



Manage a FlexCache relationship

ONTAP 9

NetApp
November 04, 2021

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Manage a FlexCache relationship

View the connection status of a FlexCache relationship

Starting with ONTAP 9.6, you can view the connection status of a FlexCache relationship and take any corrective action if the connection status between the origin and FlexCache volumes goes to the disconnected mode.

About this task

A FlexCache relationship can have one of the following connection status:

- connected
- disconnected
- unknown

Steps

1. Log in to the advanced privilege mode:

```
set -privilege advanced
```

2. Verify the connection status of all the FlexCache relationships in the cluster:

```
volume flexcache connection-status show
```

```
cluster::*> volume flexcache connection-status show
```

```
Node: cluster-01
```

		Remote		Remote
Connection				
+Vserver Status	Volume	Vserver	Remote Volume	Endpoint
+----- -----	-----	-----	-----	-----
vs_1 connected	vol_origin	vs_2	fc_11__0001	cache
vs_1 connected	vol_origin	vs_2	fc_11__0002	cache
vs_1 connected	vol_origin	vs_2	fc_11__0003	cache
vs_1 connected	vol_origin	vs_2	fc_11__0004	cache
vs_2 connected	fc_11	vs_1	vol_origin	origin

Synchronize properties of a FlexCache volume from an origin volume

Some of the volume properties of the FlexCache volume must always be synchronized with those of the origin volume. If the volume properties of a FlexCache volume fail to synchronize automatically after the properties are modified at the origin volume, you can manually synchronize the properties.

About this task

The following volume properties of a FlexCache volume must always be synchronized with those of the origin volume:

- Security style (`-security-style`)
- Volume name (`-volume-name`)
- Maximum directory size (`-maxdir-size`)

- Minimum read ahead (`-min-readahead`)

Step

1. From the FlexCache volume, synchronize the volume properties:

```
volume flexcache sync-properties -vserver svm_name -volume flexcache_volume
```

```
cluster1::> volume flexcache sync-properties -vserver vs1 -volume fc1
```

Update the configurations of a FlexCache relationship

After events such as volume move, aggregate relocation, or storage failover, the volume configuration information on the origin volume and FlexCache volume is updated automatically. In case the automatic updates fail, an EMS message is generated and then you must manually update the configuration for the FlexCache relationship.

If the origin volume and the FlexCache volume are in the disconnected mode, you might need to perform some additional operations to update a FlexCache relationship manually.

About this task

If you want to update the configurations of a FlexCache volume, you must run the command from the origin volume. If you want to update the configurations of an origin volume, you must run the command from the FlexCache volume.

Step

1. Update the configuration of the FlexCache relationship:

```
volume flexcache config-refresh -peer-vserver peer_svm -peer-volume  
peer_volume_to_update -peer-endpoint-type [origin | cache]
```

Prepopulate a FlexCache volume

You can prepopulate a FlexCache volume to reduce the time it takes to access cached data.

What you'll need

- You must be a cluster administrator at the advanced privilege level
- The paths you pass for prepopulation must be valid or the prepopulate operation fails.

About this task

- Prepopulate reads files only and crawls through directories
- The `is-recursion` flag applies to the entire list of directories passed to prepopulate

Steps

1. Prepopulate a FlexCache volume:

```
volume flexcache prepopulate -cache-vserver vs2 -cache-volume -path
-list path_list -is-recursion true|false
```

This example includes a single directory path for prepopulation:

```
cluster1::*> flexcache prepopulate start -cache-vserver vs2 -cache
-volume fg_cachevol_1 -path-list /dir1
(volume flexcache prepopulate start)
[JobId 207]: FlexCache prepopulate job queued.
```

This example includes a list of several paths for prepopulation:

```
cluster1::*> flexcache prepopulate start -cache-vserver vs2 -cache
-volume fg_cachevol_1 -path-list /dir1,/dir2,/dir3,/dir4
(volume flexcache prepopulate start)
[JobId 208]: FlexCache prepopulate job queued.
```

2. Display the number of files read:

```
job show -id job_ID -ins
```

Delete a FlexCache relationship

You can delete a FlexCache relationship and the FlexCache volume if you no longer require the FlexCache volume.

Steps

1. From the cluster that has the FlexCache volume, take the FlexCache volume offline:

```
volume offline -vserver svm_name -volume volume_name
```

2. Delete the FlexCache volume:

```
volume flexcache delete -vserver svm_name -volume volume_name
```

The FlexCache relationship details are removed from the origin volume and the FlexCache volume.



If the volume flexcache delete command fails to clean up the origin side configuration, you are prompted to run the volume flexcache origin cleanup-cache-relationship command. In this scenario, go to Step 3.

3. From the origin cluster, clean up the FlexCache relationship details from the origin volume:

```
volume flexcache origin cleanup-cache-relationship -origin-volume
origin_volume -origin-vserver origin_svm -cache-vserver flexcache_svm -cache
-volume flexcache_vol
```



If you run the `volume flexcache origin cleanup-cache-relationship` command, the FlexCache relationship is deleted and cannot be reestablished.

```
cluster1::> volume flexcache origin cleanup-cache-relationship -origin  
-volume origin1 -origin-vserver vs34 -cache-vserver vs56 -cache-volume  
fc1
```

Warning: This command only needs to be run if "volume flexcache delete" fails on

the FlexCache cluster and prompts you to run this command. The cache

configuration will be deleted and cannot be reestablished for the

cache relationship between origin of a FlexCache volume

"origin1" in Vserver "vs34" and FlexCache volume

"fc1" in Vserver "vs56".

Do you want to continue? {y|n}: y

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