# Manage Hyper-V and SQL Server over SMB configurations

ONTAP 9

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## 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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