Configure NFSv4 file and record locking

ONTAP 9

NetApp
July 12, 2022

This PDF was generated from https://docs.netapp.com/us-en/ontap/nfs-admin/nfsv4-file-record-locking-concept.html on July 12, 2022. Always check docs.netapp.com for the latest.

Table of Contents

Configure NFSv4 file and record locking 1
About NFSv4 file and record locking 1
Specify the NFSv4 locking lease period 1
Specify the NFSv4 locking grace period 1

Configure NFSv4 file and record locking

About NFSv4 file and record locking

For NFSv4 clients, ONTAP supports the NFSv4 file-locking mechanism, maintaining the state of all file locks under a lease-based model.

NetApp Technical Report 3580: NFSv4 Enhancements and Best Practices Guide Data ONTAP Implementation

Specify the NFSv4 locking lease period

To specify the NFSv4 locking lease period (that is, the time period in which ONTAP irrevocably grants a lock to a client), you can modify the `-v4-lease-seconds` option. Shorter lease periods speed up server recovery while longer lease periods are beneficial for servers handling a very large amount of clients.

About this task

By default, this option is set to `30`. The minimum value for this option is `10`. The maximum value for this option is the locking grace period, which you can set with the `locking.lease_seconds` option.

Steps

1. Set the privilege level to advanced:

   ```
   set -privilege advanced
   ```

2. Enter the following command:

   ```
   vserver nfs modify -vserver vserver_name -v4-lease-seconds number_of_seconds
   ```

3. Return to the admin privilege level:

   ```
   set -privilege admin
   ```

Specify the NFSv4 locking grace period

To specify the NFSv4 locking grace period (that is, the time period in which clients attempt to reclaim their locking state from ONTAP during server recovery), you can modify the `-v4-grace-seconds` option.

About this task

By default, this option is set to `45`.

Steps

1. Set the privilege level to advanced:

   ```
   set -privilege advanced
   ```

2. Enter the following command:

   ```
   vserver nfs modify -vserver vserver_name -v4-grace-seconds number_of_seconds
   ```

3. Return to the admin privilege level:

   ```
   set -privilege admin
   ```

Copyright Information

Copyright © 2022 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.