



Create a volume or qtree storage container

ONTAP 9

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Create a volume or qtree storage container

Create a volume

You can create a volume and specify its junction point and other properties by using the `volume create` command.

About this task

A volume must include a *junction path* for its data to be made available to clients. You can specify the junction path when you create a new volume. If you create a volume without specifying a junction path, you must *mount* the volume in the SVM namespace using the `volume mount` command.

Before you begin

- SMB should be set up and running.
- The SVM security style must be NTFS.
- Beginning in ONTAP 9.13.1, you can create volumes with capacity analytics and Activity Tracking enabled. To enable capacity or Activity Tracking, issue the `volume create` command with `-analytics-state` or `-activity-tracking-state` set to `on`.

To learn more about capacity analytics and Activity Tracking, see [Enable File System Analytics](#).

Steps

1. Create the volume with a junction point: `volume create -vserver svm_name -volume volume_name -aggregate aggregate_name -size {integer[KB|MB|GB|TB|PB]} -security-style ntfs -junction-path junction_path]`

The choices for `-junction-path` are the following:

- Directly under root, for example, `/new_vol`

You can create a new volume and specify that it be mounted directly to the SVM root volume.

- Under an existing directory, for example, `/existing_dir/new_vol`

You can create a new volume and specify that it be mounted to an existing volume (in an existing hierarchy), expressed as a directory.

If you want to create a volume in a new directory (in a new hierarchy under a new volume), for example, `/new_dir/new_vol`, then you must first create a new parent volume that is junctioned to the SVM root volume. You would then create the new child volume in the junction path of the new parent volume (new directory).

2. Verify that the volume was created with the desired junction point: `volume show -vserver svm_name -volume volume_name -junction`

Examples

The following command creates a new volume named `users1` on the SVM `vs1.example.com` and the aggregate `aggr1`. The new volume is made available at `/users`. The volume is 750 GB in size, and its volume guarantee is of type `volume` (by default).

```
cluster1::> volume create -vserver vs1.example.com -volume users
-aggregate aggr1 -size 750g -junction-path /users
[Job 1642] Job succeeded: Successful
```

```
cluster1::> volume show -vserver vs1.example.com -volume users -junction
```

Vserver	Volume	Active	Junction Path	Junction Path Source
vs1.example.com	users1	true	/users	RW_volume

The following command creates a new volume named “home4” on the SVM “vs1.example.com” and the aggregate “aggr1”. The directory /eng/ already exists in the namespace for the vs1 SVM, and the new volume is made available at /eng/home, which becomes the home directory for the /eng/ namespace. The volume is 750 GB in size, and its volume guarantee is of type `volume` (by default).

```
cluster1::> volume create -vserver vs1.example.com -volume home4
-aggregate aggr1 -size 750g -junction-path /eng/home
[Job 1642] Job succeeded: Successful
```

```
cluster1::> volume show -vserver vs1.example.com -volume home4 -junction
```

Vserver	Volume	Active	Junction Path	Junction Path Source
vs1.example.com	home4	true	/eng/home	RW_volume

Create a qtree

You can create a qtree to contain your data and specify its properties by using the `volume qtree create` command.

Before you begin

- The SVM and the volume that will contain the new qtree must already exist.
- The SVM security style must be NTFS, and SMB should be set up and running.

Steps

1. Create the qtree: `volume qtree create -vserver vs1.example.com { -volume volume_name -qtree qtree_name | -qtree-path qtree path } -security-style ntfs`

You can specify the volume and qtree as separate arguments or specify the qtree path argument in the format `/vol/volume_name/_qtree_name`.

2. Verify that the qtree was created with the desired junction path: `volume qtree show -vserver vs1.example.com { -volume volume_name -qtree qtree_name | -qtree-path qtree path }`

Example

The following example creates a qtree named qt01 located on SVM vs1.example.com that has a junction path /vol/data1:

```
cluster1::> volume qtree create -vserver vs1.example.com -qtree-path  
/vol/data1/qt01 -security-style ntfs  
[Job 1642] Job succeeded: Successful
```

```
cluster1::> volume qtree show -vserver vs1.example.com -qtree-path  
/vol/data1/qt01
```

```
          Vserver Name: vs1.example.com  
          Volume Name: data1  
          Qtree Name: qt01  
Actual (Non-Junction) Qtree Path: /vol/data1/qt01  
          Security Style: ntfs  
          Oplock Mode: enable  
          Unix Permissions: ---rwxr-xr-x  
          Qtree Id: 2  
          Qtree Status: normal  
          Export Policy: default  
Is Export Policy Inherited: true
```

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