



Provision NAS storage for both Windows and Linux using both NFS and SMB/CIFS

ONTAP System Manager

Amanda Stroman, Barb Einarsen, Thom Illingworth
November 04, 2020

This PDF was generated from https://docs.netapp.com/us-en/ontap/task_nas_provision_nfs_and_smb.html on November 18, 2020. Always check docs.netapp.com for the latest.

Table of Contents

Provision NAS storage for both Windows and Linux using both NFS and SMB/CIFS 1

Provision NAS storage for both Windows and Linux using both NFS and SMB/CIFS

Create volumes to provide storage for clients using either the NFS or SMB/CIFS protocol.

This procedure creates new volumes on an [existing storage VM enabled for both NFS and SMB protocols](#).



Beginning in ONTAP 9.8, when you provision storage, QoS is enabled by default. You can disable QoS or choose a custom QoS policy during the provisioning process or at a later time.

Steps

1. In ONTAP System Manager, click **Storage > Volumes** and then click **Add**.

If you are running ONTAP 9.8 or later and you want to disable QoS or choose a custom QoS policy, click **More Options** and then select **Performance Service Level**.

2. Click **More Options** and select **Share via NFS**.

The default setting grants full access to all users. You can add more restrictive rules to the export policy later.

3. Select **Share via SMB/CIFS**.

The share is created with a default Access Control List (ACL) set to "Full Control" for the **Everyone** group. You can add restrictions to the ACL later.

4. On a Linux client, do the following to verify that the export is accessible.
 - a. Create and mount the volume using the network interface of the storage VM.
 - b. On the newly mounted volume, create a test file, write text to it, and then delete the file.
5. On a Windows client, do the following to verify that the share is accessible.
 - a. In Windows Explorer, map a drive to the share in the following format:
`_SMB_Server_Name__Share_Name_`
 - b. On the newly created drive, create a test file, write text to it, and then delete the file.

After verifying access, you can [restrict client access with the volume's export policy](#), [restrict client](#)

[access with the share ACL](#), and set any desired ownership and permissions on the exported and shared volume.

Copyright Information

Copyright © 2020 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.