

Recover files and folders using Previous Versions

ONTAP 9

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Recover files and folders using Previous Versions

Recover files and folders using previous versions overview

The ability to use Microsoft Previous Versions is applicable to file systems that support Snapshot copies in some form and have them enabled. Snapshot technology is an integral part of ONTAP. Users can recover files and folders from Snapshot copies from their Windows client by using the Microsoft Previous Versions feature.

Previous Versions functionality provides a method for users to browse through the Snapshot copies or to restore data from a Snapshot copy without a storage administrator's intervention. Previous Versions is not configurable. It is always enabled. If the storage administrator has made Snapshot copies available on a share, then the user can use Previous Versions to perform the following tasks:

- · Recover files that were accidentally deleted.
- · Recover from accidentally overwriting a file.
- · Compare versions of file while working.

The data stored in Snapshot copies is read-only. Users must save a copy of a file to another location to make any changes to the file. Snapshot copies are periodically deleted; therefore, users need to create copies of files contained in Previous Versions if they want to indefinitely retain a previous version of a file.

Requirements for using Microsoft Previous Versions

Before you can use Previous Versions with your CIFS server, you need to know which versions of ONTAP and SMB, and which Windows clients, support it. You also need to know about the Snapshot copy setting requirement.

ONTAP version requirements

Supports Previous Versions.

SMB protocol version requirements

For storage virtual machine (SVM), ONTAP supports Previous Versions on all versions of SMB.

Windows client requirements

Before a user can use Previous Versions to access data in Snapshot copies, the Windows client must support the feature.

For the latest information about which Windows clients support Previous Versions, see the Interoperability Matrix

NetApp Interoperability Matrix Tool

Requirements for Snapshot copy settings

To use Previous Versions to access data in Snapshot copies, an enabled Snapshot policy must be associated to the volume containing the data, clients must be able to access to the Snapshot data, and Snapshot copies must exist.

Use the Previous Versions tab to view and manage Snapshot copy data

Users on Windows client machines can use the Previous Versions tab on the Windows Properties window to restore data stored in Snapshot copies without needing to involve the storage virtual machine (SVM) administrator.

About this task

You can only use the Previous Versions tab to view and manage data in Snapshot copies of data stored on the SVM if the administrator has enabled Snapshot copies on the volume containing the share, and if the administrator configures the share to show Snapshot copies.

Steps

- 1. In Windows Explorer, display the contents of the mapped drive of the data stored on the CIFS server.
- Right-click the file or folder in the mapped network drive whose Snapshot copies you want to view or manage.
- 3. Click Properties.

Properties for the file or folder you selected are displayed.

4. Click the Previous Versions tab.

A list of available Snapshot copies of the selected file or folder is displayed in the Folder versions: box. The listed Snapshot copies are identified by the Snapshot copy name prefix and the creation timestamp.

- 5. In the **Folder versions:** box, right-click the copy of the file or folder that you want to manage.
- 6. Perform the appropriate action:

| If you want to | Do the following |
|---|------------------|
| View data from that Snapshot copy | Click Open. |
| Create a copy of data from that Snapshot copy | Click Copy. |

Data in Snapshot copies is read-only. If you want to make modifications to files and folders listed in the Previous Versions tab, you must save a copy of the files and folders that you want to modify to a writable location and make modifications to the copies.

7. After you finish managing Snapshot data, close the Properties dialog box by clicking OK.

For more information about using the Previous Versions tab to view and manage Snapshot data, consult the Microsoft TechNet Library.

Related information

Determine whether Snapshot copies are available for Previous Versions use

You can view Snapshot copies from the Previous Versions tab only if an enabled Snapshot policy is applied to the volume containing the share, and if the volume configuration allows access to Snapshot copies. Determining Snapshot copy availability is helpful when assisting a user with Previous Versions access.

Steps

1. Determine whether the volume on which the share data resides has automatic Snapshot copies enabled and whether clients have access to Snapshot directories: volume show -vserver vserver-name -volume volume-name -fields vserver, volume, snapdir-access, snapshot-policy, snapshot-count

The output displays what Snapshot policy is associated with the volume, whether client Snapshot directory access is enabled, and the number of available Snapshot copies.

- Determine whether the associated Snapshot policy is enabled: volume snapshot policy show
 -policy policy-name
- 3. List the available Snapshot copies: volume snapshot show -volume volume name

For more information about configuring and managing Snapshot policies and Snapshot schedules, see Data Protection.

Example

The following example displays information about Snapshot policies associated with the volume named "data1" that contains the shared data and available Snapshot copies on "data1".

| vserver | volume | snapdir-acces | | ccess, snaps oolicy snap | | C - | |
|---------------------|-------------------|--|---|--|---|--------------------------|-------------------------|
| vs1 | data1 | true | default | 10 | | | |
| | ::> volu | me snapshot p | oolicy show - | -policy def | ault | | |
| Policy N | lame | Number of Schedules | Is Enabled Comm | | | | |
| default | | | true Defa | | | | ily & |
| Sche | chedules edule | | Prefix | | _ | rror Lal | oel |
| | aly | | hourly | | _ | | |
| dail | - У | 2 | daily | | daily | | |
| week | - 7 | 2 | weekly | | | | |
| | хту | 2 | weekiy | | weekly | | |
| | _ | me snapshot s | _ | data1 | weekly | | |
| cluster1 | ::> volu | me snapshot s | _ | | | Bloo | |
| cluster1 | ::> volu | | _ | | weekly Size | | |
| cluster1 Vserver | Volume | me snapshot s | _ | | | | |
| cluster1 Vserver | Volume | me snapshot s | show -volume | State | Size | Total% | Used% |
| cluster1 Vserver | Volume | me snapshot s Snapshot weekly.2012- | show -volume | State valid | Size | Total% | Used% |
| cluster1 Vserver | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 | how -volume | State valid valid | Size 408KB 420KB | Total% 0% 0% | Used% |
| cluster1 /server | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 | how -volume | State valid valid valid | Size 408KB 420KB 192KB | Total% 0% 0% | Used% 1% 1% 0% |
| cluster1 /server | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 daily.2012-1 | 2how -volume | State valid valid valid | Size 408KB 420KB 192KB | Total% 0% 0% | Used% 1% 1% 0% |
| cluster1 Vserver | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 daily.2012-1 weekly.2012- hourly.2012- hourly.2012- | :how -volume :12-16_0015 :2-22_0010 :2-23_0015 :12-23_1405 :12-23_1505 | State valid valid valid valid valid | Size 408KB 420KB 192KB 360KB | Total% 0% 0% 0% 0% | Used% 1% 1% 0% 1% |
| cluster1 Vserver | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 daily.2012-1 weekly.2012- hourly.2012- | :how -volume :12-16_0015 :2-22_0010 :2-23_0015 :12-23_1405 :12-23_1505 | State valid valid valid valid valid valid | Size 408KB 420KB 192KB 360KB 196KB | Total% 0% 0% 0% 0% 0% | Used% 1% 1% 0% 1% 0% |
| cluster1 | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 daily.2012-1 weekly.2012- hourly.2012- hourly.2012- hourly.2012- hourly.2012- | show -volume | State valid valid valid valid valid valid valid valid | Size 408KB 420KB 192KB 360KB 196KB | Total% 0% 0% 0% 0% 0% | Used% 1% 1% 0% 1% |
| cluster1 Vserver | Volume | me snapshot s Snapshot weekly.2012- daily.2012-1 daily.2012-1 weekly.2012- hourly.2012- hourly.2012- hourly.2012- | thow -volume 12-16_0015 2-22_0010 2-23_0015 12-23_1405 12-23_1505 12-23_1605 12-23_1705 12-23_1805 | State valid valid valid valid valid valid valid valid valid | Size 408KB 420KB 192KB 360KB 196KB 196KB 212KB | Total% 0% 0% 0% 0% 0% 0% | Used% 1% 1% 0% 1% 0% 0% |

Related information

Creating a Snapshot configuration to enable Previous Versions access

Data protection

Create a Snapshot configuration to enable Previous Versions access

The Previous Versions functionality is always available, provided that client access to Snapshot copies is enabled and provided that Snapshot copies exist. If your Snapshot

copy configuration does not meet these requirements, you can create a Snapshot copy configuration that does.

Steps

 If the volume containing the share to which you want to allow Previous Versions access does not have an associated Snapshot policy, associate a Snapshot policy to the volume and enable it by using the volume modify command.

For more information about using the volume modify command, see the man pages.

2. Enable access to the Snapshot copies by using the volume modify command to set the -snap-dir option to true.

For more information about using the volume modify command, see the man pages.

3. Verify that Snapshot policies are enabled and that access to Snapshot directories is enabled by using the volume show and volume snapshot policy show commands.

For more information about using the volume show and volume snapshot policy show commands, see the man pages.

For more information about configuring and managing Snapshot policies and Snapshot schedules, see Data Protection.

Related information

Data protection

Guidelines for restoring directories that contain junctions

There are certain guidelines you should keep in mind when using Previous Versions to restore folders that contain junction points.

When using Previous Versions to restore folders that have child folders that are junction points, the restore can fail with an Access Denied error.

You can determine whether the folder that you are attempting to restore contains a junction by using the vol show command with the -parent option. You can also use the vserver security trace commands to create detailed logs about file and folder access issues.

Related information

Creating and managing data volumes in NAS namespaces

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