Prepare Linux for XCP NFS

XCP 1.6.2

Ciaran McNamara, Amanda Stroman
October 29, 2020

This PDF was generated from https://docs.netapp.com/us-en/xcp/xcp-prepare-linux-for-xcp-nfs.html on November 10, 2020. Always check docs.netapp.com for the latest.

NetApp®

Table of Contents

Prepare Linux for XCP NFS 1

Prepare Linux for XCP NFS

XCP NFS uses Linux client host systems to generate parallel I/O streams and fully use available network and storage performance.

Configure catalog

XCP saves operation reports and metadata in an NFSv3-accessible catalog directory. Provisioning the catalog is a one-time preinstallation task requiring the following:

- A NetApp NFSv3 export for security and reliability.
- At least ten disks or solid-state drives in the aggregate containing the export for performance.
- Storage configured to allow root access to the catalog export for the IP addresses of all Linux clients used to run XCP (multiple XCP clients can share a catalog location).
- Approximately 1 GB of space for every 10 million objects (directories plus files and hard links) to be indexed; each copy that can be resumed or synched and each offline-searchable scan requires an index.

You should store XCP catalogs separately. They should not be located on either the source or destination NFS export directory. XCP maintains metadata—reports in the catalog location specified during the initial setup. You must specify and update the location for storing the reports before you run any operation with XCP.

Configure storage

XCP NFS transitions and migrations have the following source and target storage requirements:

- Source and target servers must have NFSv3 protocol service enabled. For NFSv4 ACL migration, you must enable NFSv4 protocol service and NFSv4 ACL on the destination server.
- Source and target volumes must be exported with `root` access to the XCP Linux client host.

Configure the source for NFSv3 and NFSv4 exports as read-only so administrators cannot accidentally modify it.

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.