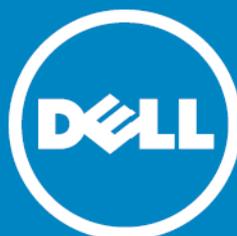


# Dell™ NetVault™ Backup Plug-in for NDMP 10.0.5

Application Notes for EMC Unified VNX/VNXe  
Series and legacy EMC Celerra platforms



© 2015 Dell Inc.  
ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Dell Inc.

The information in this document is provided in connection with Dell products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Dell products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, DELL ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL DELL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF DELL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Dell makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Dell does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Dell Inc.  
Attn: LEGAL Dept  
5 Polaris Way  
Aliso Viejo, CA 92656

Refer to our web site ([software.dell.com](http://software.dell.com)) for regional and international office information.

#### Patents

This product is protected by U.S. Patents # 7,814,260; 7,913,043; 7,979,650; 8,086,782; 8,145,864; 8,171,247; 8,255,654; 8,271,755; 8,311,985; and 8,452,731. Protected by Japanese, E.U., French, and UK patents 1615131 and 05250687.0, and German patent DE602004002858. Additional patents pending. For more information, go to <http://software.dell.com/legal/patents.aspx>.

#### Trademarks

Dell, the Dell logo, and NetVault are trademarks of Dell Inc. Celerra, SnapSure, VNX, and VNXe are trademarks or registered trademarks of EMC Corporation in the United States and other countries. Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both. Windows is a registered trademarks of Microsoft Corporation in the United States and/or other countries. UNIX is a registered trademark of The Open Group in the United States and other countries. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims any proprietary interest in the marks and names of others.

#### Legend

 **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

 **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.

 **IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

Plug-in for NDMP Application Notes for EMC Unified VNX/VNXe Series and legacy EMC Celerra platforms  
Updated - April 2015  
Software Version - 10.0.5  
NCG-102-10.0.5-EN-01

# Contents

<b>Introduction</b> . . . . .	4
About this document . . . . .	4
Target audience . . . . .	4
Recommended additional reading . . . . .	4
<b>Installation and configuration prerequisites</b> . . . . .	5
Installation prerequisites . . . . .	5
Configuration prerequisites . . . . .	5
<b>Backing up data</b> . . . . .	7
About Backup Dump Levels . . . . .	7
Important notes . . . . .	7
Backing up volumes . . . . .	8
Backing up individual data paths . . . . .	10
<b>Restoring data</b> . . . . .	11
Restoring data using the plug-in . . . . .	11
Restoring Incremental Backups . . . . .	13
Renaming or relocating data . . . . .	13
Restoring data to an alternate filer . . . . .	14
Prerequisites . . . . .	14
Restore procedure . . . . .	14
Using additional features available on the Choose Saveset page . . . . .	15
Filtering the saveset list . . . . .	15
Searching for files in savesets . . . . .	15
Viewing media list . . . . .	16
<b>Troubleshooting</b> . . . . .	17
Common errors . . . . .	17
<b>About Dell</b> . . . . .	18
Contacting Dell . . . . .	18
Technical support resources . . . . .	18

# Introduction

- [About this document](#)
- [Target audience](#)
- [Recommended additional reading](#)

## About this document

This document provides information about using the Dell™ NetVault™ Backup Plug-in for NDMP (Plug-in for NDMP) with an EMC® Celerra® or VNX® Storage System. It is intended as a supplement to the *Dell NetVault Backup Plug-in for NDMP User's Guide*, which describes the common procedures for installing and configuring the plug-in.

## Target audience

This document is intended for system administrators and others responsible for installing, configuring, and using the Plug-in for NDMP. An understanding of filer administration and the host platform is assumed.

## Recommended additional reading

- NetVault Backup documentation:
  - *Dell NetVault Backup Installation Guide*: This guide provides information about installing the NetVault Backup Server and Client software.
  - *Dell NetVault Backup Administrator's Guide*: This guide provides information about configuring and using NetVault Backup to protect your data. It provides comprehensive information about all NetVault Backup features and functionality.
  - *Dell NetVault Backup Command Line Interface Reference Guide*: This guide provides information about using the NetVault Backup command-line utilities.
  - *Dell NetVault Backup Plug-in for NDMP Application Notes*: These notes provide filer-specific information.

You can download these guides from <https://support.software.dell.com/>.

**!** **IMPORTANT:** Starting with 10.0, NetVault Backup provides a web-based user interface to configure, manage, and monitor your NetVault Backup system and installed plug-ins. The procedures described in this document are intended for the new NetVault WebUI. For procedures based on the NetVault Backup Console (user interface available with NetVault Backup 9.x), see the documentation for an earlier version of the plug-in.

- Administrator's Guide for your NDMP-based NAS appliance

# Installation and configuration prerequisites

- [Installation prerequisites](#)
- [Configuration prerequisites](#)

## Installation prerequisites

In addition to the installation prerequisites covered in the *Dell NetVault Backup Plug-in for NDMP User's Guide*, verify that the following requirements are met:

- **Hardware requirements:** For information about Hitachi NAS (HNAS) Servers, see the Hitachi Data Systems website at: <http://www.emc.com>
- **Software requirements:** For information about software requirements and supported filer operating systems, see the *Dell NetVault Backup Compatibility Guide* available at: <https://support.software.dell.com/>
- **Install NDMP license:** On the EMC Celerra or VNX Storage System, install the NDMP license.

**NOTE:** The installation and configuration procedures are described in the *Dell NetVault Backup User's Guide*.

## Configuration prerequisites

In addition to the configuration prerequisites covered in the *Dell NetVault Backup Plug-in for NDMP User's Guide*, verify that the following requirements are met:

- **Disable Removable Storage Manager (RSM) Service on Windows:** On Windows-based operating systems, stop and disable the RSM Service.
- **Disable SCSI RESERVE/RELEASE on Linux and UNIX:** For instructions, consult the relevant Operating System Guide.
- **Configure the Preferred Network Address setting:** In the Remote Backup model, configure the Preferred Network Address setting if the NetVault Backup machine to which the device is attached uses multiple network addresses. For more information about this setting, see the *Dell NetVault Backup Administrator's Guide*.
- **Create a user account:** On the EMC system, create a user named ndmp. For more information, see the EMC documentation. Use this user account to add the NDMP Client. EMC systems do not support any other user for NDMP backups and restores.
- **Specify a single IP address:** EMC Storage Platform only supports a single IP address. You cannot specify multiple IP addresses when adding the NDMP Client.

- **Configure “param” settings:** On filers running DART ver. 5.4 and ver. 5.5, configure the following settings:

```
param NDMP scsiReserve=0
```

(Disables device sharing.)

```
param NDMP md5=1
```

(Enables md5 encrypted user authentication.)

```
param PAX readWriteBlockSizeInKB=128
```

(Sets the MOVER\_RECORD\_SIZE parameter to 128 Kb.)

- **Enable SnapSure™:** To use the SnapSure feature with the Plug-in for NDMP, enable the SnapSure functionality on the EMC system. SnapSure creates read-only, point-in-time logical views of a file system. This feature is only supported on DARTOS/ VNX File OE 5.5 and later versions. For more information, see the relevant EMC documentation for details.

You must also enable the SnapSure functionality for NDMP Volume-Based (VBB) Backups.

## Backing up data

- [About Backup Dump Levels](#)
- [Backing up volumes](#)
- [Backing up individual data paths](#)

### About Backup Dump Levels

The Plug-in for NDMP supports both Full and Incremental Backups. The backup type is determined by the Dump Level that can be set to Level 0 for a Full Backup or Levels 1 through 9 for Incremental Backups:

- **Level 0 or Full Backup:** A Full Backup provides a backup of all the data in the selected path.
- **Level 1 through 9 or Incremental Backup:** The Incremental Backups base themselves on the most recent lower-level Incremental Backup, and include any data that has changed or is new since the last Full or Incremental Backup.

**Examples:**

- Level 1 Incremental Backup includes any data that has changed or is new since the last Level 0 or Full Backup.
- Level 2 Incremental Backup includes any data that has changed or is new since the last Level 1 Incremental Backup, and so on, up to dump level 9.

### Important notes

- If a directory is included in a dump level 0 backup, it is included in all future dumps even if no changes have occurred. In this instance, the directory is empty and does not contain content. However, it does not negatively affect the recovery of data.
- Only one dump level is maintained for each selected set of data. For example, after performing Level 1, Level 2, and Level 3 Incremental Backups, if you perform a Full Backup, the dump level is reset to 0. The next instance of the Incremental Backup is based on the Full Backup.
- If an Incremental Backup fails, the subsequent backup is based on the most recent backup of a lower level. For example, if dump level 1 is completed successfully, but dump level 2 fails, dump level 3 is based on dump level 1. The failure of an Incremental Backup is noted in the NetVault Backup logs.

# Backing up volumes

## To back up one or more volumes

- 1 In the Navigation pane, click **Create Backup Job**.  
— or —  
In the Navigation pane, click **Guided Configuration**, and then on the **NetVault Configuration Wizard** page, click **Create Backup Jobs**.
  - 2 In **Job Name**, specify a name for the job.  
Assign a descriptive name that allows you to easily identify the job for monitoring its progress or restoring data. The job name can contain alphanumeric and non-alphanumeric characters, but it cannot contain non-Latin characters. There is no length restriction. However, a maximum of 40 characters is recommended on all platforms.
  - 3 In the **Selections** list, select an existing Backup Selection Set, or complete the following steps to create a set.
    - a Click **Create New** next to the **Selections** list.
    - b On the **NetVault Backup Selections** page, open the NetVault Backup Server, and then open **NDMP Client**.
    - c In the list of added servers, open the applicable filer to display the **Volumes** node.
    - d Select the data that you want to back up:
      - **Back up all volumes:** Select the **Volumes** node.
      - **Back up individual volumes:** Open the **Volumes** node, and select the volumes that you want to back up.
    - e Click **Save**, and in the **Create New Set** dialog box, type a name for the set. Click **Save** to close the dialog box.
- NOTE:** A set name can contain alphanumeric and non-alphanumeric characters, but it cannot contain non-Latin characters. On Linux® OS, the names can have a maximum of 200 characters. On Windows® OS, there is no length restriction. However, a maximum of 40 characters is recommended on all platforms.
- 4 In the **Plugin Options** list, select an existing Backup Options Set, or complete the following steps to create a set.
    - a Click **Create New** next to the **Plugin Options** list.
    - b Under **NDMP Backup Options**, configure the following settings.

Table 1. NDMP Backup Options

Option	Description
Dump Level	Select the type of backup that you want to perform. For a Full Backup, type or select 0. For an Incremental Backup, type or select any level from 1 to 9, based on the previous dump level.
Update /etc/dumpdates	The file "/etc/dumpdates" keeps a record of the backup, including the backup name, backup level, and snapshot time.  Leave this check box selected if your backup strategy includes Incremental Backups. The information in this file is used to determine what data must be included in an Incremental Backup.
Do Direct Backup if Possible	To use DAR during restores, leave this check box selected. DAR enables precise tape positioning, which allows quick recovery of individual or a small set of files.  Without DAR, the backup saveset is read sequentially to restore files. DAR requires Data ONTAP 6.x or later.

**Table 1. NDMP Backup Options**

Option	Description
Save File Information	This option allows you to browse individual files and directories while selecting data during restore. You cannot restore individual files and directories if you clear this check box.  We recommend that you leave this check box selected.
SnapSure	Select this check box to back up a snapshot. This feature is only supported on DART/VNX File 5.5 and later. The SnapSure functionality must be enabled on the EMC Celerra/VNX system to use this feature.
Volume Based Backup	Select this check box to use the EMC Celerra/VNX NDMP Volume Backup feature for performing backups. This feature is only supported on DART/VNX File 5.5 and later. The SnapSure functionality must be enabled on Celerra/VNX to use this feature.
Allow Single File Backup	To back up an individual file, leave this check box selected.
EMC Directory Filter 1	You can use these boxes to specify the directories that you want to exclude from the backup. Type the full path, starting with a forward slash ("/"). Each box can contain one entry. Thus, you can specify a maximum of 5 entries in the filter boxes.  You can use the wildcard characters "?" and "x" to specify the directory names. Wildcard characters can only be used at the first or the last place in the directory name. For example, if you enter "/dir1/tmp*" in filter box, the plug-in excludes all directories starting with the letters "tmp" in the directory /dir1.  Directory names are case-sensitive for NFS shares and case-insensitive for CIFS shares.
EMC Directory Filter 2	
...	
EMC Directory Filter 5	
EMC File Filter 1	You can use these boxes to specify the files that you want to exclude from the backup. Type the full path, starting with a forward slash ("/"). Each box can contain one entry. Thus, you can specify a maximum of 5 entries in the filter boxes.  You can use the wildcard characters "?" and "x" to specify the filenames. Wildcard characters can only be used at the last place in the filename. For example, if you enter "/dir1/tmp*" in filter box, the plug-in excludes all files starting with the letters "tmp" in the directory /dir1.  Filenames are case-sensitive for NFS shares and case-insensitive for CIFS shares.
EMC File Filter 2	
...	
EMC File Filter 5	

- c Under **Sub Jobs**, configure the following settings.

**Table 2. Sub Jobs**

Option	Description
Number of Backups to Run in Parallel	Type or select the number of jobs that can run concurrently. The default value is zero. With the default setting, all jobs in parallel, limited only by the availability of drives, network bandwidth, and other resources.  To achieve the desired result, set the same value for each job.
Delete Auto Generated Backup Jobs on Completion	By default, each subjob is listed on the <b>Job Status</b> page. This can create confusion when you try to view the details of the parent job. To include only a single entry for the parent job, leave this check box selected.

- d Click **Save**, and in the **Create New Set** dialog box, type a name for the set. Click **Save** to close the dialog box.
- 5 Select or create the **Schedule Set**, **Target Set**, and **Advanced Options Set**. For more information about these sets, see the *Dell NetVault Backup Administrator's Guide*.
  - 6 To submit the job for scheduling, click **Save & Submit**. You can monitor the job progress from the **Job Status** page and view the logs from the **View Logs** page.

To save the job definition without scheduling it, click **Save**. You can view, edit, or run this job from the **Manage Job Definitions** page. This job is not displayed on the **Job Status** page until you submit it.

For more information about **Job Status**, **View Logs**, and **Manage Job Definitions**, see the *Dell NetVault Backup Administrator's Guide*.

## Backing up individual data paths

### *To back up an individual data path*

- 1 In the Navigation pane, click **Create Backup Job**.

— or —

In the Navigation pane, click **Guided Configuration**, and then on the **NetVault Configuration Wizard** page, click **Create Backup Jobs**.

- 2 In **Job Name**, specify a name for the job.

Assign a descriptive name that allows you to easily identify the job for monitoring its progress or restoring data. The job name can contain alphanumeric and non-alphanumeric characters, but it cannot contain non-Latin characters. There is no length restriction. However, a maximum of 40 characters is recommended on all platforms.

- 3 Click **Create New** next to the **Selections** list.

- 4 On the **NetVault Backup Selections** page, open the **NetVault Backup Server**, and then open **NDMP Client**.

- 5 Select the applicable filer, and in the **Actions** list, click **Enter Backup Path**.

- 6 In the **NDMP Backup Request** dialog box, configure the following option:

- **Directory:** Specify the full path to the directory that you want to back up. Use the following format to specify the backup path:

```
/<File System>/<parent directory>/<sub-directory>
```

To back up an individual file, type the full file path and verify that the **Allow Single File Backup** check box is selected. Use the following format to specify the file path:

```
/<File System>/<parent directory...>/<file name>
```

- 7 Set the **Dump Level** and the remaining backup options.

For more information, see [NDMP Backup Options](#).

- 8 Click **OK** to save the settings.

- 9 Complete steps 5 and 6 in the section [Backing up volumes](#).

## Restoring data

- [Restoring data using the plug-in](#)
- [Restoring Incremental Backups](#)
- [Renaming or relocating data](#)
- [Restoring data to an alternate filer](#)
- [Using additional features available on the Choose Saveset page](#)

### Restoring data using the plug-in

#### *To restore data using the plug-in*

- 1 In the Navigation pane, click **Create Restore Job**.
- 2 In the saveset table, select the saveset that you want to use, and click **Next**.

The table displays the saveset name (Job Title and Saveset ID), creation date and time, and saveset size. Note the following:

- The list is sorted alphabetically by saveset name. You can sort the list by a different column or reverse the sort order by clicking the column heading. The arrowhead next to the column name indicates the sort order.
  - You can use one or more filters to display specific savesets on this page. You can also search for a data item in savesets and view the media list for a saveset. For more information about the additional features, see [Using additional features available on the Choose Saveset page](#).
  - When you select a saveset, the following details are displayed in the **Saveset Information** area: Job ID, Job Title, name of the NetVault Backup Server, name of the client from which the data was backed up, plug-in used to create the saveset, saveset creation date and time, saveset retirement setting, whether Incremental Backup or not, whether Archive or not, and saveset size.
- 3 On the **Create Selection Set** page, select the data that you want to restore:
    - **Restore entire saveset:** Select the root node.
    - **Restore individual files and directories:** Select the target files and directories in the selections tree. The selections tree can only be browsed if the **Save File Information** option was selected during backup.

#### **IMPORTANT:**

- If you omit child-level items after selecting the parent node, the job fails. To perform selective restores, open the parent node, and select each item that you want to restore.
- EMC Celerra/VNX systems do not allow you to restore system files on Linux- and UNIX-based operating systems. The system files include character device files, block device files, FIFO (named pipe files), sockets, doors, and other special files. The restore job might fail if you include these files.
- EMC Celerra/VNX systems do not support individual file restores on deduplicated volumes. For details, see the EMC guide *Configuring NDMP Backups on EMC Celerra/VNX*.

- Click **Edit Plugin Options**, and configure the following settings.

**Table 1. Restore options**

Option	Description
NDMP Server	This option specifies the target filer name. It is only required when you want to restore data to an alternate filer. By default, it is set to the name of the original filer from which the data was backed up. Do not change the NDMP Server while restoring data to the same filer.
Direct Access Restore Mode	Select the appropriate DAR mode from the following: <ul style="list-style-type: none"> <li><b>Use Direct Access Restore if Possible:</b> Select this option to perform a direct access restore if the backup was direct and the mover and data server can complete a Direct Access Restore. If these conditions are not met, a non-direct access restore is performed.</li> <li><b>Use Direct Access Restore by Recovering Individual Files:</b> Select this option to restore a directory and its file contents. When you use this option, empty directories in the saveset are ignored. You must select this option if any item was omitted during data selection; otherwise, the restore job fails.</li> <li><b>Only Do Direct Access Restore:</b> Select this option to force a Direct Access Restore. It can be only used if the backup was direct and the mover and data server can complete a Direct Access Restore; otherwise the restore job fails.</li> <li><b>Never Do Direct Access Restore:</b> Select this option to perform a standard non-Direct Access Restore.</li> </ul>
Incremental Restore	Select this check box to recursively extract data and reconstruct the selected subtree to the state it was in at the time of backup.  This option is equivalent to setting the environment variable <code>EXTRACT=N</code> . The plug-in overwrites the existing files and deletes the files that were not present at the time of backup.
Restore ACLs	Select this option to restore ACLs from the backed-up file. This option is equivalent to setting the environment variable <code>EXTRACT_ACL=Y</code> . You can use this option only if the <b>Backup ACLs</b> option was selected during backup.

**IMPORTANT:**

- When individual files are selected for a Direct Access Restore, their parent-level directory permissions are not restored.
- When running a Direct Access Restore, NetVault Backup organizes the restore requests into groups of 1024 files at a time. When a restore job consists of more than 1024 total files, multiple restore requests are issued. Accordingly, multiple log entries are displayed for the job.

- Click **OK** to save the settings, and then click **Next**.

- In **Job Name**, specify a name for the job.

Assign a descriptive name that allows you to easily identify the job for monitoring its progress. The job name can contain alphanumeric and non-alphanumeric characters, but it cannot contain non-Latin characters. There is no length restriction. However, a maximum of 40 characters is recommended on all platforms

- In the **Target Client** list, the client from which data was backed up is selected by default. Do not change this setting.

- 8 Select or create the Schedule Set, Restore Source Set, and Advanced Options Set. For more information about these sets, see the *Dell NetVault Backup Administrator's Guide*.
- 9 Click **Submit** to submit the job for scheduling.

You can monitor the job progress from the **Job Status** page and view the logs from the **View Logs** page. For more information about these functions, see the *Dell NetVault Backup Administrator's Guide*.

## Restoring Incremental Backups

The incremental restores build on each other. To restore an Incremental Backup, you must have all the backups from Level-0 through the last backup in the backup sequence that you want to restore.

### *To restore an Incremental Backup*

- 1 Restore the Full or Level 0 Backup. For more information, see [Restoring data using the plug-in](#).
- 2 Restore each Incremental Backup in the backup sequence, starting with the lowest-level backup and going to the last backup that you want to restore (that is, in the same order in which they were created). For each dump level, follow the steps outlined in the section [Restoring data using the plug-in](#).

**IMPORTANT:** All NDMP backups are effectively snapshots of the volume. When you restore a dump backup in an increment series, it restores all the data in the saveset. At the same time, it deletes the files present on the filer, but not available in that saveset. Thus, it reconstructs the subtree as it was at the time of backup.

## Renaming or relocating data

When restoring a backup, you can rename the directories to create a copy of the data instead of overwriting of the existing versions. You can also relocate the data to a different volume. This procedure can be useful if the original volume is down or if you are dealing with limited bandwidth or capacity.

**NOTE:** This feature is only available to savesets that were created with the **Save File Information** option.

### *To rename or relocate data during restore*

- 1 Complete steps 1 through 3 in the section [Restoring data using the plug-in](#)
- 2 Select the volume that you want to rename, and in the **Actions** list, click **Rename**.
- 3 In the **Restore Rename** dialog box, configure the following option:
  - To rename a file or directory, type the new name.
  - To relocate the item to a different volume, type the volume name. You can also rename while relocating by specifying a new path. The volume to which you are relocating must exist on the filer.

Click **OK** to close the dialog box.

After you close the dialog box, the plug-in updates the corresponding node in the selections tree to display the new name and location for the file or directory.

- 4 Complete steps 4 through 9 in the section [Restoring data using the plug-in](#).

# Restoring data to an alternate filer

To relocate a backup to an alternate filer, use the following procedure. This procedure can be useful during a server migration or disaster recovery operation.

## Prerequisites

Before you start the restore procedure, add the target filer to the plug-in. For more information, see the *Dell NetVault Backup Plug-in for NDMP User's Guide*.

## Restore procedure

### *To restore data to an alternate filer*

- 1 Complete steps 1 through 3 in the section [Restoring data using the plug-in](#).
- 2 To rename or relocate data during restore, complete steps 2 and 3 in the section [Renaming or relocating data](#).
- 3 Click **Edit Plugin Options**, and configure the following option:  
**NDMP Server:** This option specifies the target filer name. By default, it is set to the name of the original filer from which the data was backed up. To relocate the data to an alternate server, type the name of the target filer.
- 4 Select the appropriate DAR method. For more information about the available options, see [Restore options](#).
- 5 Complete steps 5 through 9 in the section [Restoring data using the plug-in](#).

# Using additional features available on the Choose Saveset page

This section describes how to use the additional features available on the **Create Restore Job – Choose Saveset** page. These features are common to all NetVault Backup plug-ins.

## Filtering the saveset list

By default, the saveset table on the **Create Restore Job – Choose Saveset** page lists all available savesets. You can use the following filters to display specific savesets on this page.

Table 2. Saveset filters

Filter	Description
Client	<p>Displays savesets created for particular clients.</p> <p><i>To use this filter</i></p> <ul style="list-style-type: none"><li>Click the <b>Client</b> box, and in the <b>Choose Client</b> dialog box, select the applicable clients. Click <b>OK</b> to close the dialog box.</li></ul> <p>The default selection is <b>Any</b>.</p>
Plugin Type	<p>Displays savesets created using a particular plug-in.</p> <p><i>To use this filter</i></p> <ul style="list-style-type: none"><li>Click the <b>Plugin Type</b> box, and in the list, select the applicable plug-in.</li></ul> <p>The default selection is <b>Any</b>.</p>
Date	<p>Displays savesets created during a specified period.</p> <p><i>To use this filter</i></p> <ul style="list-style-type: none"><li>Click the <b>Date</b> box, and in the list, select the option that you want to use. The available options are Last 24 hours, Last Week, Last Month, Last 6 Months, Last Year, and Any.</li></ul> <p>The default selection is <b>Any</b>.</p>
Job	<p>Displays savesets created for particular job IDs.</p> <p><i>To use this filter</i></p> <ul style="list-style-type: none"><li>Click the <b>Job</b> box, and in the <b>Choose Job</b> dialog box, select the applicable jobs. Click <b>OK</b> to close the dialog box.</li></ul> <p>The default selection is <b>Any</b>.</p>

## Searching for files in savesets

The **Search** option on the **Create Restore Job – Choose Saveset** page allows you to find specific files or data items without opening a saveset or browsing through its contents. You can use filenames or regular expressions to find the data items that you want to restore.

### *To search for data items in savesets*

- On the **Create Restore Job – Choose Saveset** page, click **Search**.
- In the **Search for files in savesets** dialog box, configure the following options:
  - Search String:** Type the search string.
  - Regular expression search:** To use POSIX (Portable Operating System Interface for Unix) regular expressions in the **Search String** box, select this check box.
  - Case sensitive:** To perform a case-sensitive search, select this check box.

- 3 Click **Search**.

On the **Search Results** page, you can view the savesets that contain the specified files or data items. Select the items you want to restore. You can only restore items from one saveset.

## Viewing media list

### *To view media list for a saveset*

- 1 On the **Create Restore Job — Choose Saveset** page, select the applicable saveset.
- 2 In the **Saveset Information** area, click **Media List**.
- 3 In the dialog box that appears, you can view the data and index segment details. For each data segment, you can view the media label, media group, offset, segment size, and media location. For index segments, you can view the media label, media group, and media location.
- 4 Click **Close** to close the dialog box.

# Troubleshooting

- Common errors

## Common errors

The following is a list of some common errors and their solution.

Table 1. Troubleshooting

Description	Symptom	Solution
The NetVault Backup Service fails to start on a Windows-based NetVault Backup Server.	Check the Windows Event Viewer to see if it displays the following message: PDT FATAL: lock file "postmaster.pid" already exists	NetVault Backup cannot start if the PostgreSQL database that is used to store the system data does not start.  To correct this issue, delete the "postmaster.pid" file from the location referenced in the log and restart the NetVault Backup Server. For more information, see <a href="https://support.software.dell.com/netvaultbackup/kb/122475">https://support.software.dell.com/netvaultbackup/kb/122475</a> .
After restarting the machine, the NetVault Backup Service sometimes fails to start on a Windows-based NetVault Backup Server.	Check the Windows Event Viewer to see if it displays the following message: FATAL: could not create any TCP/IP sockets " for a PostgreSQL source	NetVault Backup cannot start if the PostgreSQL database that is used to store the system data does not start.  To correct this issue, start the Task Manager, and click <b>Show processes from all users</b> . You can see multiple instances of <b>postgres32.exe</b> running on the system. Select any one instance of this process, and click <b>End Process</b> to remove all instances of <b>postgres32.exe</b> . Then, start the NetVault Backup Service from the Configurator.
The NetVault Backup Service starts, and then stops immediately on a Linux-based machine.	No error messages are displayed.	This issue can occur if the Postgres service cannot resolve the host name <b>localhost</b> , and fails to start.  Check the <code>/etc/hosts</code> file, and if the file does not contain an entry for <b>localhost</b> , add the entry.

Dell listens to customers and delivers worldwide innovative technology, business solutions and services they trust and value. For more information, visit [www.software.dell.com](http://www.software.dell.com).

## Contacting Dell

Technical support:

[Online support](#)

Product questions and sales:

(800) 306-9329

Email:

[info@software.dell.com](mailto:info@software.dell.com)

## Technical support resources

Technical support is available to customers who have purchased Dell software with a valid maintenance contract and to customers who have trial versions. To access the Support Portal, go to <https://support.software.dell.com/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. In addition, the portal provides direct access to product support engineers through an online Service Request system.

The site enables you to:

- Create, update, and manage Service Requests (cases)
- View Knowledge Base articles
- Obtain product notifications
- Download software. For trial software, go to [Trial Downloads](#).
- View how-to videos
- Engage in community discussions
- Chat with a support engineer