



# About NDMP modes of operation

## ONTAP 9

NetApp  
November 30, 2022

# Table of Contents

- About NDMP modes of operation . . . . . 1
  - What node-scoped NDMP mode is . . . . . 1
  - What SVM-scoped NDMP mode is . . . . . 1

# About NDMP modes of operation

You can choose to perform tape backup and restore operations either at the node level as you have been doing until now or at the storage virtual machine (SVM) level. To perform these operations successfully at the SVM level, NDMP service must be enabled on the SVM.

If you upgrade from Data ONTAP 8.2 to Data ONTAP 8.3, the NDMP mode of operation used in 8.2 will continue to be retained post the upgrade from 8.2 to 8.3.

If you install a new cluster with Data ONTAP 8.2 or later, NDMP is in the SVM-scoped NDMP mode by default. To perform tape backup and restore operations in the node-scoped NDMP mode, you must explicitly enable the node-scoped NDMP mode.

## Related information

[Commands for managing node-scoped NDMP mode](#)

[Managing node-scoped NDMP mode for FlexVol volumes](#)

[Managing SVM-scoped NDMP mode for FlexVol volumes](#)

## What node-scoped NDMP mode is

In the node-scoped NDMP mode, you can perform tape backup and restore operations at the node level. The NDMP mode of operation used in Data ONTAP 8.2 will continue to be retained post the upgrade from 8.2 to 8.3.

In the node-scoped NDMP mode, you can perform tape backup and restore operations on a node that owns the volume. To perform these operations, you must establish NDMP control connections on a LIF hosted on the node that owns the volume or tape devices.



This mode is deprecated and will be removed in a future major release.

## Related information

[Managing node-scoped NDMP mode for FlexVol volumes](#)

## What SVM-scoped NDMP mode is

You can perform tape backup and restore operations at the storage virtual machine (SVM) level successfully if the NDMP service is enabled on the SVM. You can back up and restore all volumes hosted across different nodes in the SVM of a cluster if the backup application supports the CAB extension.

An NDMP control connection can be established on different LIF types. In the SVM-scoped NDMP mode, these LIFs belong to either the data SVM or admin SVM. The connection can be established on a LIF only if the NDMP service is enabled on the SVM that owns this LIF.

A data LIF belongs to the data SVM and the intercluster LIF, node-management LIF, and cluster-management LIF belong to the admin SVM.

In the SVM-scoped NDMP mode, the availability of volumes and tape devices for backup and restore operations depends on the LIF type on which the NDMP control connection is established and the status of the CAB extension. If your backup application supports the CAB extension and a volume and the tape device share the same affinity, then the backup application can perform a local backup or restore operation, instead of a three-way backup or restore operation.

**Related information**

[Managing SVM-scoped NDMP mode for FlexVol volumes](#)

## 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.

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.