Manage Hyper-V and SQL Server over SMB configurations

ONTAP 9

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Table of Contents

Manage Hyper-V and SQL Server over SMB configurations 1
Configure existing shares for continuous availability 1
Enable or disable VSS shadow copies for Hyper-V over SMB backups 4

Manage Hyper-V and SQL Server over SMB configurations

Configure existing shares for continuous availability

You can modify existing shares to become continuously available shares that the Hyper-V and SQL Server application servers use to nondisruptively access Hyper-V virtual machine and configuration files and SQL Server database files.

About this task

You cannot use an existing share as a continuously available share for nondisruptive operations with application servers over SMB if the share has the following characteristics:

- If the `homedirectory` share property is set on that share
- If the share contains enabled symlinks or widelinks
- If the share contains junctioned volumes below the root of the share

You must verify that the two following share parameters are set correctly:

- The `-offline-files` parameter is set to either `manual` (the default) or `none`.
- Symlinks must be disabled.

The following share properties must be configured:

- `continuously-available`
- `oplocks`

The following share properties must not be set. If they are present in the list of current share properties, they need to be removed from the continuously available share:

- `attributecache`
- `branchcache`

Steps

1. Display the current share parameter settings and the current list of configured share properties:

   `vserver cifs share show -vserver` *`vserver_name`* `-share-name` *`share_name`*

2. If necessary, modify the share parameters to disable symlinks and set offline files to manual by using the `vserver cifs share properties modify` command.

   You can disable symlinks by setting the value of the `-symlink` parameter to `""`.

   - You can disable symlinks by setting the value of the `-symlink` parameter to `""`.
   - You can set the `-offline-files` parameter to the correct setting by specifying `manual`.

3. Add the `continuously-available` share property, and, if needed, the `oplocks` share property:

vserver cifs share properties add -vserver *vserver_name* -share-name *share_name* -share-properties continuously-available[,oplock]

If the `oplocks` share property is not already set, you must add it along with the `continuously-available` share property.

4. Remove any share properties that are not supported on continuously available shares:

   vserver cifs share properties remove -vserver *vserver_name* -share-name *share_name* -share-properties properties[,…]

   You can remove one or more share properties by specifying the share properties with a comma-delimited list.

5. Verify that the `-symlink` and `-offline-files` parameters are set correctly:

   vserver cifs share show -vserver *vserver_name* -share-name *share_name* -fields symlink-properties,offline-files

6. Verify that the list of configured share properties is correct:

   vserver cifs shares properties show -vserver *vserver_name* -share-name share_name

Examples

The following example shows how to configure an existing share named “share1” on storage virtual machine (SVM) vs1 for NDOs with an application server over SMB:

- Symlinks are disabled on the share by setting the `-symlink` parameter to "".
- The `-offline-file` parameter is modified and set to `manual`.
- The `continuously-available` share property is added to the share.
- The `oplocks` share property is already in the list of share properties; therefore, it does not need to be added.
- The `attributecache` share property is removed from the share.
- The `browsable` share property is optional for a continuously available share used for NDOs with application servers over SMB and is retained as one of the share properties.

```
cluster1::> vserver cifs share show -vserver vs1 -share-name share1

                      Vserver: vs1
                        Share: share1
     CIFS Server NetBIOS Name: vs1
                         Path: /data
             Share Properties: oplocks
                               browsable
                               attributecache
           Symlink Properties: enable
      File Mode Creation Mask: -
 Directory Mode Creation Mask: -
                Share Comment: -
                    Share ACL: Everyone / Full Control
File Attribute Cache Lifetime: 10s
                  Volume Name: data
                Offline Files: documents
Vscan File-Operations Profile: standard

cluster1::> vserver cifs share modify -vserver vs1 -share-name share1
-offline-file manual -symlink ""

cluster1::> vserver cifs share properties add -vserver vs1 -share-name
share1 -share-properties continuously-available

cluster1::> vserver cifs share properties remove -vserver vs1 -share-name
share1 -share-properties attributecache

cluster1::> vserver cifs share show -vserver vs1 -share-name share1
-fields symlink-properties,offline-files
vserver  share-name symlink-properties offline-files
-------- ---------- ------------------ -------------
vs1      share1    -                  manual

cluster1::> vserver cifs share properties show -vserver vs1 -share-name
share1

         Vserver: vs1
           Share: share1
Share Properties: oplocks
                  browsable
                  continuously-available
```

Enable or disable VSS shadow copies for Hyper-V over SMB backups

If you use a VSS-aware backup application to back up Hyper-V virtual machine files stored on SMB shares, VSS shadow copy must be enabled. You can disable the VSS shadow copy if you do not use VSS-aware backup applications. The default is to enable the VSS shadow copy.

About this task

You can enable or disable VSS shadow copies at any time.

Steps

1. Set the privilege level to advanced:

   ```
   set -privilege advanced
   ```

2. Perform one of the following actions:

If you want VSS shadow copies to be…	Enter the command…
Enabled	`vserver cifs options modify -vserver vserver_name -shadowcopy-enabled true`
Disabled	`vserver cifs options modify -vserver vserver_name -shadowcopy-enabled false`

3. Return to the admin privilege level:

   ```
   set -privilege admin
   ```

Example

The following commands enable VSS shadow copies on SVM vs1:

```
cluster1::> set -privilege advanced
Warning: These advanced commands are potentially dangerous; use them
only when directed to do so by technical support personnel.
Do you wish to continue? (y or n): y

cluster1::*> vserver cifs options modify -vserver vs1 -shadowcopy-enabled
true

cluster1::*> set -privilege admin
```

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