Step-by-Step Guide
Backup to attached Tape Drive using Open-E DSS V7

Software Version: DSS ver. 7.00 up54
Presentation updated: February 2016
To set up a backup to an attached Tape Drive, perform the following steps:

1. Hardware configuration
2. Creating Volume group, NAS Volume and snapshot
3. Configure the Backup to use with a Tape Drive
4. Create the Restore from Backup
Backup to attached Tape Drive

1. Hardware configuration

Data residing on the DSS V7 is backed up from RAID Array to the Tape Drive.

- RAID Array
- Volume Group (vg00)
- NAS volume (lv0000)
- Share: Data
- Share: Restore from Backup

Data Server (DSS V7)
IP Address: 192.168.0.220

Data residing on the DSS V7 is backed up from RAID Array to the Tape Drive.

Snapshot of lv0000: snap00000

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive

Data Server (DSS V7)
IP Address: 192.168.0.220

Backup to attached Tape Drive
Backup to attached Tape Drive

2. Creating Volume group, NAS volume and Snapshot volume

Under the "CONFIGURATION" tab, select "Volume manager" and next "Volume groups"

In the Unit manager add the selected physical units (Unit S001) to create a new volume group (in this case, vg00) and click apply button.
Select the appropriate volume group (vg00) from the list on the left.

Create a new NAS volume of the required size. This logical volume will be the source of the backup process. After assigning an appropriate amount of space for the NAS volume, click the apply button.
To run the local backup process, you must first define a new snapshot in the Volume manager of the volume to be backed up. After assigning an appropriate amount of space for the snapshot, click apply button.
Backup to attached Tape Drive

Assign **snap00000** to the logical volume to be backed up (in this example - **lv0000**) and click the **apply** button.
3. Configure the Backup to be used with the Tape Drive

Under the "CONFIGURATION" tab, select the "NAS settings" menu.

Check to Use local backup box. Also select, Default share on LV as lv0000, and click the apply button.

NOTE:
In order to increase safety of the backup to the tape drive, it is recommended to place database on another volume (e.g. lv0001).
Backup to attached Tape Drive

3. ... Continue

Under the "CONFIGURATION", select the "NAS resources" and "Shares".

A tree listing of NAS shared volumes in "Shares" will appear on the left side of the DSS V7 web GUI. In the example, a shared volume named Data is to be created on lv0000.

Data Server (DSS)
IP Address: 192.168.0.22
Under the "MAINTENANCE" tab, select "Backup" and "Backup pools"

In the Create new pool, enter a name for the pool and select Tape retention after. In this example, enter 2 weeks (14 days) and click on the create button.
Backup to attached Tape Drive

3. ... Continue

Next, choose **Tape Drive**, in the "Backup devices" tree.

In **Label new tape**, enter a **name** for the new tape (**Tape001**), and select the **Pool name**. In this example choose **Pool02week** and click the **apply** button.
After the DSS V7 WEB page has been reloaded, the new Backup device tapes (Tape001) should appear.

3. ... Continue

Data Server (DSS)
IP Address: 192.168.0.22
Next, select "Backup tasks". In the Create new backup task function enter a name for the backup tasks and select the Logical volume. In this example choose lv0000.

Next, you must select the shares for the local backup (Data). Move the shares you want to back up from Available list to Assigned list by clicking button.
Backup to attached Tape Drive

In the Create new backup task function, choose Snapshot and select Store on pool. In this example, snap0000 and Pool02week. Next, select the backup Level (e.g. incremental) check box, Compress data (e.g. normal), and click the apply button.

NOTE:
Most of the tape devices have internal compression for the data. If your tape device has internal compression, you can skip this option "Compress data".
Backup to attached Tape Drive

3. ... Continue

After the DSS V7 WEB page has been reloaded, the new Backup tasks should appear. Next, click **BackupTask001**, in the "Backup tasks" tree.

In the **Create new schedule for backup task** function, enter a **Comment** for the new schedule and **Select time**. In this example choose **Weekly** and check the box for all of days of the week. Select time for the start task (8 pm). Next, click the **apply** button.
Backup to attached Tape Drive

Data Server (DSS)
IP Address: 192.168.0.22

3. ... Continue

After clicking ☑ button in the **Backup tasks** function you can see status of the backup tasks.
Backup to attached Tape Drive

3. ... Continue

The **Backup tasks** function shows the backup task running at 8 pm.
3. ... Continue

Under the "STATUS" tab, select "Tasks" and Backup.

Runnings tasks tab displays information for currently running tasks, in this case shows BackupTask001.
Backup to attached Tape Drive

Data Server (DSS)
IP Address: 192.168.0.220

3. ... Continue

After the end of the Backup all data from Data share are located in Tape001. Showing us that 2.68 GB of 60GB has been backed up.

The configuration of Backup is now complete.
4. Create a Restore from the Backup

Under the "CONFIGURATION" tab, select the "NAS resources" menu and "Shares".

In order to execute the Restore, you must create new share. In the example, a shared volume named Restore from Backup is to be created on lv0000.
Backup to attached Tape Drive

4. ... Continue

Under the "MAINTENANCE" tab, select the "Restore" menu.

In the Restore backup task function, check the box BackupTask001. Enter a name for the Restore tasks name (e.g. RestoreTask001), and select the destination share in the Restore to field. In this example, choose Restore from Backup share. Next, click on the apply button, and confirm this action by clicking the yes button again.
Backup to attached Tape Drive

Data Server (DSS)
IP Address: 192.168.0.22

4. ... Continue

After the end of the Restore Backup in **Backup Restore tasks**, you will start the task again.

After clicking ✅ button on the **Backup Restore task**, detailed information regarding current restore task will be presented.
Backup to attached Tape Drive

4. ... Continue

Next, click on the **RestoreTask001** name.

In the **Restore task**, to display detailed information on the current restore task.
Backup to attached Tape Drive

Data Server (DSS)  
IP Address: 192.168.0.220

4. ... Continue

Under the "STATUS" tab, select the "Tasks" menu. Next, in the "Tasks" tree on the left select **Restore from backup**.

**Running tasks** tab displays information for currently running tasks, in this case about **RestoreTask001**.
Backup to attached Tape Drive

Data Server (DSS)
IP Address: 192.168.0.22

4. ... Continue

After the end of the **Restore from Backup** all data from the **Data** share are available on the **Restore from Backup** share.

**NOTE:**
In case you restore data from more than one backup you need to merge data from all backup folders (starting from the oldest one) to a single data set.

The configuration of the **Restore from Backup** is now complete.
Thank you!