



Manage Hyper-V and SQL Server over SMB configurations

ONTAP 9

NetApp
January 13, 2023

This PDF was generated from <https://docs.netapp.com/us-en/ontap/smb-hyper-v-sql/configure-shares-continuous-availability-task.html> on January 13, 2023. Always check docs.netapp.com for the latest.

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::> 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
```

Copyright information

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.