Manage local snapshots

ONTAP 9

NetApp
February 12, 2026

Table of Contents

Manage local snapshots . . . 1
- Learn about managing local ONTAP snapshots . . . 1
- Learn about ONTAP long-term retention snapshots . . . 1
  - Related information . . . 1
- Configure custom snapshot policies . . . 1
  - Learn about configuring custom ONTAP snapshot policies . . . 1
  - When to configure a custom ONTAP snapshot policy . . . 2
  - Create an ONTAP snapshot job schedule . . . 2
  - Create an ONTAP snapshot policy . . . 3
- Manage snapshots manually . . . 5
  - Create and delete snapshots manually . . . 5
  - Calculate reclaimable space before deleting snapshots . . . 8
- Manage the snapshot reserve . . . 8
  - Learn about managing the ONTAP snapshot reserve . . . 8
  - Monitor ONTAP snapshot disk consumption . . . 10
  - Check available ONTAP snapshot reserve on a volume . . . 10
  - Modify the ONTAP snapshot reserve . . . 11
  - Autodelete ONTAP snapshots . . . 11
- Restore files from snapshots . . . 12
  - Restore a file from an ONTAP snapshot on an NFS or SMB client . . . 12
  - Enable and disable NFS and SMB client access to ONTAP snapshot directory . . . 12
  - Restore a single file from an ONTAP snapshot . . . 15
  - Restore part of a file from an ONTAP snapshot . . . 16
  - Restore the contents of a volume from an ONTAP snapshot . . . 17

Manage local snapshots

Learn about managing local ONTAP snapshots

A *snapshot* is a read-only, point-in-time image of a volume. The image consumes minimal storage space and incurs negligible performance overhead because it records only changes to files since the last snapshot.

You can use a snapshot to restore the entire contents of a volume, or to recover individual files or LUNs. snapshots are stored in the directory `.snapshot` on the volume.

In ONTAP 9.4 and later, a FlexVol volume can contain up to 1023 snapshots. In ONTAP 9.3 and earlier, a volume can contain up to 255 snapshots.

Beginning with ONTAP 9.8, FlexGroup volumes can contain 1023 snapshots. For more information, see Protect FlexGroup volumes using snapshots.

Learn about ONTAP long-term retention snapshots

SnapMirror relationships with a policy type of either "vault" or "mirror-vault" allow snapshot creation directly on the secondary volume of the SnapMirror relationship. These snapshots are retained on the destination as backups. These snapshots are often created for long-term retention and are called long-term retention snapshots.

You create a long-term retention snapshot by specifying a snapshot creation schedule in the SnapMirror policy rule, the snapshot name prefix, SnapMirror label, and the retention count. This snapshot is retained on the SnapMirror destination volume regardless of the retention rules on the source.

Long-term retention snapshots are available for FlexVol SnapMirror configurations only. You cannot create long-term retention snapshots for FlexGroup SnapMirror configurations.

In a SnapMirror cascade relationship, long-term retention snapshots can only be created on the last volume of the cascade.

Related information

- Learn about how cascade deployments work
- Define an ONTAP SnapMirror schedule to create a local copy on the destination

Configure custom snapshot policies

Learn about configuring custom ONTAP snapshot policies

A *snapshot policy* defines how the system creates snapshots. The policy specifies when to create snapshots, how many copies to retain, and how to name them. For example, a system might create one snapshot every day at 12:10 a.m., retain the two most recent copies, and name the copies “daily.*timestamp*.”

The default policy for a volume automatically creates snapshots on the following schedule, with the oldest snapshots deleted to make room for newer copies:

- A maximum of six hourly snapshots taken five minutes past the hour.
- A maximum of two daily snapshots taken Monday through Saturday at 10 minutes after midnight.
- A maximum of two weekly snapshots taken every Sunday at 15 minutes after midnight.

Unless you specify a snapshot policy when you create a volume, the volume inherits the snapshot policy associated with its containing storage virtual machine (SVM).

When to configure a custom ONTAP snapshot policy

If the default snapshot policy is not appropriate for a volume, you can configure a custom policy that modifies the frequency, retention, and name of snapshots. The schedule will be dictated mainly by the rate of change of the active file system.

You might back up a heavily used file system like a database every hour, while you back up rarely used files once a day. Even for a database, you will typically run a full backup once or twice a day, while backing up transaction logs every hour.

Other factors are the importance of the files to your organization, your Service Level Agreement (SLA), your Recovery Point Objective (RPO), and your Recovery Time Objective (RTO). Generally speaking, you should retain only as many snapshots as necessary.

Create an ONTAP snapshot job schedule

A snapshot policy requires at least one snapshot job schedule. You can use System Manager or the `job schedule cron create` command to create a job schedule. Learn more about `job schedule cron create` in the ONTAP command reference.

About this task

This procedure applies to FAS, AFF, and ASA systems. If you have an ASA r2 system (ASA A1K, ASA A90, ASA A70, ASA A50, ASA A30, ASA A20, or ASA C30), follow these steps to create a snapshot job schedule. ASA r2 systems provide a simplified ONTAP experience specific to SAN-only customers.

By default, ONTAP forms the names of snapshots by appending a timestamp to the job schedule name.

If you specify values for both day of the month and day of the week, the values are considered independently. For example, a cron schedule with the day specification `Friday` and the day of the month specification `13` runs every Friday and on the 13th day of each month, not just on every Friday the 13th.

Example 1. Steps

System Manager

1. Navigate to **Protection > Overview** and expand **Local policy settings**.
2. In the **Schedules** pane, click →.
3. In the **Schedules** window, click + Add .
4. In the **Add schedule** window, enter the schedule name, and choose the context and schedule type.
5. Click **Save**.

CLI

1. Create a job schedule:

```
job schedule cron create -name <job_name> -month <month> -dayofweek
<day_of_week> -day <day_of_month> -hour <hour> -minute <minute>
```

For `-month`, `-dayofweek`, and `-hour`, you can specify `all` to run the job every month, day of the week, and hour, respectively.

Beginning with ONTAP 9.10.1, you can include the Vserver for your job schedule:

```
job schedule cron create -name <job_name> -vserver <Vserver_name>
-month <month> -dayofweek <day_of_week> -day <day_of_month> -hour
<hour> -minute <minute>
```

The following example creates a job schedule named `myweekly` that runs on Saturdays at 3:00 a.m.:

```
cluster1::> job schedule cron create -name myweekly -dayofweek
"Saturday" -hour 3 -minute 0
```

The following example creates a schedule named `myweeklymulti` that specifies multiple days, hours and minutes:

```
job schedule cron create -name myweeklymulti -dayofweek
"Monday,Wednesday,Sunday" -hour 3,9,12 -minute 0,20,50
```

Create an ONTAP snapshot policy

A snapshot policy specifies when to create snapshots, how many copies to retain, and how to name them. For example, a system might create one snapshot every day at 12:10 a.m., retain the two most recent copies, and name them “daily.*timestamp*.” A snapshot policy can contain up to five job schedules.

About this task

This procedure applies to FAS, AFF, and ASA systems. If you have an ASA r2 system (ASA A1K, ASA A90, ASA A70, ASA A50, ASA A30, ASA A20, or ASA C30), follow these steps to create a snapshot policy. ASA r2 systems provide a simplified ONTAP experience specific to SAN-only customers.

By default, ONTAP forms the names of snapshots by appending a timestamp to the job schedule name:

```
daily.2017-05-14_0013/              hourly.2017-05-15_1106/
daily.2017-05-15_0012/              hourly.2017-05-15_1206/
hourly.2017-05-15_1006/             hourly.2017-05-15_1306/
```

You can substitute a prefix for the job schedule name if you prefer.

The `snapmirror-label` option is for SnapMirror replication. For more information, see Defining a rule for a policy.

Steps

You can create a snapshot policy using System Manager or the ONTAP CLI. The procedure creates a snapshot policy on the local cluster only.

System Manager

1. Navigate to **Protection > Overview** and expand **Local policy settings**.
2. In the **Snapshot policies** pane, click →.
3. In the **Snapshot policies** tab, click + Add .
4. In the **Add snapshot policy** window, enter the policy name, and choose the scope.
5. Click + Add .
6. To select a schedule click the currently displayed schedule name, click ⌄, and choose a different schedule.
7. Enter the maximum snapshots to retain, and, if needed, enter the SnapMirror label and the SnapLock retention period.
8. Click **Save**.

CLI

1. Create a snapshot policy:

```
volume snapshot policy create -vserver <SVM> -policy <policy_name>
-enabled true|false -schedule1 <schedule1_name> -count1
<copies_to_retain> -prefix1 <snapshot_prefix> -snapmirror-label1
<snapshot_label> ... -schedule5 <schedule5_name> -count5
<copies_to_retain> -prefix5 <snapshot_prefix> -snapmirror-label5
<snapshot_label>
```

The following example creates a snapshot policy named `snap_policy_daily` that runs on a `daily` schedule. The policy has a maximum of five snapshots, each with the name `daily.`*`timestamp`* and the SnapMirror label `daily`:

```
cluster1::> volume snapshot policy create -vserver vs0 -policy
snap_policy_daily -schedule1 daily -count1 5 -snapmirror-label1
daily
```

Manage snapshots manually

Create and delete snapshots manually

You can create snapshots manually when you can't wait for a scheduled snapshot to be created, and you can delete snapshots when they are no longer needed.

About this task

This procedure applies to FAS, AFF, and ASA systems. If you have an ASA r2 system (ASA A1K, ASA A90, ASA A70, ASA A50, ASA A30, ASA A20, or ASA C30), follow these steps to create an on-demand snapshot. ASA r2 systems provide a simplified ONTAP experience specific to SAN-only customers.

Create a snapshot manually

You can manually create a snapshot using System Manager or the ONTAP CLI.

System Manager

Steps

1. Navigate to **Storage > Volumes** and select the **Snapshots** tab.
2. Click + Add .
3. In the **Add a snapshot** window, accept the default snapshot name or edit it if desired.
4. **Optional**: Add a SnapMirror label.
5. Click **Add**.

CLI

1. Create a snapshot:

```
volume snapshot create -vserver <SVM> -volume <volume> -snapshot
<snapshot_name>
```

Delete snapshots manually

You can manually delete a snapshot using System Manager or the ONTAP CLI.

System Manager

Steps

1. Navigate to **Storage > Volumes** and select the **Snapshot copies** tab.
2. Locate the snapshot you want to delete, click ⋮, and select **Delete**.
3. In the **Delete snapshot** window, select **Delete snapshot**.
4. Click **Delete**.

CLI

1. Use the `volume snapshot show` command to verify which snapshots you want to delete.

```
volume snapshot show -vserver <SVM> -volume <volume>
```

In this example, the command shows the snapshots on the volume vol3 in the SVM vs3.

```
cluster::> volume snapshot show -vserver vs3 -volume vol3

                                                  ---Blocks---
Vserver  Volume  Snapshot                  Size   Total% Used%
-------- ------- ------------------------ -----  ------ -----
vs3      vol3
                 snap1.2013-05-01_0015   100KB   0%    38%
                 snap1.2013-05-08_0015   76KB    0%    32%
                 snap2.2013-05-09_0010   76KB    0%    32%
                 snap2.2013-05-10_0010   76KB    0%    32%
                 snap3.2013-05-10_1005   72KB    0%    31%
                 snap3.2013-05-10_1105   72KB    0%    31%
                 snap3.2013-05-10_1205   72KB    0%    31%
                 snap3.2013-05-10_1305   72KB    0%    31%
                 snap3.2013-05-10_1405   72KB    0%    31%
                 snap3.2013-05-10_1505   72KB    0%    31%
10 entries were displayed.
```

2. Delete a snapshot:

If you want to…	Enter this command…
Delete a single snapshot	`volume snapshot delete -vserver _svm_name_ -volume _vol_name_ -snapshot _snapshot_name_`

If you want to…	Enter this command…
Delete multiple snapshots	`volume snapshot delete -vserver _svm_name_ -volume _vol_name_ -snapshot _snapshot_name1_[,_snapshot_name2_,...]`
Delete all snapshots	`volume snapshot delete -vserver _svm_name_ -volume _vol_name_ -snapshot *`

Calculate reclaimable space before deleting snapshots

Beginning with ONTAP 9.10.1, you can use System Manager to select snapshots you want to delete and calculate the reclaimable space before you delete them.

Steps

1. Click **Storage > Volumes**.
2. Select the volume from which you want to delete snapshots.
3. Click **Snapshots**.
4. Select one or more snapshots.
5. Click **Calculate Reclaimable Space**.

Manage the snapshot reserve

Learn about managing the ONTAP snapshot reserve

The *snapshot reserve* sets aside a percentage of disk space for snapshots, five percent by default. Because snapshots use space in the active file system when the snapshot reserve is exhausted, you might want to increase the snapshot reserve as needed. Alternatively, you can autodelete snapshots when the reserve is full.

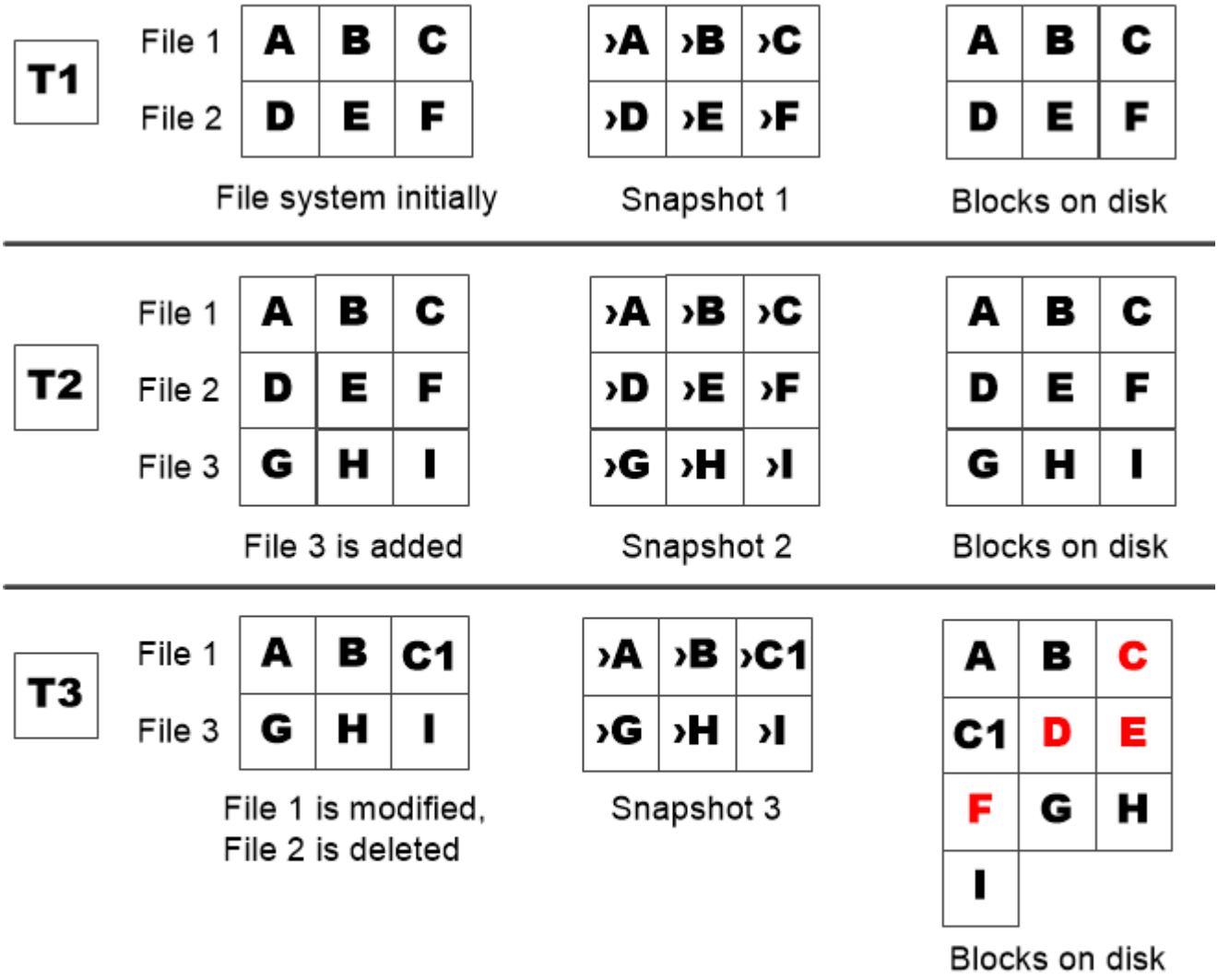
When to increase the snapshot reserve

In deciding whether to increase the snapshot reserve, it's important to remember that a snapshot records only changes to files since the last snapshot was made. It consumes disk space only when blocks in the active file system are modified or deleted.

This means that the rate of change of the file system is the key factor in determining the amount of disk space used by snapshots. No matter how many snapshots you create, they will not consume disk space if the active file system has not changed.

A FlexVol volume containing database transaction logs, for example, might have a snapshot reserve as large as 20% to account for its greater rate of change. Not only will you want to create more snapshots to capture the more frequent updates to the database, you will also want to have a larger snapshot reserve to handle the additional disk space the snapshots consume.

A snapshot consists of pointers to blocks rather than copies of blocks. You can think of a pointer as a "claim" on a block: ONTAP "holds" the block until the snapshot is deleted.



A Snapshot copy consumes disk space only when blocks in the active file system are modified or deleted.

How deleting protected files can lead to less file space than expected

A snapshot points to a block even after you delete the file that used the block. This explains why an exhausted snapshot reserve might lead to the counter-intuitive result in which deleting an entire file system results in less space being available than the file system occupied.

Consider the following example. Before deleting any files, the `df` command output is as follows:

```
Filesystem          kbytes  used    avail  capacity
/vol/vol0/          3000000 3000000 0       100%
/vol/vol0/.snapshot 1000000 500000  500000   50%
```

After deleting the entire file system and making a snapshot of the volume, the `df` command generates the following output:

```
Filesystem          kbytes  used    avail  capacity
/vol/vol0/          3000000 2500000 500000   83%
/vol/vol0/.snapshot 1000000 3500000 0       350%
```

As the output shows, the entire 3 GB formerly used by the active file system is now being used by snapshots, in addition to the 0.5 GB used before the deletion.

Because the disk space used by the snapshots now exceeds the snapshot reserve, the overflow of 2.5 GB "spills" into the space reserved for active files, leaving you with 0.5 GB free space for files where you might reasonably have expected 3 GB.

Learn more about the commands described in this procedure in the ONTAP command reference.

Monitor ONTAP snapshot disk consumption

You can monitor snapshot disk consumption using the `df` command. The command displays the amount of free space in the active file system and the snapshot reserve.

Step

1. Display snapshot disk consumption: `df`

   The following example shows snapshot disk consumption:

   ```
   cluster1::> df
   Filesystem          kbytes  used    avail  capacity
   /vol/vol0/          3000000 3000000 0       100%
   /vol/vol0/.snapshot 1000000 500000  500000   50%
   ```

Learn more about the commands described in this procedure in the ONTAP command reference.

Check available ONTAP snapshot reserve on a volume

You might want to check how much snapshot reserve is available on a volume by using the `snapshot-reserve-available` parameter with the `volume show` command. Learn more about `volume show` in the ONTAP command reference.

Step

1. Check the snapshot reserve available on a volume:

```
vol show -vserver SVM -volume volume -fields snapshot-reserve-available
```

The following example displays the available snapshot reserve for `vol1`:

```
cluster1::> vol show -vserver vs0 -volume vol1 -fields snapshot-reserve-
available

vserver volume snapshot-reserve-available
------- ------ --------------------------
vs0     vol1   4.84GB
```

Modify the ONTAP snapshot reserve

You might want to configure a larger snapshot reserve to prevent snapshots from using space reserved for the active file system. You can decrease the snapshot reserve when you no longer need as much space for snapshots.

Step

1. Modify the snapshot reserve:

   ```
   volume modify -vserver SVM -volume volume -percent-snapshot-space snap_reserve
   ```

   Learn more about `volume modify` in the ONTAP command reference.

   The following example sets the snapshot reserve for `vol1` to 10 percent:

   ```
   cluster1::> volume modify -vserver vs0 -volume vol1 -percent-snapshot
   -space 10
   ```

Autodelete ONTAP snapshots

You can use the `volume snapshot autodelete modify` command to trigger automatic deletion of snapshots when the Snapshot reserve is exceeded. By default, the oldest snapshots are deleted first. Learn more about `volume snapshot autodelete modify` in the ONTAP command reference.

About this task

LUN and file clones are deleted when there are no more snapshots to be deleted.

Step

1. Autodelete snapshots:

   ```
   volume snapshot autodelete modify -vserver SVM -volume volume -enabled
   true|false -trigger volume|snap_reserve
   ```

The following example autodeletes snapshots for `vol1` when the snapshot reserve is exhausted:

```
cluster1::> volume snapshot autodelete modify -vserver vs0 -volume vol1
-enabled true -trigger snap_reserve
```

Restore files from snapshots

Restore a file from an ONTAP snapshot on an NFS or SMB client

A user on an NFS or SMB client can restore a file directly from a snapshot without the intervention of a storage system administrator.

Every directory in the file system contains a subdirectory named `.snapshot` accessible to NFS and SMB users. The `.snapshot` subdirectory contains subdirectories corresponding to the snapshots of the volume:

```
$ ls .snapshot
daily.2017-05-14_0013/              hourly.2017-05-15_1106/
daily.2017-05-15_0012/              hourly.2017-05-15_1206/
hourly.2017-05-15_1006/             hourly.2017-05-15_1306/
```

Each subdirectory contains the files referenced by the snapshot. If users accidentally delete or overwrite a file, they can restore the file to the parent read-write directory by copying the file from the snapshot subdirectory to the read-write directory:

```
$ ls my.txt
ls: my.txt: No such file or directory
$ ls .snapshot
daily.2017-05-14_0013/              hourly.2017-05-15_1106/
daily.2017-05-15_0012/              hourly.2017-05-15_1206/
hourly.2017-05-15_1006/             hourly.2017-05-15_1306/
$ ls .snapshot/hourly.2017-05-15_1306/my.txt
my.txt
$ cp .snapshot/hourly.2017-05-15_1306/my.txt .
$ ls my.txt
my.txt
```

Enable and disable NFS and SMB client access to ONTAP snapshot directory

You can enable and disable access to the snapshot directory using the ONTAP CLI `-snapdir-access` option of the `volume modify` command, and beginning with ONTAP 9.10.1, you can use System Manager to enable or disable client systems to access to a snapshot directory on a volume. Enabling access makes the snapshot directory visible to clients and allows Windows clients to map a drive to the snapshot

directory to view and access its contents. NFS and SMB clients can then restore a file or LUN from a snapshot.

You can enable or disable access to a volume's snapshot directory by editing the volume settings or by editing the volume's share settings.

Enable or disable client access to snapshot directory by editing a volume

Steps

You can enable and disable client snapshot directory access by using ONTAP System Manager or the ONTAP CLI. The snapshot directory on a volume is accessible to clients by default.

System Manager

1. Click **Storage > Volumes**.
2. Select the volume containing the snapshots directory you want to either show or hide.
3. Click ⋮ and select **Edit**.
4. In the **Snapshot (Local) Settings** section, select or deselect **Show the Snapshot directory to clients**.
5. Click **Save**.

CLI

1. Check the snapshot directory access status:

   ```
   volume show -vserver <SVM_name> -volume <vol_name> -fields snapdir-
   access
   ```

   Example:

   ```
   clus1::> volume show -vserver vs0 -volume vol1 -fields snapdir-
   access
   vserver volume snapdir-access
   ------- ------ --------------
   vs0     vol1   false
   ```

   Learn more about `volume show` in the ONTAP command reference.

2. Enable or disable the snapshot directory access:

   ```
   volume modify -vserver <SVM_name> -volume <vol_name> -snapdir-access
   <true|false>
   ```

   The following example enables snapshot directory access on vol1:

   ```
   clus1::> volume modify -vserver vs0 -volume vol1 -snapdir-access
   true
   Volume modify successful on volume vol1 of Vserver vs0.
   ```

   Learn more about `volume modify` in the ONTAP command reference.

Enable or disable client access to snapshot directory by editing a share

The snapshot directory on a volume is accessible to clients by default.

Steps

1. Click **Storage > Shares**.
2. Select the volume containing the snapshots directory you want to either show or hide.
3. Click ⋮ and select **Edit**.
4. In the **Share Properties** section, select or deselect **Allow clients to access snapshots directory**.
5. Click **Save**.

Restore a single file from an ONTAP snapshot

You can use the `volume snapshot restore-file` command to restore a single file or LUN from a snapshot. You can restore the file to a different location in the parent read-write volume if you do not want to replace an existing file.

About this task

If you are restoring an existing LUN, a LUN clone is created and backed up in the form of a snapshot. During the restore operation, you can read from and write to the LUN.

Files with streams are restored by default.

Steps

1. List the snapshots in a volume:

   `volume snapshot show -vserver` *`SVM`* `-volume` *`volume`*

   Learn more about `volume snapshot show` in the ONTAP command reference.

   The following example shows the snapshots in `vol1`:

```
clus1::> volume snapshot show -vserver vs1 -volume vol1

Vserver Volume Snapshot                  State    Size  Total% Used%
------- ------ ---------- ----------- ------   -----  ------ -----
vs1     vol1   hourly.2013-01-25_0005  valid   224KB     0%    0%
               daily.2013-01-25_0010   valid   92KB      0%    0%
               hourly.2013-01-25_0105  valid   228KB     0%    0%
               hourly.2013-01-25_0205  valid   236KB     0%    0%
               hourly.2013-01-25_0305  valid   244KB     0%    0%
               hourly.2013-01-25_0405  valid   244KB     0%    0%
               hourly.2013-01-25_0505  valid   244KB     0%    0%

7 entries were displayed.
```

2. Restore a file from a snapshot:

   `volume snapshot restore-file -vserver` *`SVM`* `-volume` *`volume`* `-snapshot` *`snapshot`* `-path` *`file_path`* `-restore-path` *`destination_path`*

Learn more about `volume snapshot restore-file` in the ONTAP command reference.

The following example restores the file `myfile.txt`:

```
cluster1::> volume snapshot restore-file -vserver vs0 -volume vol1
-snapshot daily.2013-01-25_0010 -path /myfile.txt
```

Restore part of a file from an ONTAP snapshot

You can use the `volume snapshot partial-restore-file` command to restore a range of data from a snapshot to a LUN or to an NFS or SMB container file, assuming you know the starting byte offset of the data and the byte count. You might use this command to restore one of the databases on a host that stores multiple databases in the same LUN.

Beginning with ONTAP 9.12.1, partial restore is available for volumes using SnapMirror active sync.

Steps

1. List the snapshots in a volume:

   `volume snapshot show -vserver` *`SVM`* `-volume` *`volume`*

   Learn more about `volume snapshot show` in the ONTAP command reference.

   The following example shows the snapshots in `vol1`:

```
clus1::> volume snapshot show -vserver vs1 -volume vol1

Vserver Volume Snapshot                  State    Size  Total% Used%
------- ------ ---------- ------------ ------   -----  ------ -----
vs1     vol1   hourly.2013-01-25_0005  valid   224KB     0%    0%
               daily.2013-01-25_0010   valid   92KB      0%    0%
               hourly.2013-01-25_0105  valid   228KB     0%    0%
               hourly.2013-01-25_0205  valid   236KB     0%    0%
               hourly.2013-01-25_0305  valid   244KB     0%    0%
               hourly.2013-01-25_0405  valid   244KB     0%    0%
               hourly.2013-01-25_0505  valid   244KB     0%    0%

7 entries were displayed.
```

2. Restore part of a file from a snapshot:

   `volume snapshot partial-restore-file -vserver` *`SVM`* `-volume` *`volume`* `-snapshot` *`snapshot`* `-path` *`file_path`* `-start-byte` *`starting_byte`* `-byte-count` *`byte_count`*

   The starting byte offset and byte count must be multiples of 4,096.

The following example restores the first 4,096 bytes of the file `myfile.txt`:

```
cluster1::> volume snapshot partial-restore-file -vserver vs0 -volume
vol1 -snapshot daily.2013-01-25_0010 -path /myfile.txt -start-byte 0
-byte-count 4096
```

Restore the contents of a volume from an ONTAP snapshot

You can recover a volume to an earlier point in time by restoring from a snapshot. You can use System Manager or the `volume snapshot restore` command to restore the contents of a volume from a snapshot. Learn more about `volume snapshot restore` in the ONTAP command reference.

About this task

If the volume has SnapMirror relationships, manually replicate all mirror copies of the volume immediately after you restore from a snapshot. Not doing so can result in unusable mirror copies that must be deleted and recreated.

Steps

You can use System Manager or the ONTAP CLI to restore from an earlier snapshot.

System Manager

1. Click **Storage** and select a volume.
2. Under **Snapshot copies**, click ⋮ next to the snapshot you want to restore, and select **Restore**.

CLI

1. List the snapshots in a volume:

```
volume snapshot show -vserver <SVM> -volume <volume>
```

The following example shows the snapshot in `vol1`:

```
clus1::> volume snapshot show -vserver vs1 -volume vol1

Vserver Volume Snapshot                State    Size  Total% Used%
------- ------ ---------- ----------- ------   -----  ------ -----
vs1     vol1   hourly.2013-01-25_0005  valid   224KB     0%    0%
               daily.2013-01-25_0010   valid   92KB      0%    0%
               hourly.2013-01-25_0105  valid   228KB     0%    0%
               hourly.2013-01-25_0205  valid   236KB     0%    0%
               hourly.2013-01-25_0305  valid   244KB     0%    0%
               hourly.2013-01-25_0405  valid   244KB     0%    0%
               hourly.2013-01-25_0505  valid   244KB     0%    0%

7 entries were displayed.
```

2. Restore the contents of a volume from a snapshot:

```
volume snapshot restore -vserver <SVM> -volume <volume> -snapshot
<snapshot>
```

The following example restores the contents of `vol1`:

```
cluster1::> volume snapshot restore -vserver vs0 -volume vol1
-snapshot daily.2013-01-25_0010
```

Copyright information

Trademark information