



Disable or enable BranchCache on the SVM

ONTAP 9

NetApp
June 30, 2023

Table of Contents

- Disable or enable BranchCache on the SVM. 1
 - What happens when you disable or reenables BranchCache on the CIFS server 1
 - Disable or enable BranchCache 1

Disable or enable BranchCache on the SVM

What happens when you disable or reenable BranchCache on the CIFS server

If you previously configured BranchCache but do not want the branch office clients to use cached content, you can disable caching on the CIFS server. You must be aware of what happens when you disable BranchCache.

When you disable BranchCache, ONTAP no longer computes hashes or sends the metadata to the requesting client. However, there is no interruption to file access. Thereafter, when BranchCache-enabled clients request metadata information for content they want to access, ONTAP responds with a Microsoft-defined error, which causes the client to send a second request, requesting the actual content. In response to the request for content, the CIFS server sends the actual content that is stored on the storage virtual machine (SVM).

After BranchCache is disabled on the CIFS server, SMB shares do not advertise BranchCache capabilities. To access data on new SMB connections, clients make normal read SMB requests.

You can reenable BranchCache on the CIFS server at any time.

- Because the hash store is not deleted when you disable BranchCache, ONTAP can use the stored hashes when replying to hash requests after you reenable BranchCache, provided that the requested hash is still valid.
- Any clients that have made SMB connections to BranchCache-enabled shares during the time when BranchCache was disabled do not get BranchCache support if BranchCache is subsequently reenabled.

This is because ONTAP advertises BranchCache support for a share at the time the SMB session is set up. Clients that established sessions to BranchCache-enabled shares while BranchCache was disabled need to disconnect and reconnect to use cached content for this share.



If you do not want to save the hash store after you disable BranchCache on a CIFS server, you can manually delete it. If you reenable BranchCache, you must ensure that the hash store directory exists. After BranchCache is reenabled, BranchCache-enabled shares advertise BranchCache capabilities. ONTAP creates new hashes as new requests are made by BranchCache-enabled clients.

Disable or enable BranchCache

You can disable BranchCache on the storage virtual machine (SVM) by changing the BranchCache operating mode to `disabled`. You can enable BranchCache at any time by changing the operating mode to either offer BranchCache services per-share or automatically for all shares.

Steps

1. Run the appropriate command:

If you want to...	Then enter the following...
Disable BranchCache	<code>vserver cifs branchcache modify -vserver vserver_name -operating-mode disable</code>
Enable BranchCache per share	<code>vserver cifs branchcache modify -vserver vserver_name -operating-mode per-share</code>
Enable BranchCache for all shares	<code>vserver cifs branchcache modify -vserver vserver_name -operating-mode all-shares</code>

2. Verify that the BranchCache operating mode is configured with the desired setting: `vserver cifs branchcache show -vserver vserver_name`

Example

The following example disables BranchCache on SVM vs1:

```
cluster1::> vserver cifs branchcache modify -vserver vs1 -operating-mode
disable

cluster1::> vserver cifs branchcache show -vserver vs1

                                Vserver: vs1
        Supported BranchCache Versions: enable_all
                Path to Hash Store: /hash_data
        Maximum Size of the Hash Store: 20GB
Encryption Key Used to Secure the Hashes: -
        CIFS BranchCache Operating Modes: disable
```

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.