



Manage NFSv4 file delegations

ONTAP 9

NetApp
June 30, 2023

Table of Contents

- Manage NFSv4 file delegations 1
 - Enable or disable NFSv4 read file delegations 1
 - Enable or disable NFSv4 write file delegations 1

Manage NFSv4 file delegations

Enable or disable NFSv4 read file delegations

To enable or disable NFSv4 read file delegations, you can modify the `-v4.0-read-delegation` or `-v4.1-read-delegation` option. By enabling read file delegations, you can eliminate much of the message overhead associated with the opening and closing of files.

About this task

By default, read file delegations are disabled.

The disadvantage of enabling read file delegations is that the server and its clients must recover delegations after the server reboots or restarts, a client reboots or restarts, or a network partition occurs.

Step

1. Perform one of the following actions:

If you want to...	Then...
Enable NFSv4 read file delegations	Enter the following command: <pre>vserver nfs modify -vserver vserver_name -v4.0 -read-delegation enabled</pre>
Enable NFSv4.1 read file delegations	Enter the following command: <pre>+vserver nfs modify -vserver vserver_name -v4.1 -read-delegation enabled</pre>
Disable NFSv4 read file delegations	Enter the following command: <pre>vserver nfs modify -vserver vserver_name -v4.0 -read-delegation disabled</pre>
Disable NFSv4.1 read file delegations	Enter the following command: <pre>vserver nfs modify -vserver vserver_name -v4.1 -read-delegation disabled</pre>

Result

The file delegation options take effect as soon as they are changed. There is no need to reboot or restart NFS.

Enable or disable NFSv4 write file delegations

To enable or disable write file delegations, you can modify the `-v4.0-write-delegation` or `-v4.1-write-delegation` option. By enabling write file delegations,

you can eliminate much of the message overhead associated with file and record locking in addition to opening and closing of files.

About this task

By default, write file delegations are disabled.

The disadvantage of enabling write file delegations is that the server and its clients must perform additional tasks to recover delegations after the server reboots or restarts, a client reboots or restarts, or a network partition occurs.

Step

1. Perform one of the following actions:

If you want to...	Then...
Enable NFSv4 write file delegations	Enter the following command: <code>vserver nfs modify -vserver vserver_name -v4.0 -write-delegation enabled</code>
Enable NFSv4.1 write file delegations	Enter the following command: <code>vserver nfs modify -vserver vserver_name -v4.1 -write-delegation enabled</code>
Disable NFSv4 write file delegations	Enter the following command: <code>vserver nfs modify -vserver vserver_name -v4.0 -write-delegation disabled</code>
Disable NFSv4.1 write file delegations	Enter the following command: <code>vserver nfs modify -vserver vserver_name -v4.1 -write-delegation disabled</code>

Result

The file delegation options take effect as soon as they are changed. There is no need to reboot or restart NFS.

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.