

Integrating NEO® Tape Libraries with Veritas™ NetBackup 8.2

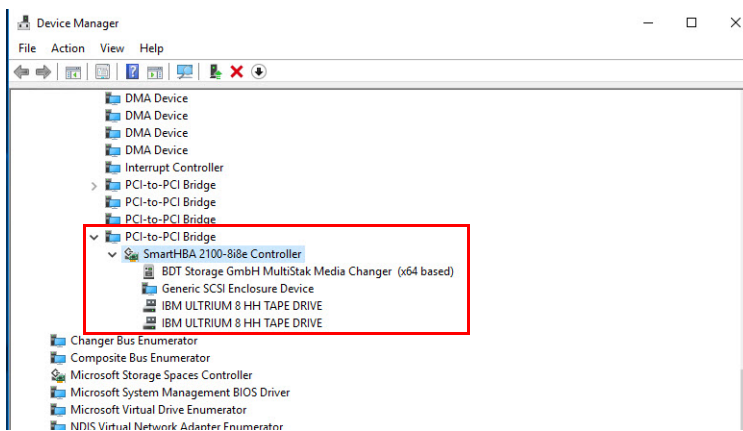


Veritas NetBackup 8.2 in a Windows-centric environment supports many Overland-Tandberg tape libraries including NEOs StorageLoader (1U), NEOs T24 (2U), NEOxl 40 (3U), and NEOxl 80 (6U).

This guide explains how to:

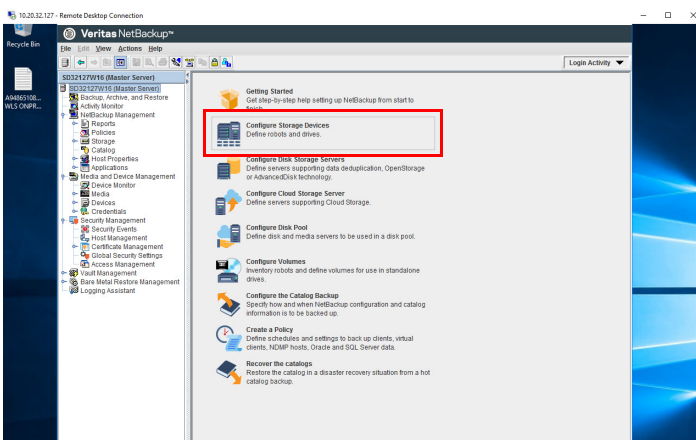
- Configure a NEOxl 80 to work with NetBackup 8.2. The process is the same for the other supported NEO tape libraries (NEO StorageLoader, NEOs T24, and NEOxl 40).
- Configure tape drive encryption.

Integrate NEOxl 80 with NetBackup 8.2



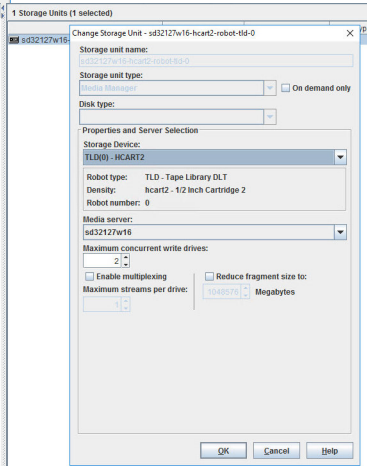
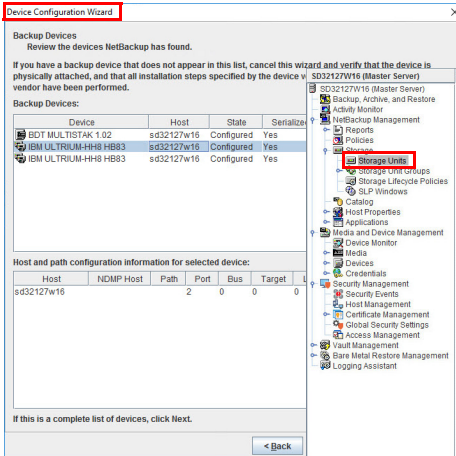
1. Open **Windows Device Manager** and verify all devices are displayed.

In this example, a NEOxl 80 and two LTO-8 drives are shown. Tape device drivers are required in Windows for NetBackup to use the library.



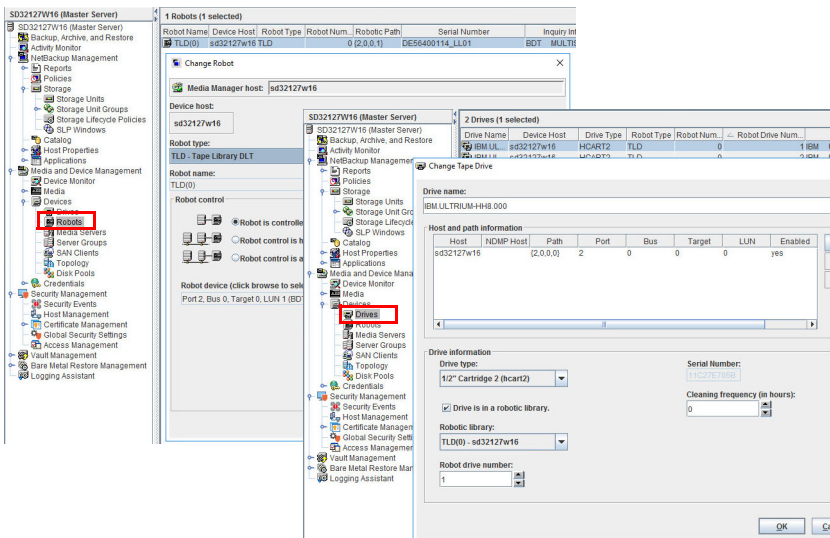
2. The NEO tape library needs to be **configured** with NetBackup:

a. Run the **Configure Storage Devices** wizard to start this process.

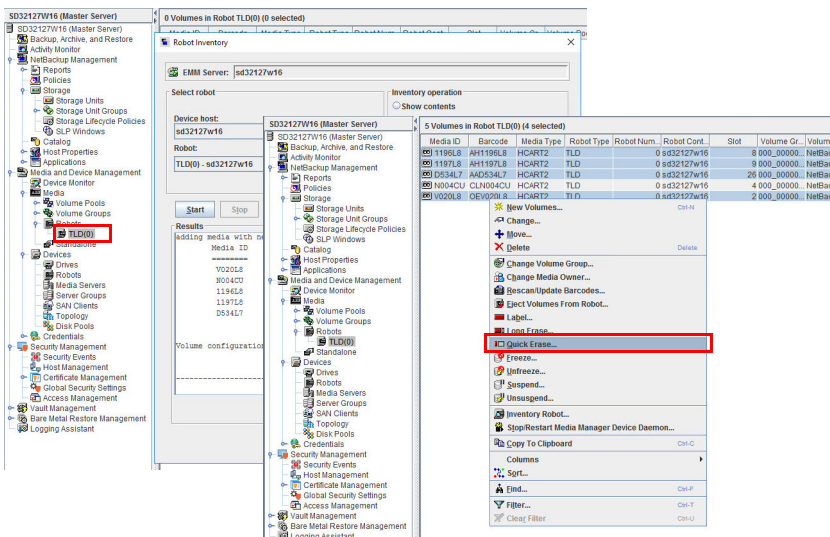


b. Review the **list of devices** found and, if accurate, click **Next**.

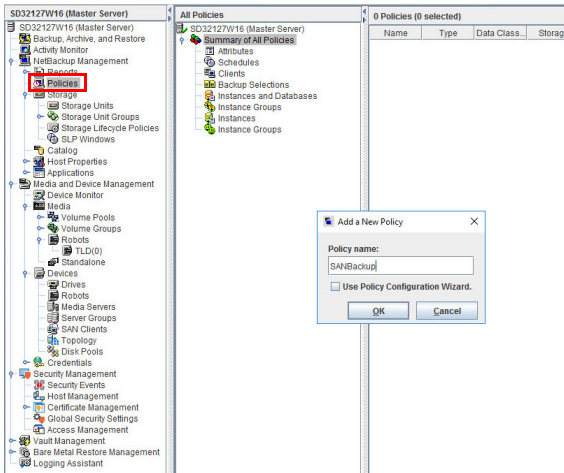
c. Verify the Storage Unit information and click **OK**.



d. Verify the **properties** provided by NetBackup for the library and tape drives, clicking **OK** to accept.



3. Inventory all **drives** and erase all the **media** discovered prior to running a backup job.

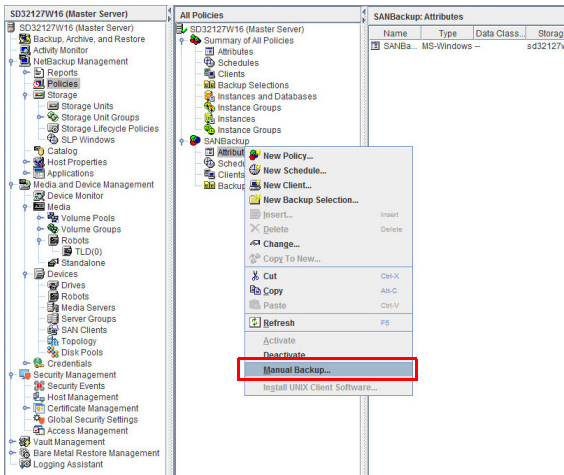


4. Create a NetBackup backup policy to tape.

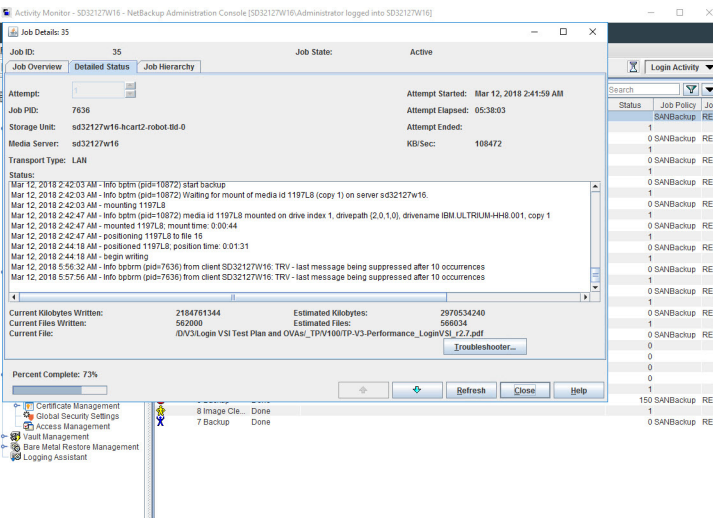
a. Provide a Policy Name.

b. Enable the **Use Policy Configuration Wizard** to create a backup policy.

c. Click **OK** to start the wizard.



5. Start a **Manual backup** for the job.



The backup job can be **monitored** from the NetBackup software.

NetBackup 8.2 Encryption

NetBackup 8.2 supports tape drive encryption. Use the following procedure to configure encryption using NetBackup Key Management Service (nbkms.exe).

```
Administrator: Command Prompt - nbkms.exe
C:\Program Files\Veritas\NetBackup\bin>
C:\Program Files\Veritas\NetBackup\bin>
C:\Program Files\Veritas\NetBackup\bin>nbkms.exe -createemptydb
Enter the Host Master Key (HMK) passphrase (or hit ENTER to use a randomly
generated HMK). The passphrase will not be displayed on the screen.
Enter passphrase : *****
Re-enter passphrase : *****

An ID will be associated with the Host Master Key (HMK) just created. The ID
will assist you in determining the HMK associated with any key store.
Enter HMK ID : Overland0

Enter the Key Protection Key (KPK) passphrase (or hit ENTER to use a randomly
generated KPK). The passphrase will not be displayed on the screen.
Enter passphrase : *****
Re-enter passphrase : *****

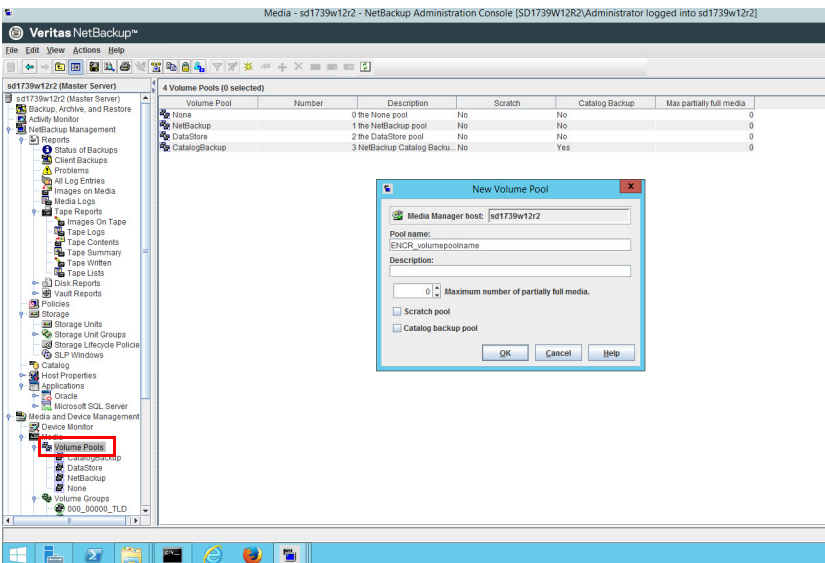
An ID will be associated with the Key Protection Key (KPK) just created. The
ID will assist you in determining the KPK associated with any key store.
Enter KPK ID : Overland0

Operation successfully completed

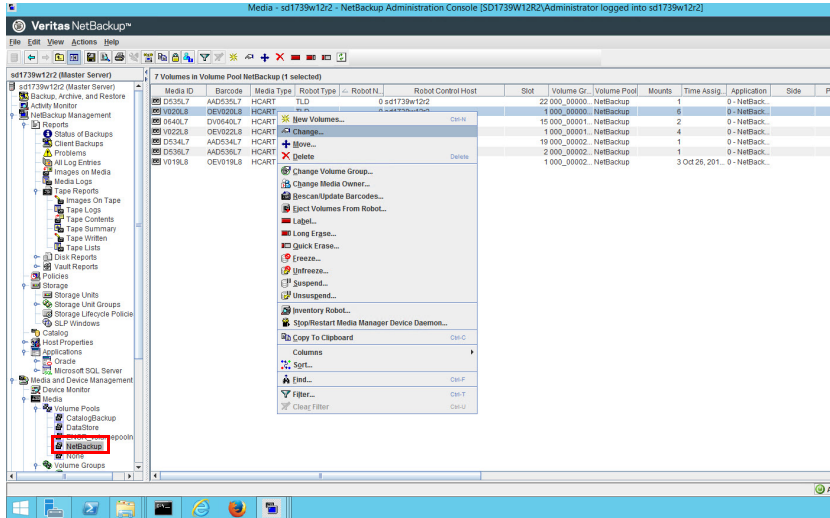
C:\Program Files\Veritas\NetBackup\bin>
C:\Program Files\Veritas\NetBackup\bin>
C:\Program Files\Veritas\NetBackup\bin>nbkms.exe

The NetBackup Key Management Service should not be started by directly executing
nbkms.exe. Press Ctrl-C if you wish to cancel this operation.
```

1. Open a **Command Prompt**.
2. Navigate to **C:\Program Files\Veritas\NetBackup\bin**.
3. Create an empty KMS database:
nbkms.exe -createemptydb.
4. Enter a unique **Host Master Key (HMK)** passphrase and confirm.
5. Enter a unique **Key Protection Key (KPK)** passphrase and confirm.
6. Enter the **KPK ID**.
7. Start KMS service by executing **nbkms.exe**.



8. Create a new volume pool:
 - a. In NetBackup Administration Console, navigate to: **Media and Device Management > Media > Volume Pools**.
 - b. Right-click Volume Pools and select **New Volume Pool**.
 - c. Create a new pool with the prefix of **"ENCR_"** for the pool name.

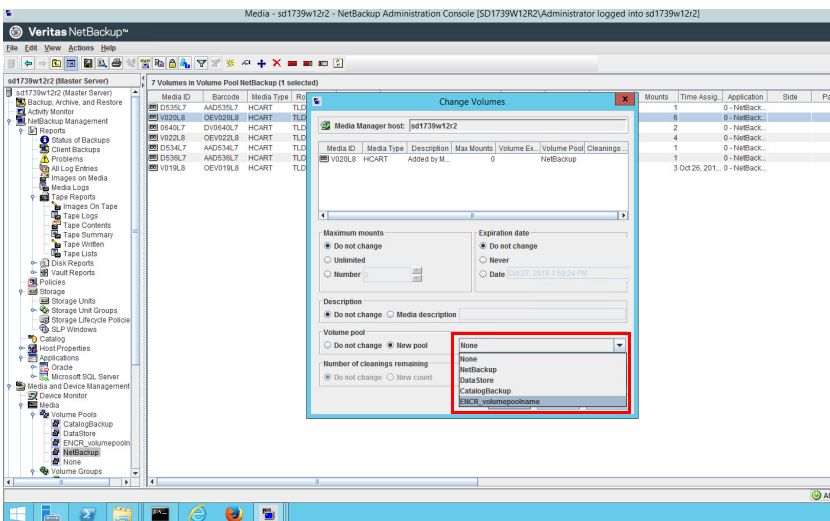


9. Assign a media to the new pool:

a. Navigate to: **Media and Device Management > Media > Volume Pools > NetBackup.**

All available media are assigned by default to the NetBackup pool.

b. Right-click one of the medias and select **Change**.



10. Change the volume pool from the default NetBackup pool to the new ENCR pool.

11. Open a command prompt and navigate to **C:\Program Files\Veritas\NetBackup\bin\ admincmd.**

12. Execute: **nbkmsutil.exe -createkg -kgname ENCR_volumepoolname.**


```

C:\Program Files\Veritas\NetBackup\bin\admincmd>nbkmsutil.exe -createkg -kgname
ENCR_volumepoolname

New Key Group creation is successful

C:\Program Files\Veritas\NetBackup\bin\admincmd>nbkmsutil.exe -createkey -kgname
ENCR_volumepoolname -keyname keyname -activate -desc "IBM LTO8 Tape"

Enter a passphrase: *****
Re-enter the passphrase: *****

Key Tag      : e767d5cd51bfb555a72c8eacc3a15f8e4c7a342f169a9f8eca856cf3108f377b
Key Name     : keyname
Current State : ACTIVE
Creation Time : Fri Oct 27 14:03:58 2017
Last Modification Time: Fri Oct 27 14:03:58 2017
Description  : IBM LTO8 Tape
FIPS Approved Key : Yes
Salt        : 53025ea93ad45fee65b147200590853669ec7a0ee0f27650

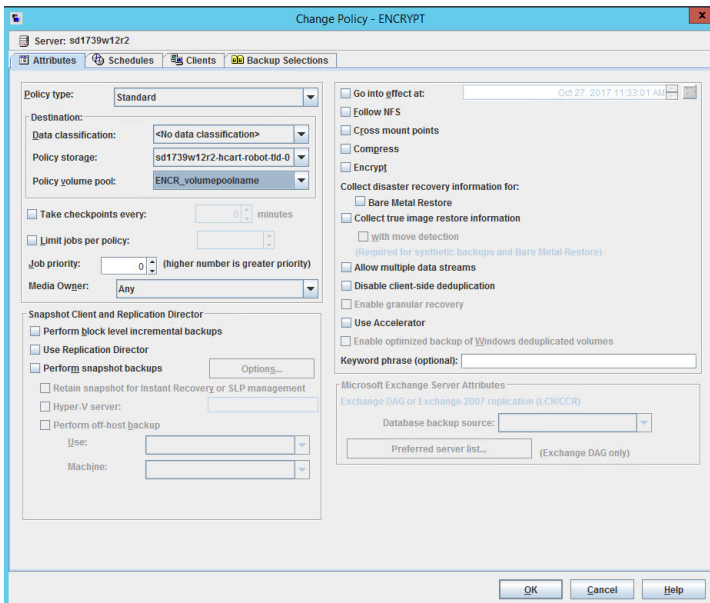
New Key creation is successful

You must provide the Salt value to recover the key

C:\Program Files\Veritas\NetBackup\bin\admincmd>

```

13. Open a command prompt and navigate to **C:\Program Files\Veritas\NetBackup\bin\admincmd**.
14. Execute: **nbkmsutil.exe -createkg -kgname ENCR_volumepoolname**.
15. Execute: **nbkmsutil.exe -createkey -kgname ENCR_volumepoolname -keyname keyname -activate -desc "IBM LTO8 Tape"**.
16. Enter and confirm new **passphrase**.



17. Before starting an Encrypted backup, from the NetBackup Administration Console change the Backup Policy Volume Pool to the new **Encrypted Pool**.

```

Administrator: Command Prompt
C:\Program Files\Veritas\NetBackup\bin\goodies>available_media.cmd
media  media  robot  robot  robot  side/  ret  size  status
ID     type  type  #     slot  face  level  KBytes
-----
CatalogBackup pool

DataStore pool

ENCR_volumepoolname pool
U020L8  HCART  TLD  0     1     -     0     22861239  ENCRYPTION

NetBackup pool
0640L7  HCART  TLD  1     15    -     -     -         AVAILABLE
D534L7  HCART  TLD  2     19    -     -     -         AVAILABLE
D535L7  HCART  TLD  0     22    -     -     -         AVAILABLE
D536L7  HCART  TLD  2     2     -     -     -         AVAILABLE
U019L8  HCART  TLD  2     1     -     -     -         AVAILABLE
U022L8  HCART  TLD  1     1     -     -     -         AVAILABLE

None pool
  
```

When the backup completes the status of the media used for backup shows **ENCRYPTION**.

To verify this from a command prompt navigate to C:\Program Files\Veritas\NetBackup\bin\goodies and execute: **available_media**.