

Parameters

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

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	
authentication	authentication	
encryption	encryption	
initial_allowed_svms	array[initial_allowed_svms]	The local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
ipspace	ipspace	The IPspace of the local intercluster LIFs
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster.
remote	remote	

Name	Type	Description
status	status	
uuid	string	UUID of the cluster peer relationship. For anonymous cluster peer offers, the UUID will change when the remote cluster accepts the relationship.

Example response


```
{
  "_links": {
    "interfaces": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication": {
    "expiry_time": "P1DT2H3M4S or '2017-01-25T11:20:13Z'",
    "in_use": "string",
    "passphrase": "string",
    "state": "string"
  },
  "encryption": {
    "proposed": "string",
    "state": "string"
  },
  "initial_allowed_svms": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  ],
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "name": "cluster2",
  "remote": {
    "ip_addresses": [
      "10.10.10.7"
    ],
```

```
    "name": "cluster2",
    "serial_number": "4048820-60-9"
  },
  "status": {
    "state": "available",
    "update_time": "2017-01-25 11:20:13 UTC"
  },
  "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
interfaces	href	
self	href	

authentication

Name	Type	Description
expiry_time	string	The time when the passphrase will expire, in ISO 8601 duration format or date and time format. The default is 1 hour.
generate_passphrase	boolean	Auto generate a passphrase when true.
in_use	string	
passphrase	string	A password to authenticate the cluster peer relationship.
state	string	

encryption

Name	Type	Description
proposed	string	
state	string	

_links

Name	Type	Description
self	href	

initial_allowed_svms

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

ipspace

The IPspace of the local intercluster LIFs

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

interfaces

Name	Type	Description
ip_address	string	IPv4 or IPv6 address

local_network

Cluster peering requires an intercluster LIF on each local node. These can be optionally created by specifying a list of IP addresses corresponding to each node.

Name	Type	Description
broadcast_domain	string	Broadcast domain that is in use within the IPspace.
gateway	string	The IPv4 or IPv6 address of the default router.
interfaces	array[interfaces]	
netmask	string	IPv4 mask or netmask length.

remote

Name	Type	Description
ip_addresses	array[string]	The IPv4 addresses, IPv6 addresses, or hostnames of the peers.

Name	Type	Description
name	string	The name of the remote cluster.
serial_number	string	The serial number of the remote cluster.

status

Name	Type	Description
state	string	
update_time	string	The last time the state was updated.

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.

Updates a cluster peer instance

learn more

- [`doc /cluster/peers`](#docs-cluster-cluster_peers)

PATCH `/cluster/peers/{uuid}`

Updates a cluster peer instance.

Learn more

- DOC /cluster/peers

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Cluster peer relationship UUID

Request Body

Name	Type	Description
_links	_links	
authentication	authentication	
encryption	encryption	
initial_allowed_svms	array[initial_allowed_svms]	The local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
ipspace	ipspace	The IPspace of the local intercluster LIFs
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster.
remote	remote	
status	status	
uuid	string	UUID of the cluster peer relationship. For anonymous cluster peer offers, the UUID will change when the remote cluster accepts the relationship.

Example request


```
{
  "_links": {
    "interfaces": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication": {
    "expiry_time": "P1DT2H3M4S or '2017-01-25T11:20:13Z'",
    "in_use": "string",
    "passphrase": "string",
    "state": "string"
  },
  "encryption": {
    "proposed": "string",
    "state": "string"
  },
  "initial_allowed_svms": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  ],
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "name": "cluster2",
  "remote": {
    "ip_addresses": [
      "10.10.10.7"
    ],
```

```
    "name": "cluster2",
    "serial_number": "4048820-60-9"
  },
  "status": {
    "state": "available",
    "update_time": "2017-01-25 11:20:13 UTC"
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```


Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	
authentication	authentication	
ip_address	string	IPv4 or IPv6 address
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster, or a temporary name may be autogenerated for anonymous cluster peer offers.

Example response


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "authentication": {
    "expiry_time": "2017-01-25 11:20:13 UTC",
    "passphrase": "string"
  },
  "ip_address": "10.10.10.7",
  "name": "cluster2"
}
```


Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
4656070	The encryption protocol is meaningful only with authenticated cluster peer relationships.
4656072	The name must conform to the same rules as a cluster name.
4656073	Changing the encryption state requires the refreshing of the authentication passphrase.
4656076	Cluster peer modify was attempted mismatched IPv4 and IPv6 addresses.
4656075	Cannot specify encryption: this operation requires an ECV of Data ONTAP 9.6.0 or later.
4656084	Passphrase can only be modified with an authenticated cluster peer relationship.
4656082	Specify either a passphrase or "-generate-passphrase".
4656083	Cannot auto-generate a passphrase when "generate-passphrase" is false. Modifying a passphrase using an auto-generated passphrase requires "generate-passphrase" be true.

Error Code	Description
4656081	The remote IP address list is empty.
4656092	Cluster peer modify was attempted with a host name that did not resolve to an IPv4 or IPv6 address.
4655058	Expiration time cannot be more than 7 days in the future.
4653261	Error finding IPspace.
4656095	The address family of the specified peer addresses is not valid in this IPspace. Use /api/network/interfaces/ to verify that required LIFs are present and operational on each cluster node.

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
interfaces	href	
self	href	

authentication

Name	Type	Description
expiry_time	string	The time when the passphrase will expire, in ISO 8601 duration format or date and time format. The default is 1 hour.
generate_passphrase	boolean	Auto generate a passphrase when true.
in_use	string	
passphrase	string	A password to authenticate the cluster peer relationship.
state	string	

encryption

Name	Type	Description
proposed	string	
state	string	

_links

Name	Type	Description
self	href	

initial_allowed_svms

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

ipspace

The IPspace of the local intercluster LIFs

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

interfaces

Name	Type	Description
ip_address	string	IPv4 or IPv6 address

local_network

Cluster peering requires an intercluster LIF on each local node. These can be optionally created by specifying a list of IP addresses corresponding to each node.

Name	Type	Description
broadcast_domain	string	Broadcast domain that is in use within the IPspace.
gateway	string	The IPv4 or IPv6 address of the default router.
interfaces	array[interfaces]	
netmask	string	IPv4 mask or netmask length.

remote

Name	Type	Description
ip_addresses	array[string]	The IPv4 addresses, IPv6 addresses, or hostnames of the peers.

Name	Type	Description
name	string	The name of the remote cluster.
serial_number	string	The serial number of the remote cluster.

status

Name	Type	Description
state	string	
update_time	string	The last time the state was updated.

cluster_peer

Name	Type	Description
_links	_links	
authentication	authentication	
encryption	encryption	
initial_allowed_svms	array[initial_allowed_svms]	The local SVMs allowed to peer with the peer cluster's SVMs. This list can be modified until the remote cluster accepts this cluster peering relationship.
ipspace	ipspace	The IPspace of the local intercluster LIFs
name	string	Optional name for the cluster peer relationship. By default it is the name of the remote cluster.
remote	remote	
status	status	
uuid	string	UUID of the cluster peer relationship. For anonymous cluster peer offers, the UUID will change when the remote cluster accepts the relationship.

authentication

Name	Type	Description
expiry_time	string	The date and time the passphrase will expire. The default expiry time is one hour.
passphrase	string	A password to authenticate the cluster peer relationship.

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.

Copyright information

Trademark information