



Manage FlexCache volumes

REST API reference

NetApp
July 17, 2026

This PDF was generated from https://docs.netapp.com/us-en/ontap-restapi-9181/storage_flexcache_flexcaches_endpoint_overview.html on July 17, 2026. Always check docs.netapp.com for the latest.

Table of Contents

Manage FlexCache volumes	1
Manage FlexCache volumes	1
Overview	1
FlexCache APIs	1
Examples	1
Retrieve a FlexCache volume in the cluster	17
Expensive properties	17
Related ONTAP commands	17
Learn more	17
Parameters	17
Response	21
Error	23
Definitions	24
Create a FlexCache volume in the cluster	32
Required properties	32
Recommended optional properties	32
Default property values	32
Related ONTAP commands	33
Learn more	33
Parameters	33
Request Body	34
Response	38
Response	38
Error	38
Definitions	40
Delete a FlexCache volume	48
Related ONTAP commands	48
Learn more	48
Parameters	48
Response	49
Response	50
Error	50
Definitions	51
Retrieve attributes of the FlexCache volume in the cluster	52
Expensive properties	53
Related ONTAP commands	53
Learn more	53
Parameters	53
Response	53
Error	57
Definitions	58
Pre-populate a FlexCache volume in the cluster	64
Recommended optional properties	64

Default property values	64
Related ONTAP commands	64
Learn more	64
Parameters	65
Request Body	65
Response	66
Response	67
Error	67
Definitions	69

Manage FlexCache volumes

Manage FlexCache volumes

Overview

FlexCache is a persistent cache of an origin volume. An origin volume can only be a FlexVol while a FlexCache is always a FlexGroup.

The following relationship configurations are supported:

- – Intra-Vserver where FlexCache and the corresponding origin volume reside in the same Vserver.

- – Cross-Vserver but intra-cluster where FlexCache and the origin volume reside in the same cluster but belong to different Vservers.

- – Cross-cluster where FlexCache and the origin volume reside in different clusters.

FlexCache supports fan-out and more than one FlexCache can be created from one origin volume. This API retrieves and manages FlexCache configurations in the cache cluster.

FlexCache APIs

The following APIs can be used to perform operations related with FlexCache:

- – GET /api/storage/flexcache/flexcaches

- – GET /api/storage/flexcache/flexcaches/{uuid}

- – POST /api/storage/flexcache/flexcaches

- – DELETE /api/storage/flexcache/flexcaches/{uuid}

Examples

Creating a FlexCache

The POST request is used to create a FlexCache.

```

# The API:
/api/storage/flexcache/flexcaches

# The call:
curl -X POST "https://<mgmt-ip>/api/storage/flexcache/flexcaches" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
\"aggregates\": [ { \"name\": \"aggr_1\" } ], \"name\": \"fc_333\",
\"origins\": [ { \"svm\": { \"name\": \"vs_3\" }, \"volume\": {
\"name\": \"vol_o1\" } } ], \"svm\": { \"name\": \"vs_1\" } }"

# The response:
{
  "job": {
    "uuid": "e751dd5d-0f3c-11e9-8b2b-0050568e0b79",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/e751dd5d-0f3c-11e9-8b2b-0050568e0b79"
      }
    }
  }
}

```

```
# The API:
/api/storage/flexcache/flexcaches

# The call:
curl -X POST "https://<mgmt-ip>/api/storage/flexcache/flexcaches" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
\"aggregates\": [ { \"name\": \"aggr_1\" } ], \"name\": \"fc_333\",
\"origins\": [ { \"svm\": { \"name\": \"vs_3\" }, \"volume\": {
\"name\": \"vol_o1\" } } ], \"svm\": { \"name\": \"vs_1\" }, \"path\":
\"/fc_333\", \"prepopulate\": { \"dir_paths\": [ \"/dir1\" ] } }"

# The response:
{
  "job": {
    "uuid": "e751dd5d-0f3c-11e9-8b2b-0050568e0b79",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/e751dd5d-0f3c-11e9-8b2b-0050568e0b79"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches

# The call:
curl -X POST "https://<mgmt-ip>/api/storage/flexcache/flexcaches" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
  \"aggregates\": [ { \"name\": \"aggr_1\" } ], \"name\":
  \"fc_333\", \"origins\": [ { \"svm\": { \"name\": \"vs_3\" },
  \"volume\": { \"name\": \"vol_o1\" } } ], \"svm\": { \"name\": \"vs_1\" },
  \"path\": \"/          fc_333\", \"prepopulate\": { \"dir_paths\": [
  \"/dir1\" ], \"exclude_dir_paths\": [ \"/dir1/dir11\" ] } }"

# The response:
{
  "job": {
    "uuid": "5afe9ea4-1dcf-11eb-b006-005056ac6a93",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/5afe9ea4-1dcf-11eb-b006-005056ac6a93"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches

# The call:
curl -X POST "https://<mgmt-ip>/api/storage/flexcache/flexcaches" -H
"accept: application/json" -H "Content-Type: application/json" -d "{
  \"aggregates\": [ { \"name\": \"aggr_1\" } ], \"name\": \"fc_333\",
  \"origins\": [ { \"svm\": { \"name\": \"vs_3\" }, \"volume\": {
    \"name\": \"vol_o1\" } } ], \"svm\": { \"name\": \"vs_1\" }, \"dr_cache\":
  true, \"path\": \" /fc_333\", \"prepopulate\": { \"dir_paths\": [
    \" /dir1\" ] } }"

# The response:
{
  "job": {
    "uuid": "e751dd5d-0f3c-11e9-8b2b-0050568e0b79",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/e751dd5d-0f3c-11e9-8b2b-0050568e0b79"
      }
    }
  }
}
```

Retrieving FlexCache attributes

The GET request is used to retrieve FlexCache attributes. The object includes a large set of fields which can be expensive to retrieve. Most notably, the fields size, guarantee.type, aggregates, path, origins.ip_address, origins.size, and origins.state are expensive to retrieve. The recommended method to use this API is to filter and retrieve only the required fields.

```
# The API:
/api/storage/flexcache/flexcaches

# The call:
curl -X GET "https://<mgmt-ip>/api/storage/flexcache/flexcaches?" -H
"accept: application/json"

# The response:
{
  "records": [
    {
      "uuid": "04d5e07b-0ebe-11e9-8180-0050568e0b79",
      "name": "fc_322",
      "_links": {
```



```

    "self": {
      "href": "/api/storage/flexcache/flexcaches/04d5e07b-0ebe-11e9-8180-0050568e0b79"
    }
  },
  {
    "uuid": "47902654-0ea4-11e9-8180-0050568e0b79",
    "name": "fc_321",
    "_links": {
      "self": {
        "href": "/api/storage/flexcache/flexcaches/47902654-0ea4-11e9-8180-0050568e0b79"
      }
    }
  },
  {
    "uuid": "77e911ff-0ebe-11e9-8180-0050568e0b79",
    "name": "fc_323",
    "_links": {
      "self": {
        "href": "/api/storage/flexcache/flexcaches/77e911ff-0ebe-11e9-8180-0050568e0b79"
      }
    }
  },
  {
    "uuid": "ddb42bbc-0e95-11e9-8180-0050568e0b79",
    "name": "fc_32",
    "_links": {
      "self": {
        "href": "/api/storage/flexcache/flexcaches/ddb42bbc-0e95-11e9-8180-0050568e0b79"
      }
    }
  },
  {
    "uuid": "ec774932-0f3c-11e9-8b2b-0050568e0b79",
    "name": "fc_333",
    "_links": {
      "self": {
        "href": "/api/storage/flexcache/flexcaches/ec774932-0f3c-11e9-8b2b-0050568e0b79"
      }
    }
  }
}

```

```

],
"num_records": 5,
"_links": {
  "self": {
    "href": "/api/storage/flexcache/flexcaches?"
  }
}
}
}

```

Retrieving the attributes of a FlexCache

The GET request is used to retrieve the attributes of a FlexCache. The object includes a large set of fields which can be expensive to retrieve. Most notably, the fields size, guarantee.type, aggregates, path, origins.ip_address, origins.size, and origins.state are expensive to retrieve. The recommended method to use this API is to filter and retrieve only the required fields.

```

# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/storage/flexcache/flexcaches/ec774932-0f3c-11e9-8b2b-0050568e0b79" -H "accept: application/json"

# The response:
{
  "uuid": "ec774932-0f3c-11e9-8b2b-0050568e0b79",
  "name": "fc_333",
  "svm": {
    "name": "vs_1",
    "uuid": "e708fbe2-0e92-11e9-8180-0050568e0b79"
  },
  "size": 4294967296,
  "guarantee": {
    "type": "volume"
  },
  "dr_cache": "true",
  "aggregates": [
    {
      "name": "aggr_1",
      "uuid": "26f34b76-88f8-4a47-b5e0-d8e901fb1114"
    }
  ],
  "origins": [
    {
      "ip_address": "10.140.103.175",
      "size": 20971520,

```

```

    "create_time": "2019-01-03T15:19:55+05:30",
    "state": "online",
    "volume": {
      "name": "vol_o1",
      "uuid": "2bc957dd-2617-4afb-8d2f-66ac6070d313"
    },
    "svm": {
      "name": "vs_3",
      "uuid": "8aa2cd28-0e92-11e9-b391-0050568e4115"
    },
    "cluster": {
      "name": "node2",
      "uuid": "50733f81-0e90-11e9-b391-0050568e4115"
    }
  },
  "_links": {
    "self": {
      "href": "/api/storage/flexcache/flexcaches/ec774932-0f3c-11e9-8b2b-0050568e0b79"
    }
  }
}

```

Deleting a FlexCache

The DELETE request is used to delete a FlexCache.

```
# The API:
/api/storage/flexcache/flexcaches

# The call:
curl -X DELETE "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/ec774932-0f3c-11e9-8b2b-0050568e0b79"
-H "accept: application/json"

# The response:
{
  "job": {
    "uuid": "e17994f2-0f3e-11e9-8b2b-0050568e0b79",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/e17994f2-0f3e-11e9-8b2b-0050568e0b79"
      }
    }
  }
}
```

Modifying a FlexCache volume

Use the PATCH request to update a FlexCache volume.

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call:
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/ec774932-0f3c-11e9-8b2b-0050568e0b79"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
  \"prepopulate\": { \"dir_paths\": [ \"/dir1\" ] } }"

# The response:
{
  "job": {
    "uuid": "e751dd5d-0f3c-11e9-8b2b-0050568e0b79",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/e751dd5d-0f3c-11e9-8b2b-0050568e0b79"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/ec774932-0f3c-11e9-8b2b-0050568e0b79"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
  \"prepopulate\": { \"dir_paths\": [ \"/dir1\" ], \"exclude_dir_paths\": [
  \"/dir1/dir11\" ] } }"

# The response:
{
  "job": {
    "uuid": "b574c48c-1da7-11eb-b006-005056ac6a93",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/b574c48c-1da7-11eb-b006-005056ac6a93"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
  \"nfsv4\" : { \"enabled\": true } }"

# The response:
{
  "job": {
    "uuid": "c521a541-3046-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/c521a541-3046-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"nfsv4\" : { \"enabled\": false } }"

# The response:
{
  "job": {
    "uuid": "17e193f3-304b-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/17e193f3-304b-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"cifs\" : { \"enabled\": true } }"

# The response:
{
  "job": {
    "uuid": "c521a541-3046-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/c521a541-3046-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"cifs\" : { \"enabled\": false } }"

# The response:
{
  "job": {
    "uuid": "17e193f3-304b-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/17e193f3-304b-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"s3\" : { \"enabled\": true } }"

# The response:
{
  "job": {
    "uuid": "c521a541-3046-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/c521a541-3046-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"s3\" : { \"enabled\": false } }"

# The response:
{
  "job": {
    "uuid": "c521a541-3046-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/c521a541-3046-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"writeback\" : { \"enabled\": true } }"

# The response:
{
  "job": {
    "uuid": "c521a541-3046-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/c521a541-3046-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```



```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/28f9734a-2fc2-11ed-a5d5-005056bb2b7"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"writeback\" : { \"enabled\": false } }"

# The response:
{
  "job": {
    "uuid": "17e193f3-304b-11ed-a5d5-005056bbb2b7",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/17e193f3-304b-11ed-a5d5-005056bbb2b7"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/885dfd0f-ac37-11ed-a2ca-005056bb5573"
-H "accept: application/json" -d '{"relative_size" : {"enabled":true,
"percentage" : 50}}'

# The response:
{
  "job": {
    "uuid": "34d9c90d-ac38-11ed-a2ca-005056bb5573",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/34d9c90d-ac38-11ed-a2ca-005056bb5573"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/885dfd0f-ac37-11ed-a2ca-005056bb5573"
-H "accept: application/json" -d '{"relative_size" : {"enabled":false}}'

# The response:
{
  "job": {
    "uuid": "14bfcc28-ac82-11ed-83bd-005056bb5573",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/14bfcc28-ac82-11ed-83bd-005056bb5573"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/885dfd0f-ac37-11ed-a2ca-005056bb5573"
-H "accept: application/json" -d '{"atime_scrub" : {"enabled":true,
"period" : 30}}'

# The response:
{
  "job": {
    "uuid": "34d9c90d-ac38-11ed-a2ca-005056bb5573",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/34d9c90d-ac38-11ed-a2ca-005056bb5573"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/885dfd0f-ac37-11ed-a2ca-005056bb5573"
-H "accept: application/json" -d '{"atime_scrub" : {"enabled":false}}'

# The response:
{
  "job": {
    "uuid": "14bfcc28-ac82-11ed-83bd-005056bb5573",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/14bfcc28-ac82-11ed-83bd-005056bb5573"
      }
    }
  }
}
```

```
# The API:
/api/storage/flexcache/flexcaches/{uuid}

# The call
curl -X PATCH "https://<mgmt-
ip>/api/storage/flexcache/flexcaches/885dfd0f-ac37-11ed-a2ca-005056bb5573"
-H "accept: application/json" -d '{"cifs_change_notify" :
{"enabled":true}}'

# The response:
{
  "job": {
    "uuid": "14bfcc28-ac82-11ed-83bd-005056bb5573",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/14bfcc28-ac82-11ed-83bd-005056bb5573"
      }
    }
  }
}
```

Retrieve a FlexCache volume in the cluster

GET /storage/flexcache/flexcaches

Introduced In: 9.6

Retrieves FlexCache in the cluster.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [Requesting specific fields](#) to learn more.

- `origins.ip_address` - IP address of origin.
- `origins.size` - Physical size of origin.
- `origins.state` - State of origin.
- `size` - Physical size of FlexCache.
- `guarantee.type` - Space guarantee style of FlexCache.
- `aggregates.name` or `aggregates.uuid` - Name or UUID of aggregate of FlexCache volume.
- `path` - Fully-qualified path of the owning SVM's namespace where the FlexCache is mounted.

Related ONTAP commands

- `volume flexcache show`

Learn more

- [DOC /storage/flexcache/flexcaches](#)

Parameters

Name	Type	In	Required	Description
<code>relative_size.enabled</code>	boolean	query	False	Filter by <code>relative_size.enabled</code> • Introduced in: 9.13
<code>relative_size.percentage</code>	integer	query	False	Filter by <code>relative_size.percentage</code> • Introduced in: 9.13

Name	Type	In	Required	Description
origins.create_time	string	query	False	Filter by origins.create_time
origins.ip_address	string	query	False	Filter by origins.ip_address
origins.state	string	query	False	Filter by origins.state
origins.volume.name	string	query	False	Filter by origins.volume.name
origins.volume.uuid	string	query	False	Filter by origins.volume.uuid
origins.svm.name	string	query	False	Filter by origins.svm.name
origins.svm.uuid	string	query	False	Filter by origins.svm.uuid
origins.size	integer	query	False	Filter by origins.size
origins.cluster.name	string	query	False	Filter by origins.cluster.name
origins.cluster.uuid	string	query	False	Filter by origins.cluster.uuid
s3.enabled	boolean	query	False	Filter by s3.enabled • Introduced in: 9.18
atime_scrub.period	integer	query	False	Filter by atime_scrub.period • Introduced in: 9.14
atime_scrub.enabled	boolean	query	False	Filter by atime_scrub.enabled • Introduced in: 9.14

Name	Type	In	Required	Description
global_file_locking_enabled	boolean	query	False	Filter by global_file_locking_enabled • Introduced in: 9.9
use_tiered_aggregate	boolean	query	False	Filter by use_tiered_aggregate • Introduced in: 9.8
svm.name	string	query	False	Filter by svm.name
svm.uuid	string	query	False	Filter by svm.uuid
override_encryption	boolean	query	False	Filter by override_encryption • Introduced in: 9.14
constituents_per_aggregate	integer	query	False	Filter by constituents_per_aggregate
guarantee.type	string	query	False	Filter by guarantee.type • Introduced in: 9.7
dr_cache	boolean	query	False	Filter by dr_cache • Introduced in: 9.9
uuid	string	query	False	Filter by uuid
size	integer	query	False	Filter by size
nfsv4.enabled	boolean	query	False	Filter by nfsv4.enabled • Introduced in: 9.18

Name	Type	In	Required	Description
cifs_change_notify.enabled	boolean	query	False	Filter by cifs_change_notify.enabled Introduced in: 9.14
aggregates.name	string	query	False	Filter by aggregates.name
aggregates.uuid	string	query	False	Filter by aggregates.uuid
name	string	query	False	Filter by name - maxLength: 203 - minLength: 1
writeback.enabled	boolean	query	False	Filter by writeback.enabled Introduced in: 9.12
cifs.enabled	boolean	query	False	Filter by cifs.enabled Introduced in: 9.18
path	string	query	False	Filter by path
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. - Default value: 15 - Max value: 120 - Min value: 0

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.
order_by	array[string]	query	False	Order results by specified fields and optional [asc
desc] direction. Default direction is 'asc' for ascending.	return_records	boolean	query	False

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
num_records	integer	Number of records
records	array[flexcache]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "aggregates": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      ],
      "constituents_per_aggregate": 1,
      "guarantee": {
        "type": "string"
      },
      "name": "vol1",
      "origins": [
        {
          "cluster": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            }
          },
          "name": "cluster1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      ],
    }
  ]
}
```

```

        "create_time": "2018-06-04 19:00:00 +0000",
        "ip_address": "10.10.10.7",
        "size": 0,
        "state": "string",
        "svm": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "svm1",
            "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        },
        "volume": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "volume1",
            "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
        }
    },
    "path": "/user/my_fc",
    "svm": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
]
}

```

Error

Status: Default, Error

Name	Type	Description
error	returned_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	

aggregates

Aggregate

Name	Type	Description
_links	_links	
name	string	
uuid	string	

atime_scrub

FlexCache volume atime-based scrub

Name	Type	Description
enabled	boolean	Specifies whether scrubbing of inactive files based on atime is enabled for the FlexCache volume. When scrubbing is enabled, files whose atime is older than the specified duration are evicted from the cache volume. The scrubber runs once a day and looks for files whose atime has exceeded the provisioned value.

Name	Type	Description
period	integer	Specifies the atime duration in days after which a cached file is considered inactive. Inactive files are purged from the FlexCache volumes when the scrubber runs once a day.

cifs

FlexCache CIFS

Name	Type	Description
enabled	boolean	Specifies whether CIFS access is enabled on the FlexCache volume.

cifs_change_notify

Notifies that a change has been made to the FlexCache volume CIFS.

Name	Type	Description
enabled	boolean	Specifies whether a CIFS change notification is enabled for the FlexCache volume.

guarantee

Name	Type	Description
type	string	The type of space guarantee of this volume in the aggregate.

nfsv4

FlexCache NFSv4

Name	Type	Description
enabled	boolean	Specifies whether NFSv4 access is enabled on the FlexCache volume.

cluster

Name	Type	Description
_links	_links	
name	string	
uuid	string	

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
_links	_links	
name	string	The name of the volume. This field cannot be specified in a PATCH method.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true

flexcache_relationship

Name	Type	Description
cluster	cluster	
create_time	string	Creation time of the relationship.

Name	Type	Description
ip_address	string	Cluster management IP of the remote cluster.
size	integer	Size of the remote volume.
state	string	Volume state
svm	svm	SVM, applies only to SVM-scoped objects.
volume	volume	

prepopulate

FlexCache prepopulate

relative_size

FlexCache Relative Size

Name	Type	Description
enabled	boolean	Specifies whether the relative sizing is enabled for the FlexCache volume. Relative sizing is introduced as a part of follow the origin feature. When relative sizing is enabled, it blocks any modifications done manually in the absolute size of the FlexCache volume. The size of the FlexCache volume is calculated and entered automatically based on the size of the origin volume.
percentage	integer	Specifies the percent size the FlexCache volume should have relative to the total size of the origin volume. This property is only relevant to a FlexCache volume that has the relative size property enabled.

s3

Flexcache S3

Name	Type	Description
enabled	boolean	Indicates whether S3 access is enabled on the Flexcache volume.

svm

FlexCache SVM

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

writeback

FlexCache Writeback

Name	Type	Description
enabled	boolean	Indicates whether or not writeback is enabled for the FlexCache volume. Writeback is a storage method where data is first written to the FlexCache volume and then written to the origin of a FlexCache volume.

flexcache

Defines the cache endpoint of FlexCache.

Name	Type	Description
_links	_links	
aggregates	array[aggregates]	
atime_scrub	atime_scrub	FlexCache volume atime-based scrub
cifs	cifs	FlexCache CIFS

Name	Type	Description
cifs_change_notify	cifs_change_notify	Notifies that a change has been made to the FlexCache volume CIFS.
constituents_per_aggregate	integer	Number of FlexCache constituents per aggregate when the 'aggregates' field is mentioned.
dr_cache	boolean	If set to true, a DR cache is created.
global_file_locking_enabled	boolean	Specifies whether or not a FlexCache volume has global file locking mode enabled. Global file locking mode is a mode where protocol read locking semantics are enforced across all FlexCaches and origins of a FlexCache volume. When global file locking mode is enabled, the "is_disconnected_mode_off_for_locks" flag is always set to "true".
guarantee	guarantee	
name	string	FlexCache name
nfsv4	nfsv4	FlexCache NFSv4
origins	array[flexcache_relationship]	
override_encryption	boolean	If set to true, a plaintext FlexCache volume for an encrypted origin volume is created.
path	string	The fully-qualified path in the owning SVM's namespace at which the FlexCache is mounted. The path is case insensitive and must be unique within a SVM's namespace. Path must begin with '/' and must not end with '/'. Only one FlexCache be mounted at any given junction path.
relative_size	relative_size	FlexCache Relative Size

Name	Type	Description
s3	s3	Flexcache S3
size	integer	Physical size of the FlexCache. The recommended size for a FlexCache is 10% of the origin volume. The minimum FlexCache constituent size is 1GB.
svm	svm	FlexCache SVM
use_tiered_aggregate	boolean	Specifies whether or not a Fabricpool-enabled aggregate can be used in FlexCache creation. The use_tiered_aggregate is only used when auto-provisioning a FlexCache volume.
uuid	string	FlexCache UUID. Unique identifier for the FlexCache.
writeback	writeback	FlexCache Writeback

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 FlexCache volume in the cluster

POST /storage/flexcache/flexcaches

Introduced In: 9.6

Creates a FlexCache in the cluster.

Required properties

- `name` - Name of FlexCache volume.
- `origins.volume.name` - Name of the origin volume. This volume can only be identified by its name, not by its UUID.
- `origins.svm.name` - Name of origin Vserver.
- `svm.name` or `svm.uuid` - Name or UUID of Vserver where FlexCache will be created.

Recommended optional properties

- `path` - Path to mount the FlexCache volume
- `prepopulate.dir_paths` - List of directory-paths to be prepopulated for the FlexCache volume.
- `prepopulate.exclude_dir_paths` - List of directory-paths to be excluded from prepopulation for the FlexCache volume.

Default property values

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

- `size` - 10% of origin volume size or 1GB per constituent, whichever is greater.
- `guarantee.type` - `none`. FlexCache is thin provisioned by default.
- `constituents_per_aggregate` - 4 if `aggregates.name` or `aggregates.uuid` is used.
- `use_tiered_aggregate` - `false` if `aggr-list` is not used. This property is only used when auto-provisioning a FlexCache volume.
- `is_disconnected_mode_off_for_locks` - `false`. This property specifies if the origin will honor the cache side locks when doing the lock checks in the disconnected mode.
- `dr_cache` - `false` if FlexCache is not a DR cache. This property is used to create a DR FlexCache.
- `global_file_locking_enabled` - `false`. This property specifies whether global file locking is enabled on the FlexCache volume.
- `writeback.enabled` - `false`. This property specifies whether writeback is enabled for the FlexCache volume.
- `relative_size.enabled` - `false`. This property specifies whether the relative sizing is enabled for the FlexCache volume.
- `relative_size.percentage` - 10. This property specifies the percent size FlexCache volume should have relative to the total size of the origin volume.
- `override_encryption` - `false`. If true, this property is used to create a plaintext FlexCache volume for

an encrypted origin volume.

- `atime_scrub.enabled` - `false`. This property specifies whether scrubbing of inactive files based on atime is enabled for the FlexCache volume.
- `atime_scrub.period` - `30`. This property specifies the atime duration in days after which the file can be scrubbed from the FlexCache volume if it stays unused beyond the duration.
- `nfsv4.enabled` - `false`. This property specifies whether NFSv4 is enabled for the FlexCache volume.
- `cifs.enabled` - `false`. This property specifies whether CIFS is enabled for the FlexCache volume.
- `s3.enabled` - `false`. This property specifies whether S3 is enabled for the FlexCache volume.
- `cifs_change_notify.enabled` - `false`. This property specifies whether a CIFS change notification is enabled for the FlexCache volume.

Related ONTAP commands

- `volume flexcache create`
- `volume flexcache prepopulate start`

Learn more

- [DOC /storage/flexcache/flexcaches](#)

Parameters

Name	Type	In	Required	Description
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. • Default value: 0 • Max value: 120 • Min value: 0
return_records	boolean	query	False	The default is false. If set to true, the records are returned. • Default value:

Request Body

Name	Type	Description
aggregates	array[aggregates]	
atime_scrub	atime_scrub	FlexCache volume atime-based scrub

Name	Type	Description
cifs	cifs	FlexCache CIFS
cifs_change_notify	cifs_change_notify	Notifies that a change has been made to the FlexCache volume CIFS.
constituents_per_aggregate	integer	Number of FlexCache constituents per aggregate when the 'aggregates' field is mentioned.
dr_cache	boolean	If set to true, a DR cache is created.
global_file_locking_enabled	boolean	Specifies whether or not a FlexCache volume has global file locking mode enabled. Global file locking mode is a mode where protocol read locking semantics are enforced across all FlexCaches and origins of a FlexCache volume. When global file locking mode is enabled, the "is_disconnected_mode_off_for_locks" flag is always set to "true".
guarantee	guarantee	
name	string	FlexCache name
nfsv4	nfsv4	FlexCache NFSv4
origins	array[flexcache_relationship]	
override_encryption	boolean	If set to true, a plaintext FlexCache volume for an encrypted origin volume is created.
path	string	The fully-qualified path in the owning SVM's namespace at which the FlexCache is mounted. The path is case insensitive and must be unique within a SVM's namespace. Path must begin with '/' and must not end with '/'. Only one FlexCache be mounted at any given junction path.
prepopulate	prepopulate	FlexCache prepopulate

Name	Type	Description
relative_size	relative_size	FlexCache Relative Size
s3	s3	Flexcache S3
size	integer	Physical size of the FlexCache. The recommended size for a FlexCache is 10% of the origin volume. The minimum FlexCache constituent size is 1GB.
svm	svm	FlexCache SVM
use_tiered_aggregate	boolean	Specifies whether or not a Fabricpool-enabled aggregate can be used in FlexCache creation. The use_tiered_aggregate is only used when auto-provisioning a FlexCache volume.
uuid	string	FlexCache UUID. Unique identifier for the FlexCache.
writeback	writeback	FlexCache Writeback

Example request

```
{
  "aggregates": [
    {
      "name": "aggr1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  ],
  "constituents_per_aggregate": 1,
  "guarantee": {
    "type": "string"
  },
  "name": "voll",
  "origins": [
    {
      "cluster": {
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "create_time": "2018-06-04 19:00:00 +0000",
      "ip_address": "10.10.10.7",
      "size": 0,
      "state": "string",
      "svm": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "volume": {
        "name": "volume1",
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
    }
  ],
  "path": "/user/my_fc",
  "prepopulate": {
    "dir_paths": [
      "/dir1"
    ],
    "exclude_dir_paths": [
      "/dir1/dir2"
    ]
  },
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```



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

Response

Status: 202, Accepted

Name	Type	Description
job	job_link	

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Response

Status: 201, Created

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
11	Provided value is smaller than the required minimum flexvolume size.

Error Code	Description
262186	Invalid combination with field "aggregates".
917937	The root path "/" is an invalid value for the field "path".
918723	Aggregate value cannot be used to create a volume on this platform.
66846735	The peer state of the relationship is not peered or the FlexCache application is not supported by the relationship
66846762	The origin volume in the SVM is offline
66846767	Volume does not exist in SVM.
66846867	Global file locking (GFL) mode is already disabled for origin of a FlexCache volume in SVM. Enabling GFL is only supported when the first FlexCache volume is created for an origin. Set <code>is_global_file_locking_enabled</code> to "false".
66846768	Volume already exists in SVM.
66846863	The "preserve-msid" parameter is not supported when creating the FlexCache volume in the same SVM as the origin of a FlexCache volume
66846870	Either the SVM name or origin volume name is missing
66846871	Constituents per aggregate are specified but aggregate name is missing
66846872	More than one origin volume is specified
66846873	The specified SVM UUID is incorrect for the specified SVM name
66846874	The specified name and SVM uuid refer to different aggregates.
66846875	The specified aggregate name does not exist
66846876	The specified SVM does not exist or is not peered
66846877	The specified origin SVM name is of zero length
66846878	The specified SVM UUID is invalid
66846998	Failed to modify the "relative_size_percentage" property of volume in SVM because the "relative_size_enabled" property is false.
66846730	Failed to create a FlexCache volume
66846760	The specified SVM is not a data Vserver
66846787	The specified aggregate is a SnapLock aggregate
66846812	The specified aggregate is a Composite aggregate

Error Code	Description
66846812	The specified junction path is under a FlexCache volume
66846834	FlexCache encryption requires a cluster version of 9.6 or higher
66846835	A volume encryption license is not found
66847013	Creating a FlexCache volume with override-encryption property set to true requires an effective cluster version of 9.14.0 or later on both origin and cache clusters
66846844	An object store server volume cannot be the origin of a FlexCache volume
66846902	FlexCache is not supported on an All SAN Array system.
66846915	The "use_tiered_aggregate" option is only supported when auto provisioning the FlexCache volume.
66847026	Failed to enable the atime-scrub-enabled property for the FlexCache volume because the atime-update-property is false

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

aggregates

Aggregate

Name	Type	Description
name	string	
uuid	string	

atime_scrub

FlexCache volume atime-based scrub

Name	Type	Description
enabled	boolean	Specifies whether scrubbing of inactive files based on atime is enabled for the FlexCache volume. When scrubbing is enabled, files whose atime is older than the specified duration are evicted from the cache volume. The scrubber runs once a day and looks for files whose atime has exceeded the provisioned value.
period	integer	Specifies the atime duration in days after which a cached file is considered inactive. Inactive files are purged from the FlexCache volumes when the scrubber runs once a day.

cifs

FlexCache CIFS

Name	Type	Description
enabled	boolean	Specifies whether CIFS access is enabled on the FlexCache volume.

cifs_change_notify

Notifies that a change has been made to the FlexCache volume CIFS.

Name	Type	Description
enabled	boolean	Specifies whether a CIFS change notification is enabled for the FlexCache volume.

guarantee

Name	Type	Description
type	string	The type of space guarantee of this volume in the aggregate.

nfsv4

FlexCache NFSv4

Name	Type	Description
enabled	boolean	Specifies whether NFSv4 access is enabled on the FlexCache volume.

cluster

Name	Type	Description
name	string	
uuid	string	

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.

Name	Type	Description
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
name	string	The name of the volume. This field cannot be specified in a PATCH method.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true

flexcache_relationship

Name	Type	Description
cluster	cluster	
create_time	string	Creation time of the relationship.
ip_address	string	Cluster management IP of the remote cluster.
size	integer	Size of the remote volume.
state	string	Volume state
svm	svm	SVM, applies only to SVM-scoped objects.
volume	volume	

prepopulate

FlexCache prepopulate

Name	Type	Description
dir_paths	array[string]	
exclude_dir_paths	array[string]	
recurse	boolean	Specifies whether or not the prepopulate action should search through the <code>dir_paths</code> recursively. If not set, the default value <i>true</i> is used.

relative_size

FlexCache Relative Size

Name	Type	Description
enabled	boolean	Specifies whether the relative sizing is enabled for the FlexCache volume. Relative sizing is introduced as a part of follow the origin feature. When relative sizing is enabled, it blocks any modifications done manually in the absolute size of the FlexCache volume. The size of the FlexCache volume is calculated and entered automatically based on the size of the origin volume.
percentage	integer	Specifies the percent size the FlexCache volume should have relative to the total size of the origin volume. This property is only relevant to a FlexCache volume that has the relative size property enabled.

s3

Flexcache S3

Name	Type	Description
enabled	boolean	Indicates whether S3 access is enabled on the Flexcache volume.

svm

FlexCache SVM

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

writeback

FlexCache Writeback

Name	Type	Description
enabled	boolean	Indicates whether or not writeback is enabled for the FlexCache volume. Writeback is a storage method where data is first written to the FlexCache volume and then written to the origin of a FlexCache volume.

flexcache

Defines the cache endpoint of FlexCache.

Name	Type	Description
aggregates	array[aggregates]	
atime_scrub	atime_scrub	FlexCache volume atime-based scrub
cifs	cifs	FlexCache CIFS
cifs_change_notify	cifs_change_notify	Notifies that a change has been made to the FlexCache volume CIFS.
constituents_per_aggregate	integer	Number of FlexCache constituents per aggregate when the 'aggregates' field is mentioned.
dr_cache	boolean	If set to true, a DR cache is created.

Name	Type	Description
global_file_locking_enabled	boolean	Specifies whether or not a FlexCache volume has global file locking mode enabled. Global file locking mode is a mode where protocol read locking semantics are enforced across all FlexCaches and origins of a FlexCache volume. When global file locking mode is enabled, the "is_disconnected_mode_off_for_locks" flag is always set to "true".
guarantee	guarantee	
name	string	FlexCache name
nfsv4	nfsv4	FlexCache NFSv4
origins	array[flexcache_relationship]	
override_encryption	boolean	If set to true, a plaintext FlexCache volume for an encrypted origin volume is created.
path	string	The fully-qualified path in the owning SVM's namespace at which the FlexCache is mounted. The path is case insensitive and must be unique within a SVM's namespace. Path must begin with '/' and must not end with '/'. Only one FlexCache be mounted at any given junction path.
prepopulate	prepopulate	FlexCache prepopulate
relative_size	relative_size	FlexCache Relative Size
s3	s3	Flexcache S3
size	integer	Physical size of the FlexCache. The recommended size for a FlexCache is 10% of the origin volume. The minimum FlexCache constituent size is 1GB.
svm	svm	FlexCache SVM

Name	Type	Description
use_tiered_aggregate	boolean	Specifies whether or not a Fabricpool-enabled aggregate can be used in FlexCache creation. The use_tiered_aggregate is only used when auto-provisioning a FlexCache volume.
uuid	string	FlexCache UUID. Unique identifier for the FlexCache.
writeback	writeback	FlexCache Writeback

job_link

Name	Type	Description
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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.

Delete a FlexCache volume

DELETE /storage/flexcache/flexcaches/{uuid}

Introduced In: 9.6

Deletes a FlexCache. If a FlexCache volume is online, it is offlined before deletion.

Related ONTAP commands

- `volume flexcache delete`

Learn more

- [DOC /storage/flexcache/flexcaches](#)

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Unique identifier of the FlexCache.

Name	Type	In	Required	Description
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. • Default value: 0 • Max value: 120 • Min value: 0

Response

Status: 200, Ok

Name	Type	Description
job	job_link	

Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
66846879	The specified volume UUID is not a FlexCache volume
66846731	Failed to delete the FlexCache volume
524546	Failed to delete the FlexCache volume because the FlexCache volume is not unmounted
66846980	Failed to delete the FlexCache volume because it has the writeback property enabled

Name	Type	Description
error	returned_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	

job_link

Name	Type	Description
_links	_links	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 attributes of the FlexCache volume in the cluster

GET /storage/flexcache/flexcaches/{uuid}

Introduced In: 9.6

Retrieves attributes of the FlexCache in the cluster.

Expensive properties

There is an added computational cost to retrieving values for these properties. They are included by default in GET. The recommended method to use this API is to filter and retrieve only the required fields. See [Requesting specific fields](#) to learn more.

- `origins.ip_address` - IP address of origin.
- `origins.size` - Physical size of origin.
- `origins.state` - State of origin.
- `size` - Physical size of FlexCache.
- `guarantee.type` - Space guarantee style of FlexCache.
- `aggregates.name` or `aggregates.uuid` - Name or UUID of aggregate of FlexCache volume.
- `path` - Fully-qualified path of the owning SVM's namespace where the FlexCache is mounted.

Related ONTAP commands

- `volume flexcache show`

Learn more

- [DOC /storage/flexcache/flexcaches](#)

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Unique identifier of FlexCache.
fields	array[string]	query	False	Specify the fields to return.

Response

Status: 200, Ok

Name	Type	Description
<code>_links</code>	_links	
<code>aggregates</code>	array[aggregates]	

Name	Type	Description
atime_scrub	atime_scrub	FlexCache volume atime-based scrub
cifs	cifs	FlexCache CIFS
cifs_change_notify	cifs_change_notify	Notifies that a change has been made to the FlexCache volume CIFS.
constituents_per_aggregate	integer	Number of FlexCache constituents per aggregate when the 'aggregates' field is mentioned.
dr_cache	boolean	If set to true, a DR cache is created.
global_file_locking_enabled	boolean	Specifies whether or not a FlexCache volume has global file locking mode enabled. Global file locking mode is a mode where protocol read locking semantics are enforced across all FlexCaches and origins of a FlexCache volume. When global file locking mode is enabled, the "is_disconnected_mode_off_for_locks" flag is always set to "true".
guarantee	guarantee	
name	string	FlexCache name
nfsv4	nfsv4	FlexCache NFSv4
origins	array[flexcache_relationship]	
override_encryption	boolean	If set to true, a plaintext FlexCache volume for an encrypted origin volume is created.
path	string	The fully-qualified path in the owning SVM's namespace at which the FlexCache is mounted. The path is case insensitive and must be unique within a SVM's namespace. Path must begin with '/' and must not end with '/'. Only one FlexCache be mounted at any given junction path.

Name	Type	Description
relative_size	relative_size	FlexCache Relative Size
s3	s3	Flexcache S3
size	integer	Physical size of the FlexCache. The recommended size for a FlexCache is 10% of the origin volume. The minimum FlexCache constituent size is 1GB.
svm	svm	FlexCache SVM
use_tiered_aggregate	boolean	Specifies whether or not a Fabricpool-enabled aggregate can be used in FlexCache creation. The use_tiered_aggregate is only used when auto-provisioning a FlexCache volume.
uuid	string	FlexCache UUID. Unique identifier for the FlexCache.
writeback	writeback	FlexCache Writeback

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "aggregates": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "aggr1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  ],
  "constituents_per_aggregate": 1,
  "guarantee": {
    "type": "string"
  },
  "name": "voll",
  "origins": [
    {
      "cluster": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "create_time": "2018-06-04 19:00:00 +0000",
      "ip_address": "10.10.10.7",
      "size": 0,
      "state": "string",
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
```

```

        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "volume": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "volume1",
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
    },
    "path": "/user/my_fc",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
}

```

Error

Status: Default, Error

Name	Type	Description
error	returned_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	

aggregates

Aggregate

Name	Type	Description
_links	_links	
name	string	
uuid	string	

atime_scrub

FlexCache volume atime-based scrub

Name	Type	Description
enabled	boolean	Specifies whether scrubbing of inactive files based on atime is enabled for the FlexCache volume. When scrubbing is enabled, files whose atime is older than the specified duration are evicted from the cache volume. The scrubber runs once a day and looks for files whose atime has exceeded the provisioned value.
period	integer	Specifies the atime duration in days after which a cached file is considered inactive. Inactive files are purged from the FlexCache volumes when the scrubber runs once a day.

cifs

FlexCache CIFS

Name	Type	Description
enabled	boolean	Specifies whether CIFS access is enabled on the FlexCache volume.

cifs_change_notify

Notifies that a change has been made to the FlexCache volume CIFS.

Name	Type	Description
enabled	boolean	Specifies whether a CIFS change notification is enabled for the FlexCache volume.

guarantee

Name	Type	Description
type	string	The type of space guarantee of this volume in the aggregate.

nfsv4

FlexCache NFSv4

Name	Type	Description
enabled	boolean	Specifies whether NFSv4 access is enabled on the FlexCache volume.

cluster

Name	Type	Description
_links	_links	
name	string	
uuid	string	

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
_links	_links	
name	string	The name of the volume. This field cannot be specified in a PATCH method.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true

flexcache_relationship

Name	Type	Description
cluster	cluster	
create_time	string	Creation time of the relationship.
ip_address	string	Cluster management IP of the remote cluster.
size	integer	Size of the remote volume.
state	string	Volume state
svm	svm	SVM, applies only to SVM-scoped objects.
volume	volume	

prepopulate

FlexCache prepopulate

relative_size

FlexCache Relative Size

Name	Type	Description
enabled	boolean	Specifies whether the relative sizing is enabled for the FlexCache volume. Relative sizing is introduced as a part of follow the origin feature. When relative sizing is enabled, it blocks any modifications done manually in the absolute size of the FlexCache volume. The size of the FlexCache volume is calculated and entered automatically based on the size of the origin volume.
percentage	integer	Specifies the percent size the FlexCache volume should have relative to the total size of the origin volume. This property is only relevant to a FlexCache volume that has the relative size property enabled.

s3

Flexcache S3

Name	Type	Description
enabled	boolean	Indicates whether S3 access is enabled on the Flexcache volume.

svm

FlexCache SVM

Name	Type	Description
_links	_links	

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

writeback

FlexCache Writeback

Name	Type	Description
enabled	boolean	Indicates whether or not writeback is enabled for the FlexCache volume. Writeback is a storage method where data is first written to the FlexCache volume and then written to the origin of a FlexCache volume.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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.

Pre-populate a FlexCache volume in the cluster

PATCH /storage/flexcache/flexcaches/{uuid}

Introduced In: 9.8

Prepopulates a FlexCache volume in the cluster, or modifies configuration of the FlexCache volume.

Recommended optional properties

- `uuid` - FlexCache volume UUID.
- `prepopulate.exclude_dir_paths` - List of directory-paths to be excluded from prepopulation for the FlexCache volume.
- `prepopulate.dir_paths` - List of directory-paths to be prepopulated for the FlexCache volume.
- `writeback.enabled` - `false`. This property specifies whether writeback is enabled for the FlexCache volume.
- `relative_size.enabled` - This property specifies whether the relative sizing is enabled for the FlexCache volume.
- `relative_size.percentage` - This property specifies the percent size FlexCache volume should have relative to the total size of the origin volume.
- `atime_scrub.enabled` - This property specifies whether the atime based scrub is enabled for the FlexCache volume.
- `atime_scrub.period` - This property specifies the duration in days after which inactive files can be scrubbed from FlexCache volume.
- `cifs_change_notify.enabled` - This property specifies whether a CIFS change notification is enabled for the FlexCache volume.
- `nfsv4.enabled` - This property specifies whether NFSv4 is enabled for the FlexCache volume.
- `cifs.enabled` - This property specifies whether CIFS is enabled for the FlexCache volume.
- `s3.enabled` - This property specifies whether S3 is enabled for the FlexCache volume.

Default property values

If not specified in PATCH, the following default property value is assigned:

- `prepopulate.recurse` - Default value is `"true"`.

Related ONTAP commands

- `volume flexcache prepopulate start`
- `volume flexcache config modify`

Learn more

- [DOC /storage/flexcache/flexcaches](#)

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Unique identifier of the FlexCache volume.
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. • Default value: 0 • Max value: 120 • Min value: 0

Request Body

Name	Type	Description
atime_scrub	atime_scrub	FlexCache volume atime-based scrub
cifs	cifs	FlexCache CIFS

Name	Type	Description
cifs_change_notify	cifs_change_notify	Notifies that a change has been made to the FlexCache volume CIFS.
nfsv4	nfsv4	FlexCache NFSv4
prepopulate	prepopulate	FlexCache prepopulate
relative_size	relative_size	FlexCache Relative Size
s3	s3	Flexcache S3
uuid	string	FlexCache UUID. Unique identifier for the FlexCache.
writeback	writeback	FlexCache Writeback

Example request

```
{
  "dr_cache": true,
  "global_file_locking_enabled": true,
  "override_encryption": true,
  "prepopulate": {
    "dir_paths": [
      "/dir1"
    ],
    "exclude_dir_paths": [
      "/dir1/dir2"
    ]
  },
  "use_tiered_aggregate": true,
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

Response

Status: 200, Ok

Name	Type	Description
job	job_link	

Example response

```
{
  "job": {
    "uuid": "string"
  }
}
```

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

Error Code	Description
66846921	Failed to prepopulate. Empty path list
66846922	FlexCache volume does not exist in the SVM
66846923	Failed to prepopulate FlexCache volume because the origin volume is not reachable
66846924	FlexCache volume is offline
66846925	FlexCache volume is not mounted or the junction-path is not active
66846926	The junction-path of FlexCache volume is not active
66846927	FlexCache volume does not have an origin volume
66846928	FlexCache volume does not exist
66846929	Using FlexCache prepopulate requires an effective cluster version of 9.8.0 or later
66846930	Using FlexCache prepopulate in a MetroCluster configuration requires an effective cluster version of 9.8.0 or later on both the local and remote clusters

Error Code	Description
66846931	Internal Error. FlexCache prepopulate job queue failed. Wait a few minutes, and then try the operation again
66846936	Failed to lookup root file handle for origin of FlexCache volume. Wait a few minutes, and then try the operation again
66846937	Internal error. Failed to initialize thread
66846939	Internal error. Failed to get the MSID of the origin volume for FlexCache volume
66846943	Failed to prepopulate because dir_path does not exist
66846944	Failed to get root constituent for FlexCache volume
66846945	Origin of FlexCache volume is not mounted or the junction-path is not active
66846946	The junction-path of origin of FlexCache volume is not active
66846947	FlexCache prepopulate job for FlexCache volume already exists
66846948	FlexCache prepopulate job for FlexCache volume could not be queued because the node is offline
66846958	Exclude path(s) does not exist in origin volume
66846988	Cannot enable writeback for FlexCache volume because the origin is a data protection volume. Writeback is only supported on FlexCache volumes with origins that are read-write volumes
66846995	Using FlexCache relative-size requires an effective cluster version of 9.13.1 or later
66846997	Failed to modify the relative-size-percentage property of the FlexCache volume because the used size of the FlexCache Volume is greater than the newly calculated size based on the value of the relative-size-percentage property
66846997	Failed to modify the relative-size-percentage property of FlexCache volume because the relative-size-percentage property is not valid
66846998	Failed to modify the relative-size-percentage property of FlexCache volume because the is-relative-size-enabled property is false
66847010	Failed to modify the relative-size-percentage property of FlexCache volume because autosize is enabled on the FlexCache volume

Error Code	Description
66847026	Failed to enable the atime-scrub-enabled property for the FlexCache volume because the atime-update-property is false
66847027	Failed to modify atime-scrub-period property of the FlexCache volume because the atime-scrub-enabled property is false
66846720	Using FlexCache nfsv4 access requires an effective cluster version of 9.10.0 or later
66846720	Using FlexCache cifs access requires an effective cluster version of 9.8.0 or later
66847093	Using FlexCache S3 access requires an effective cluster version of 9.18.1 or later

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

aggregates

Aggregate

Name	Type	Description
name	string	
uuid	string	

atime_scrub

FlexCache volume atime-based scrub

Name	Type	Description
enabled	boolean	Specifies whether scrubbing of inactive files based on atime is enabled for the FlexCache volume. When scrubbing is enabled, files whose atime is older than the specified duration are evicted from the cache volume. The scrubber runs once a day and looks for files whose atime has exceeded the provisioned value.
period	integer	Specifies the atime duration in days after which a cached file is considered inactive. Inactive files are purged from the FlexCache volumes when the scrubber runs once a day.

cifs

FlexCache CIFS

Name	Type	Description
enabled	boolean	Specifies whether CIFS access is enabled on the FlexCache volume.

cifs_change_notify

Notifies that a change has been made to the FlexCache volume CIFS.

Name	Type	Description
enabled	boolean	Specifies whether a CIFS change notification is enabled for the FlexCache volume.

guarantee

Name	Type	Description
type	string	The type of space guarantee of this volume in the aggregate.

nfsv4

FlexCache NFSv4

Name	Type	Description
enabled	boolean	Specifies whether NFSv4 access is enabled on the FlexCache volume.

cluster

Name	Type	Description
name	string	
uuid	string	

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.

Name	Type	Description
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

volume

Name	Type	Description
name	string	The name of the volume. This field cannot be specified in a PATCH method.
uuid	string	Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true

flexcache_relationship

Name	Type	Description
cluster	cluster	
create_time	string	Creation time of the relationship.
ip_address	string	Cluster management IP of the remote cluster.
size	integer	Size of the remote volume.
state	string	Volume state
volume	volume	

prepopulate

FlexCache prepopulate

Name	Type	Description
dir_paths	array[string]	
exclude_dir_paths	array[string]	

Name	Type	Description
recurse	boolean	Specifies whether or not the populate action should search through the <code>dir_paths</code> recursively. If not set, the default value <i>true</i> is used.

relative_size

FlexCache Relative Size

Name	Type	Description
enabled	boolean	Specifies whether the relative sizing is enabled for the FlexCache volume. Relative sizing is introduced as a part of follow the origin feature. When relative sizing is enabled, it blocks any modifications done manually in the absolute size of the FlexCache volume. The size of the FlexCache volume is calculated and entered automatically based on the size of the origin volume.
percentage	integer	Specifies the percent size the FlexCache volume should have relative to the total size of the origin volume. This property is only relevant to a FlexCache volume that has the relative size property enabled.

s3

Flexcache S3

Name	Type	Description
enabled	boolean	Indicates whether S3 access is enabled on the Flexcache volume.

svm

FlexCache SVM

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

writeback

FlexCache Writeback

Name	Type	Description
enabled	boolean	Indicates whether or not writeback is enabled for the FlexCache volume. Writeback is a storage method where data is first written to the FlexCache volume and then written to the origin of a FlexCache volume.

flexcache

Defines the cache endpoint of FlexCache.

Name	Type	Description
atime_scrub	atime_scrub	FlexCache volume atime-based scrub
cifs	cifs	FlexCache CIFS
cifs_change_notify	cifs_change_notify	Notifies that a change has been made to the FlexCache volume CIFS.
nfsv4	nfsv4	FlexCache NFSv4
prepopulate	prepopulate	FlexCache prepopulate
relative_size	relative_size	FlexCache Relative Size
s3	s3	Flexcache S3
uuid	string	FlexCache UUID. Unique identifier for the FlexCache.

Name	Type	Description
writeback	writeback	FlexCache Writeback

job_link

Name	Type	Description
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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

Copyright © 2026 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.