



# **Manage Hyper-V and SQL Server over SMB configurations**

**ONTAP 9**

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# 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`
- `access-based-enumeration`

### 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::> vsriver cifs share show -vsriver 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::> vsriver cifs share modify -vsriver vs1 -share-name share1
-offline-file manual -symlink ""
```

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

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

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

```
-----
vs1      share1      -                      manual
```

```
cluster1::> vsriver cifs share properties show -vsriver 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	<code>vserver cifs options modify -vserver vserver_name -shadowcopy-enabled true</code>
Disabled	<code>vserver cifs options modify -vserver vserver_name -shadowcopy-enabled false</code>

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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