

Manage Hyper-V and SQL Server over SMB configurations

ONTAP 9

NetApp January 29, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap/smb-hyper-v-sql/configure-shares-continuous-availability-task.html on January 29, 2024. 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::> 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	<pre>vserver cifs options modify -vserver vserver_name -shadowcopy-enabled true</pre>			
Disabled	<pre>vserver cifs options modify -vserver vserver_name -shadowcopy-enabled false</pre>			

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 vsl -shadowcopy-enabled
true

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

Copyright information

Copyright © 2024 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.