1. Data Domain Pre-requisites

Before we begin to configure NetBackup, we need to verify the following:-

- Administrator rights and network access to the NetBackup master and media servers
- That the NetBackup master and media servers can communicate with the Data Domain
- The Data Domain has the OST license installed
- The Data Domain has an OST user name and password for NetBackup to use to communicate
- The Data Domain has been configured with an appropriate LSU (Logical Storage Unit) for OST
- The Boost option has been enabled on the Data Domain

2. Enabling OST

Obtain the OST PLUGIN from the Vendor and install it on the media server (see below). This shall be obtained after installing proper OST license keys on the data domain node. Using the command on data domain node.

#license add “keys”

Then add an Admin account to be used for OST purpose :

user add netbacku priv admin

Once the account is created set the account to ost.

#ost set user-name netbacku ost

#ost show user-name

Now enable OST :

#ost enable

#ost status

Create OST logical Storage Unit (LSU) .Only one LSU should be created per Data Domain.

ost lsu create “ddname_masterservename_lsu1”

#ost lsu show

Install the Data Domain OST plug-in software on the NetBackup Media Server that will be directing backups to it.

Before installing the software stop the NetBackup Remote Manager and Monitor Service (nbrmm) by entering :

#nbrmms –terminate

And after performing the install restart nbrmms :

#nbrmms

Please verify if the plug-in got installed properly .

#bpstsinfo –pi (pi – plug-in info)

3. Installing the Data Domain OST Plug-in on NetBackup Media Servers

The OST plug-in software must be installed on NetBackup media servers that need to access the Data Domain system acting as Source deduplication systems (DDBoOST)

The Plugin software is need for both Windows and Linux

Windows plug in repository

Linux plug in repository

3.1 Install the UNIX plug-in

1. Stop the NetBackup Remote Manager and Monitor Service

(nbrmms) process if it is running by entering:

/usr/openv/netbackup/bin/nbrmms -terminate

2. Use the tar file

tar -xvf OST_2.4.1.0-289644_OST_redhat_64.tar

4. The package also contains an installation script called install.sh, which verifies whether or not nbrmms has been stopped before starting the installation. Enter:

./install.sh

The shared library files that the script installs are

libstspiDataDomain.so and libstspiDataDomainMT.so.

The plug-in recognizes DataDomain as the Data Domain vendor prefix.

The install log is shown below:-

Installing the Data Domain OpenStorage Client Libraries ...

cp libstspiDataDomain.so /usr/openv/lib/ost-plugins/libstspiDataDomain.so

cp libstspiDataDomain.so /usr/openv/lib/ost-plugins/libstspiDataDomainMT.so

The new Data Domain OpenStorage Client Libraries have

been installed on this media server. In order for the changes

to take effect, the NetBackup Remote Manager and Monitor

Service (nbrmms) needs to be restarted on the media server

and Netbackup needs to discover any new OpenStorage functionality

available on the Data Domain Restorer. Restarting this service

may cause the media server to be temporarily unavailable.

The media server will automically recover.

5. If the plug-in already exists, you are prompted to enter y to proceed.

6. Restart the NetBackup nbrmms process by entering:

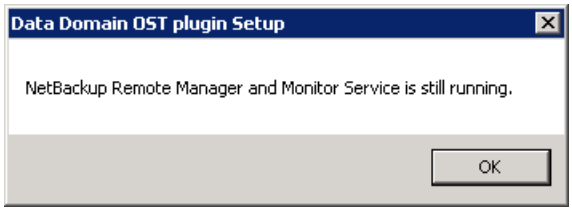
/usr/openv/netbackup/bin/nbrmms

3.2 Install the Windows plug-in

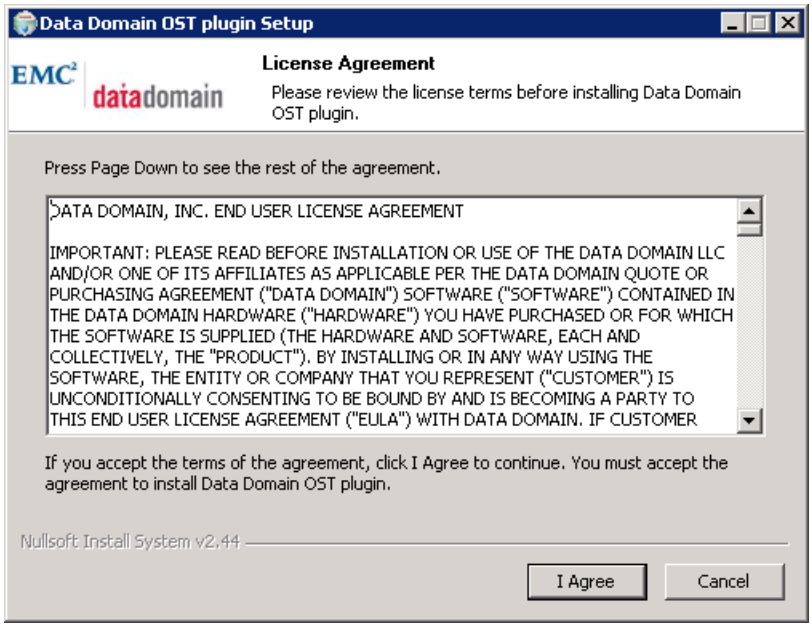
1. Double-click the libstspiDataDomainSetup.exe executable to launch the Setup Wizard.

2. If the dialog box below appears, click ok and then stop the

NetBackup Remote Manager and Monitor Service before running the executable again.



3. Select I Agree when the License Agreement box shown below is displayed



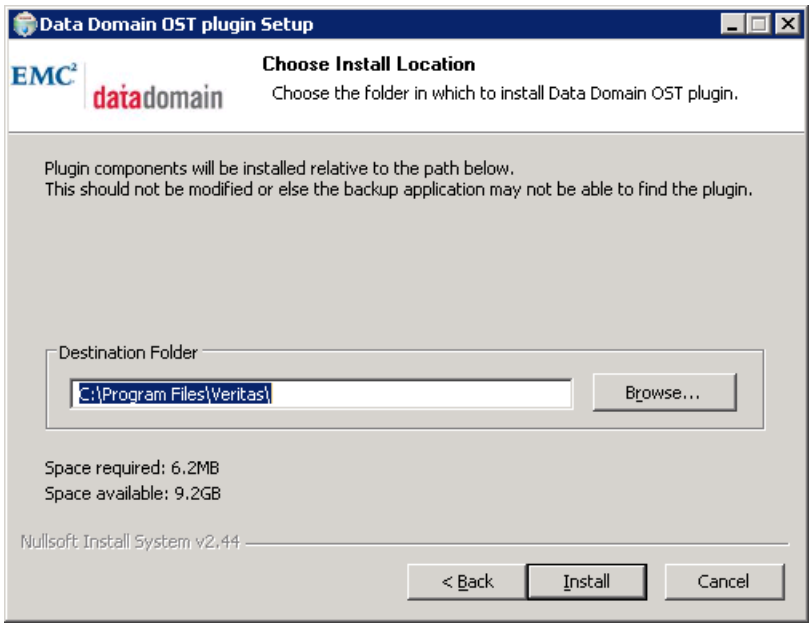
4. Select the installation folder.

By default, the plug-in is installed in the C:\Program Files\Veritas\NetBackup\Bin\ost-plugins folder. If your copy of NetBackup is installed in different folder, click the Browse button and select that folder, or type the complete pathname of the NetBackup installation folder in the text box.

For example, if NetBackup is installed in

D:\Program Files\Veritas, select or type the path as

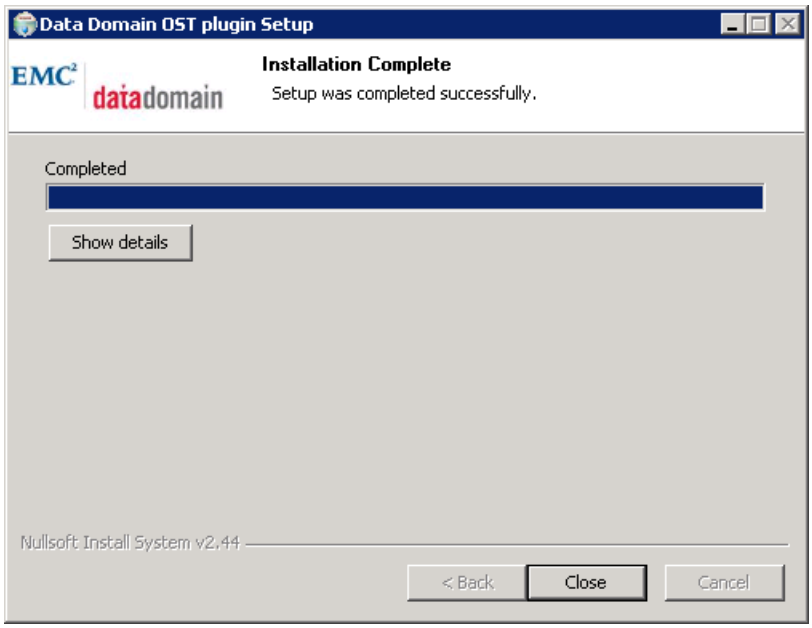
D:\Program Files\Veritas.



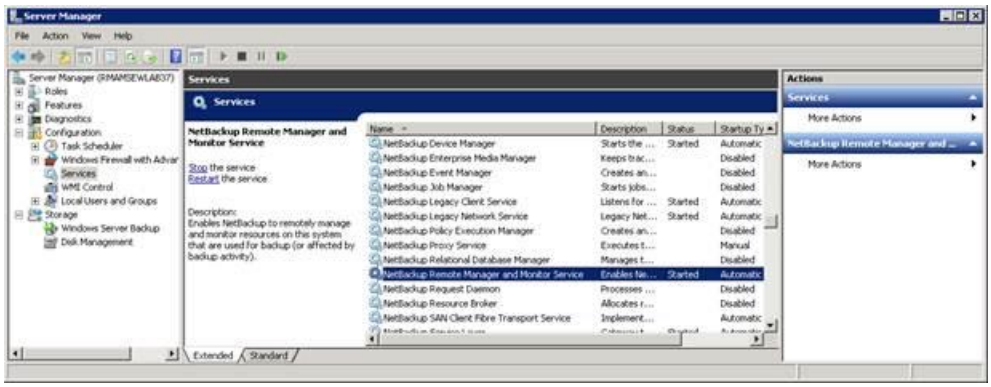
8. Select Install

9. A progress bar shows the status of the installation.

10. After the installation is complete, the Installation Complete screen is displayed.



11. Once complete, Restart the NetBackup Remote Manager and Monitor Service.



13. Tune the Windows media server for OST performance as described below.

3.3 Tune Windows media servers for OST performance

1. Within REGEDT32, navigate to

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters\

2. Add a new DWORD value named GlobalMaxTcpWindowSize and set the value to 2097152 (decimal).

3. Add a new DWORD value named TcpWindowSize and set the value to 2097152 (decimal).

4. Add a new DWORD value named Tcp1323Opts and set the value to 1.

5. Restart the Windows server.

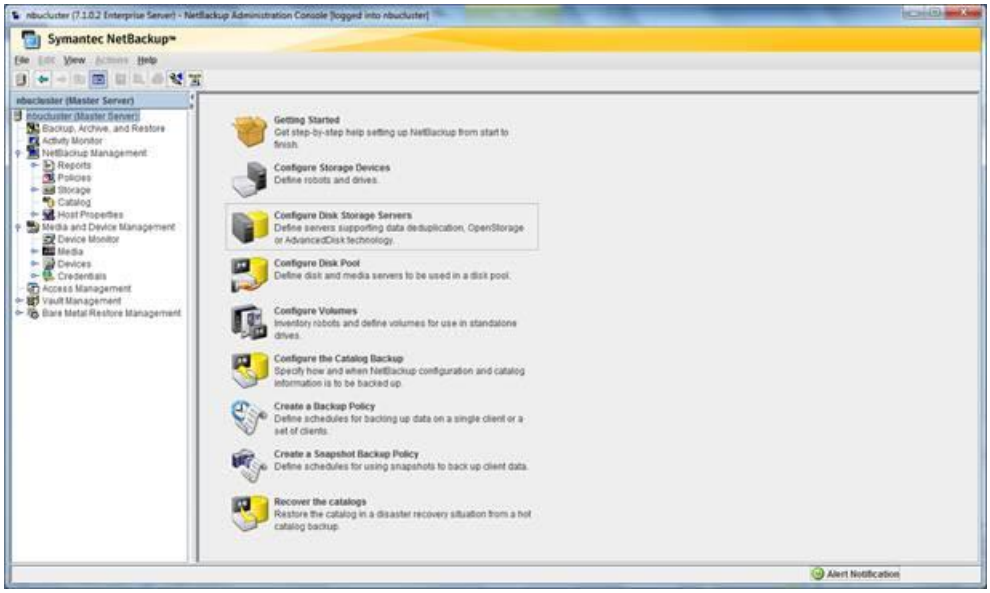
4. Configuring a NetBackup Media Server for Data Domain OST Backups

NetBackup media server configuration consists of the following procedures:-

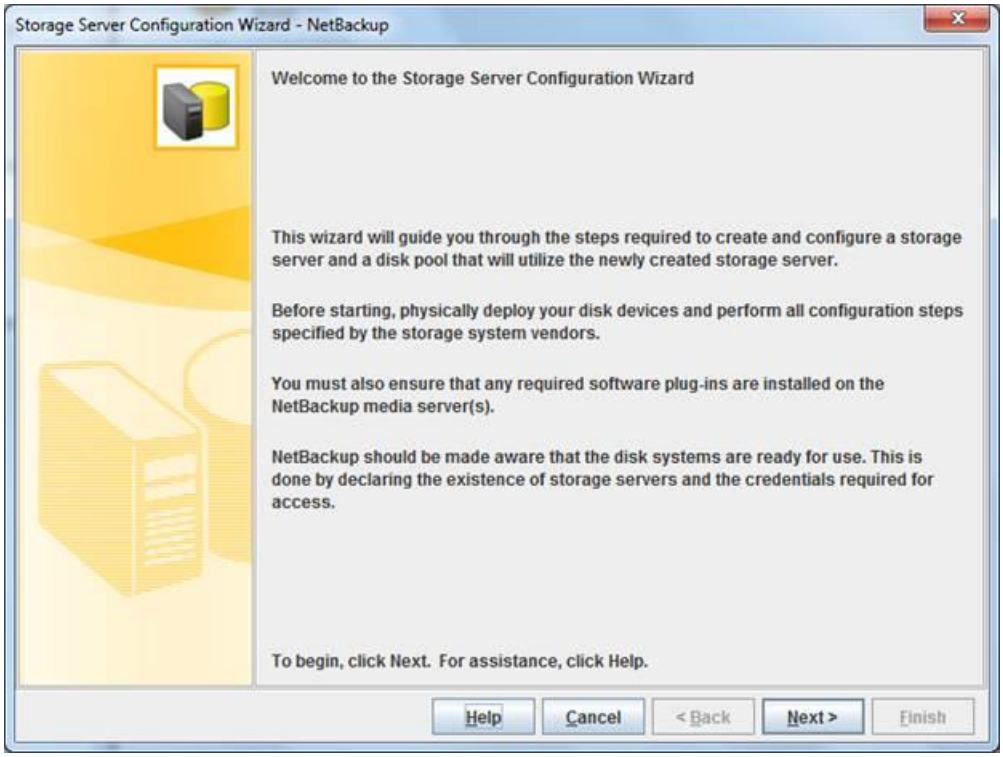
- Registering each Data Domain system
- Adding credentials for each media server that is to communicate with a Data Domain system
- Creating disk pools
- Creating storage units, which are collections of disk pools
- Setting backup policies to use the Data Domain storage units

All of the above procedures will be administered from the NetBackup GUI.

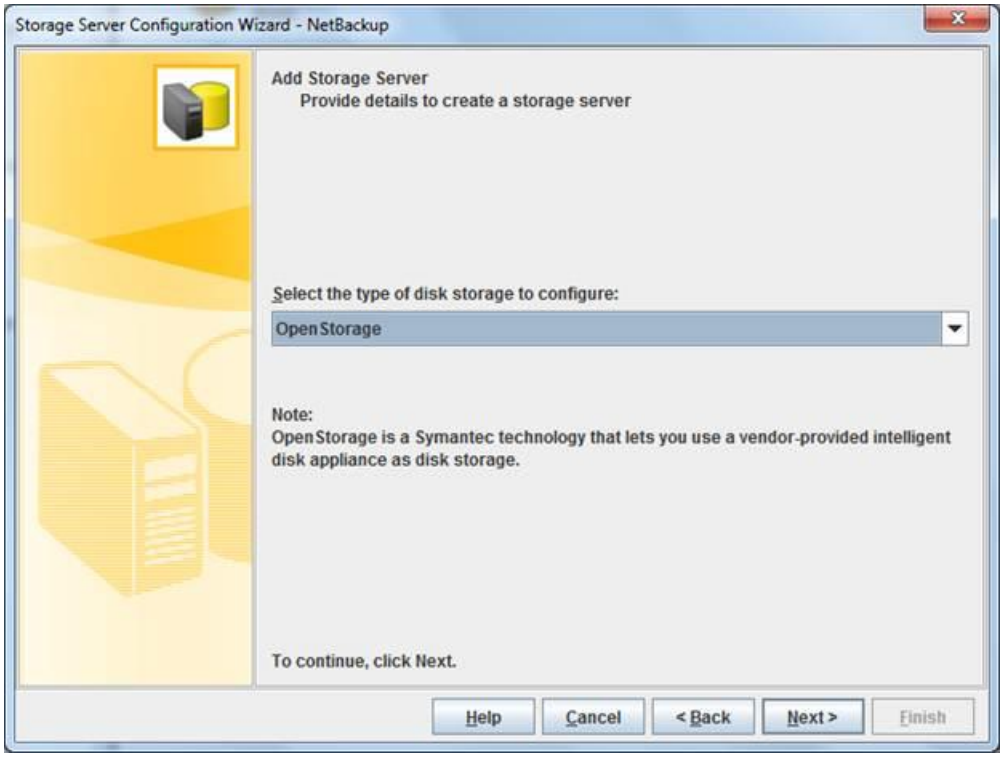
1. Start the Configure Disk Storage Servers wizard.



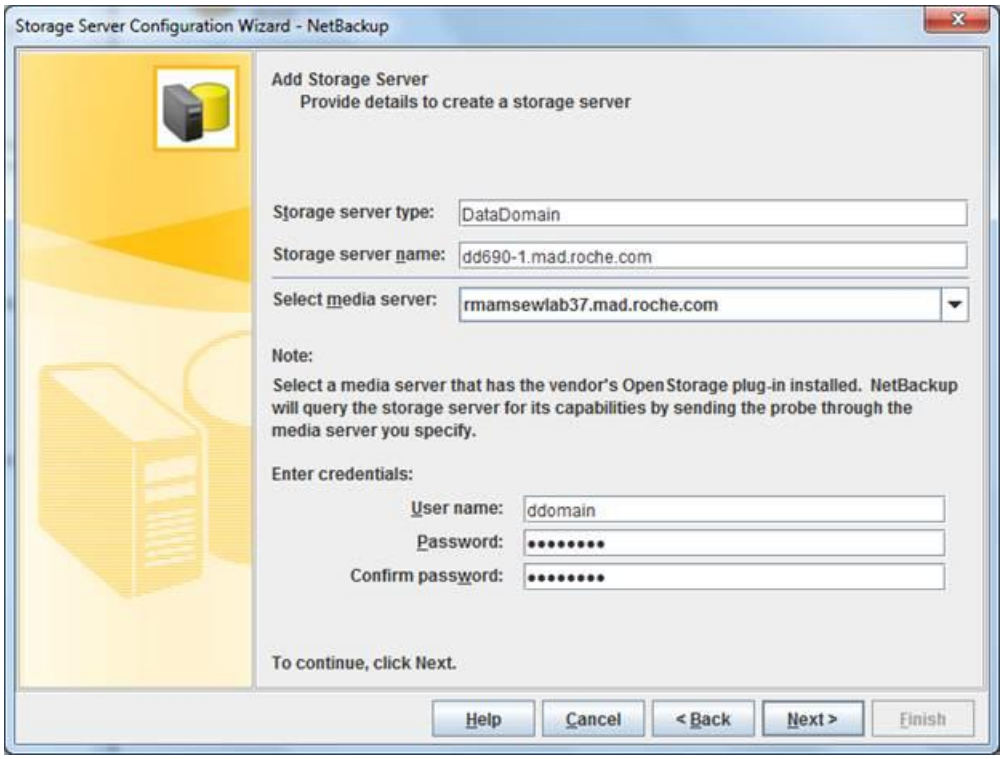
2. Click Next.


Storage Server Configuration Wizard - NetBackup
Welcome to the Storage Server Configuration Wizard
This wizard will guide you through the steps required to create and configure a storage server and a disk pool that will utilize the newly created storage server.
Before starting, physically deploy your disk devices and perform all configuration steps specified by the storage system vendors.
You must also ensure that any required software plug-ins are installed on the NetBackup media server(s).
NetBackup should be made aware that the disk systems are ready for use. This is done by declaring the existence of storage servers and the credentials required for access.
To begin, click Next. For assistance, click Help.
Help
Cancel
< Back
Next >
Finish

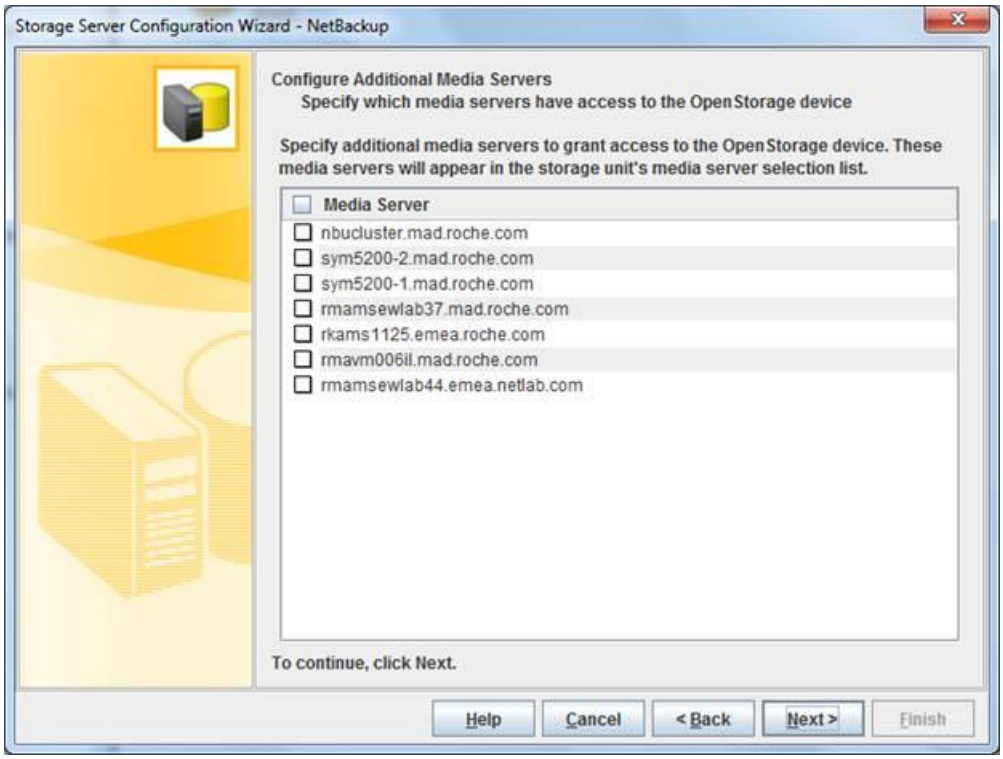
3. Select OpenStorage from the drop down menu and click Next.



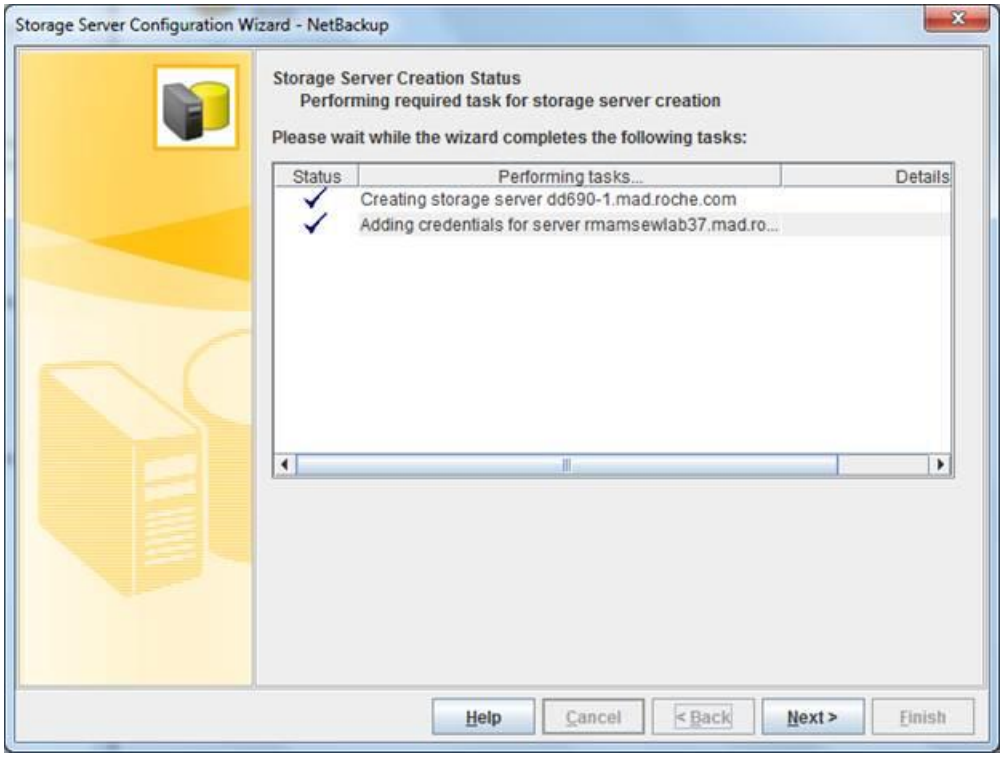
4. Enter the Storage server type, Storage server name, Select the media server that has the DataDomain OSt plug-in installed and finally enter the username and password for authentication.



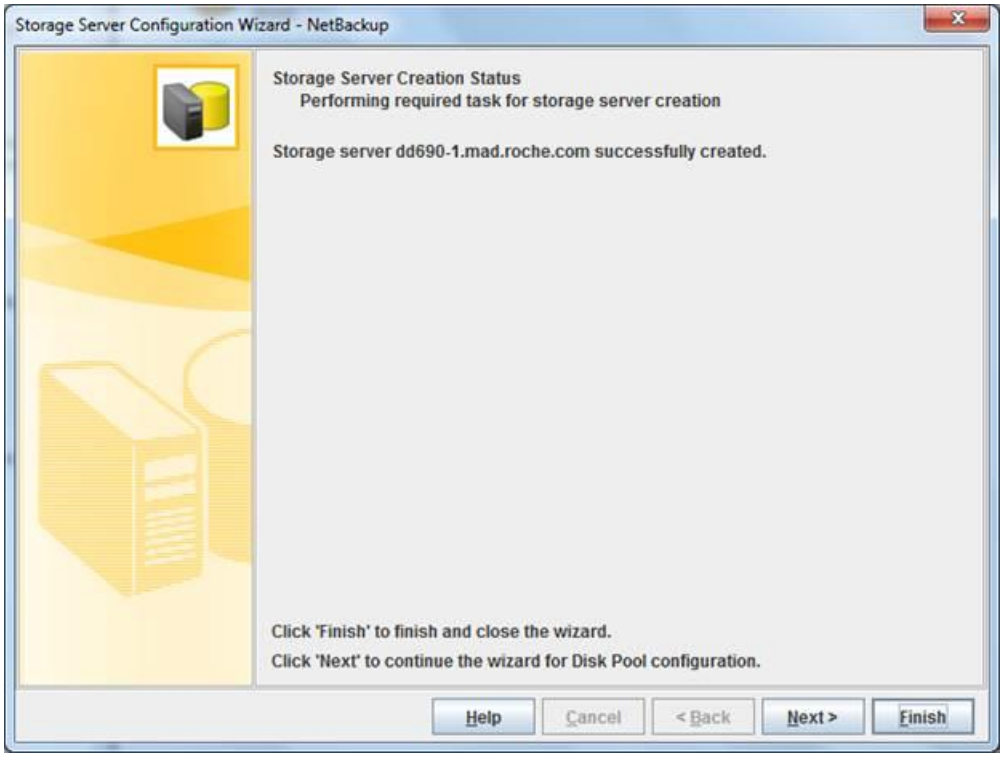
5. You do no need to select additional media servers at this time as this can be done later, click next.



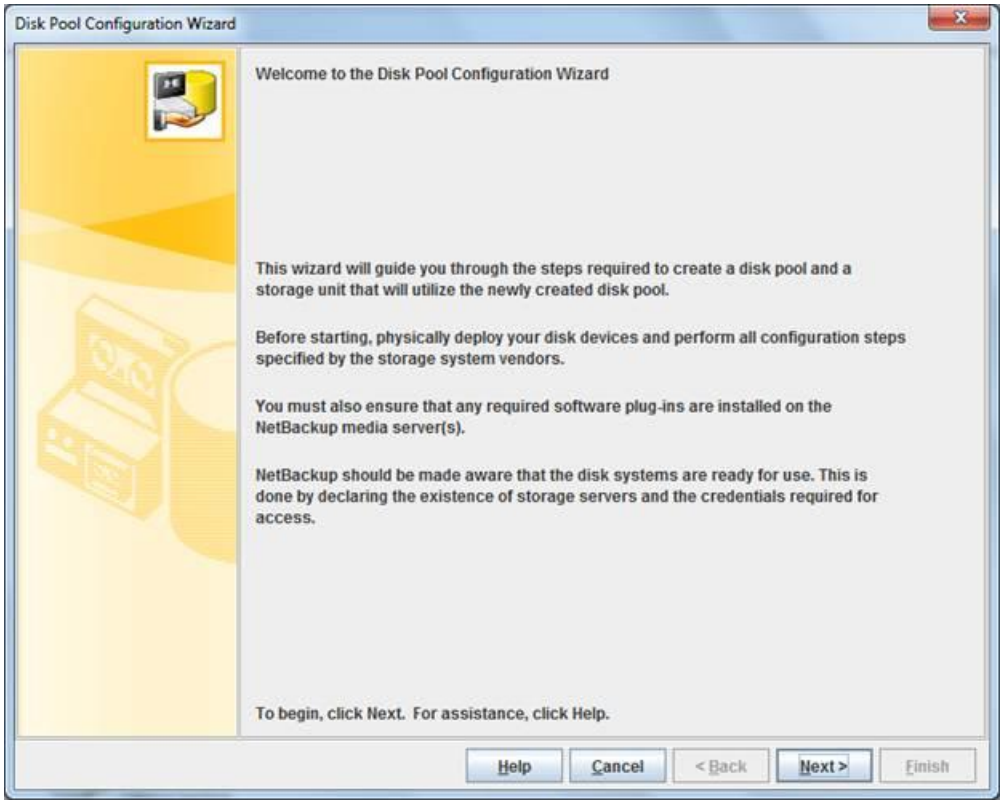
6. The storage server will now be added, once complete click next.



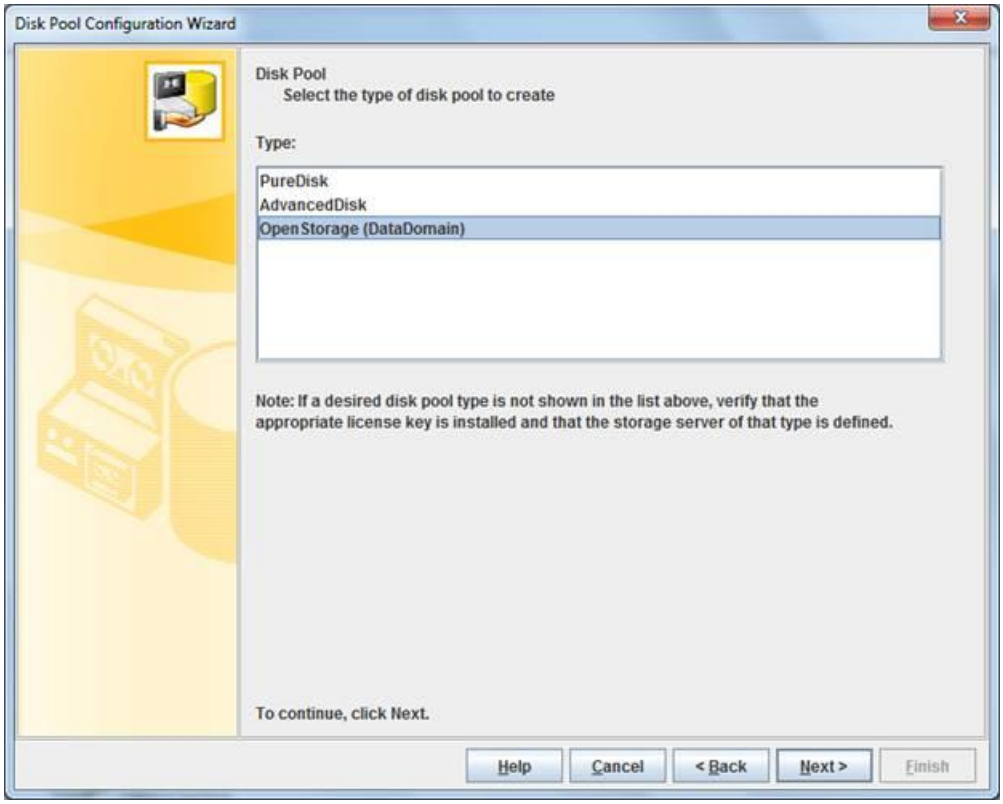
7. Click next to start the Disk Pool wizard.



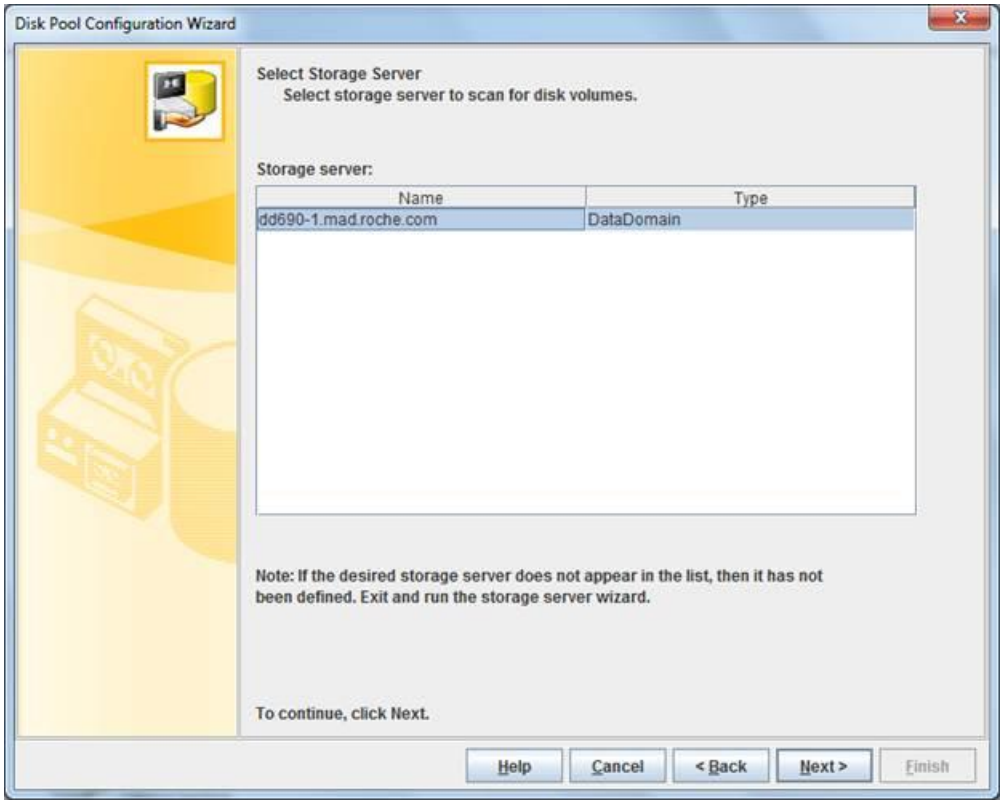
8. Click next.


Disk Pool Configuration Wizard
Welcome to the Disk Pool Configuration Wizard
This wizard will guide you through the steps required to create a disk pool and a storage unit that will utilize the newly created disk pool.
Before starting, physically deploy your disk devices and perform all configuration steps specified by the storage system vendors.
You must also ensure that any required software plug-ins are installed on the NetBackup media server(s).
NetBackup should be made aware that the disk systems are ready for use. This is done by declaring the existence of storage servers and the credentials required for access.
To begin, click Next. For assistance, click Help.
Help
Cancel
< Back
Next >
Finish

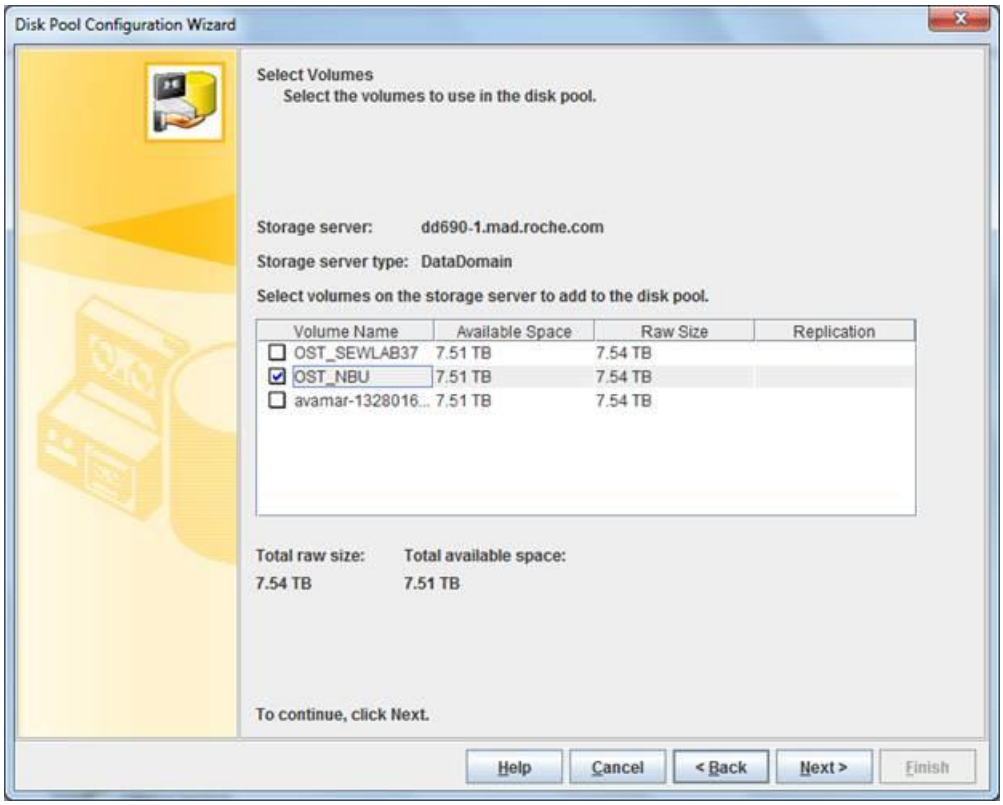
9. Select OpenStorage (DataDomain) and click next.



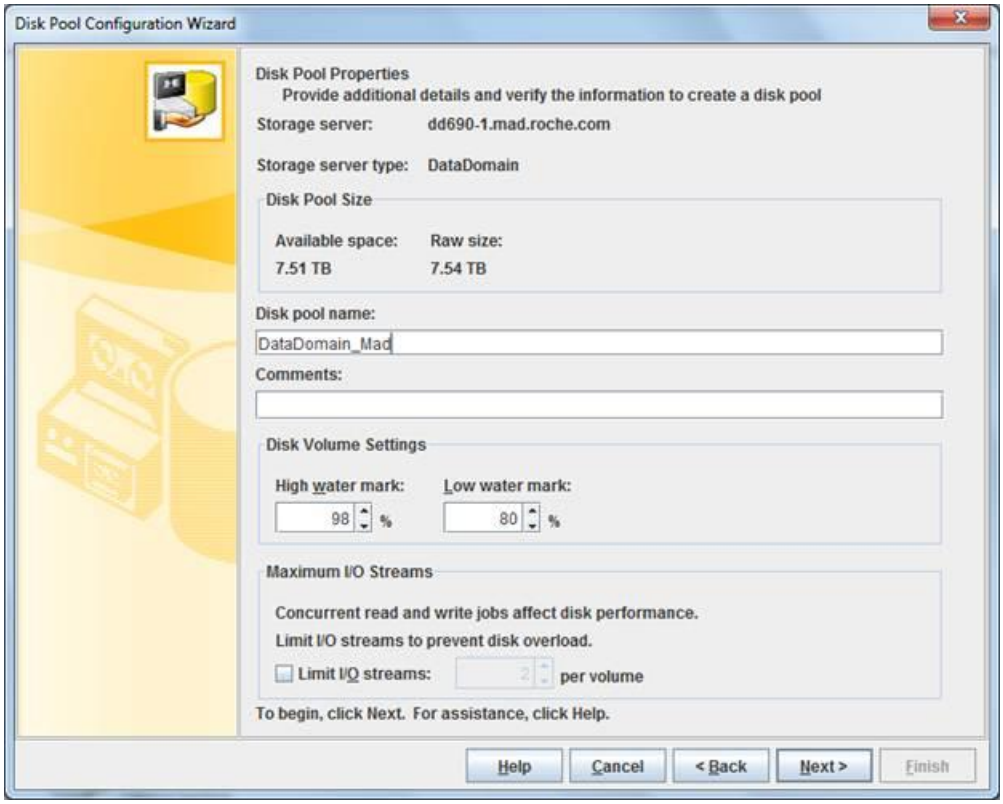
10. Select the DataDomain server specified in step 4 and click next.



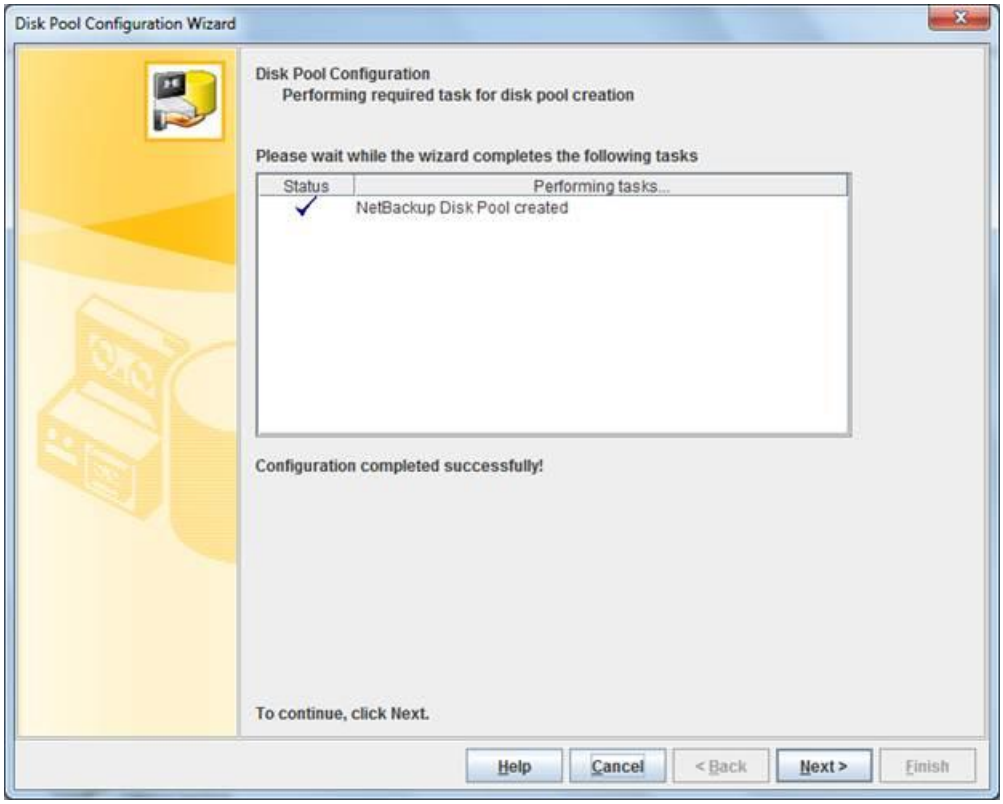
11. Select the OST volume that has been configured within DataDomain for NetBackup and click next.



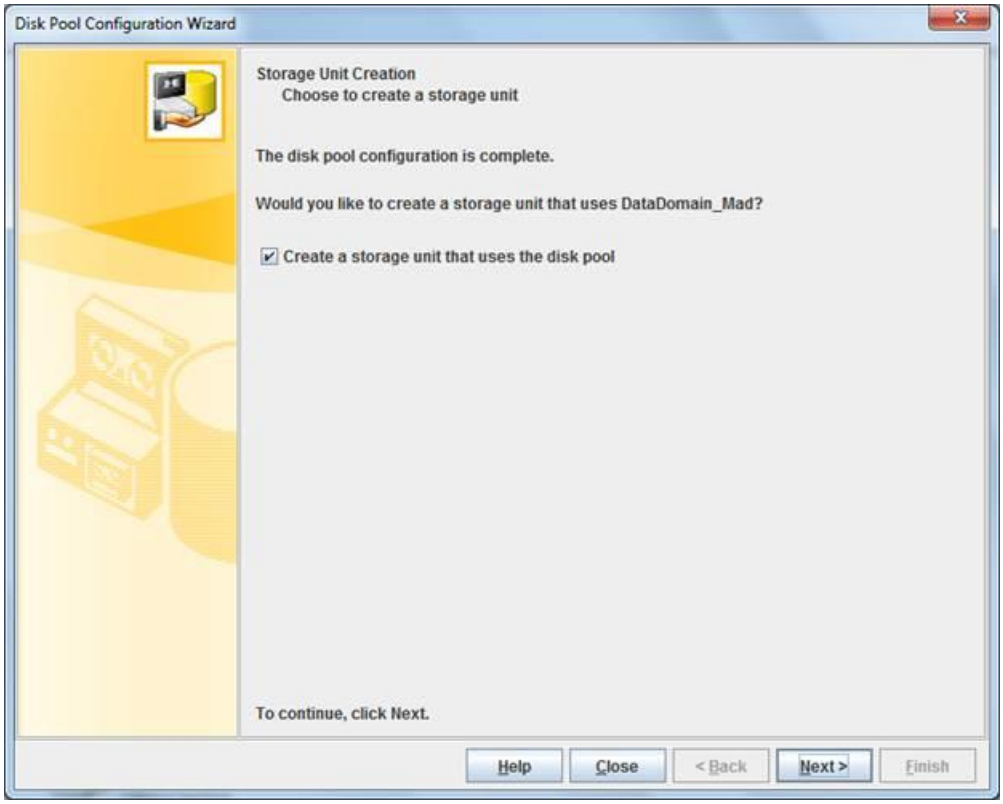
12. Enter a name for the Disk Pool and click next.



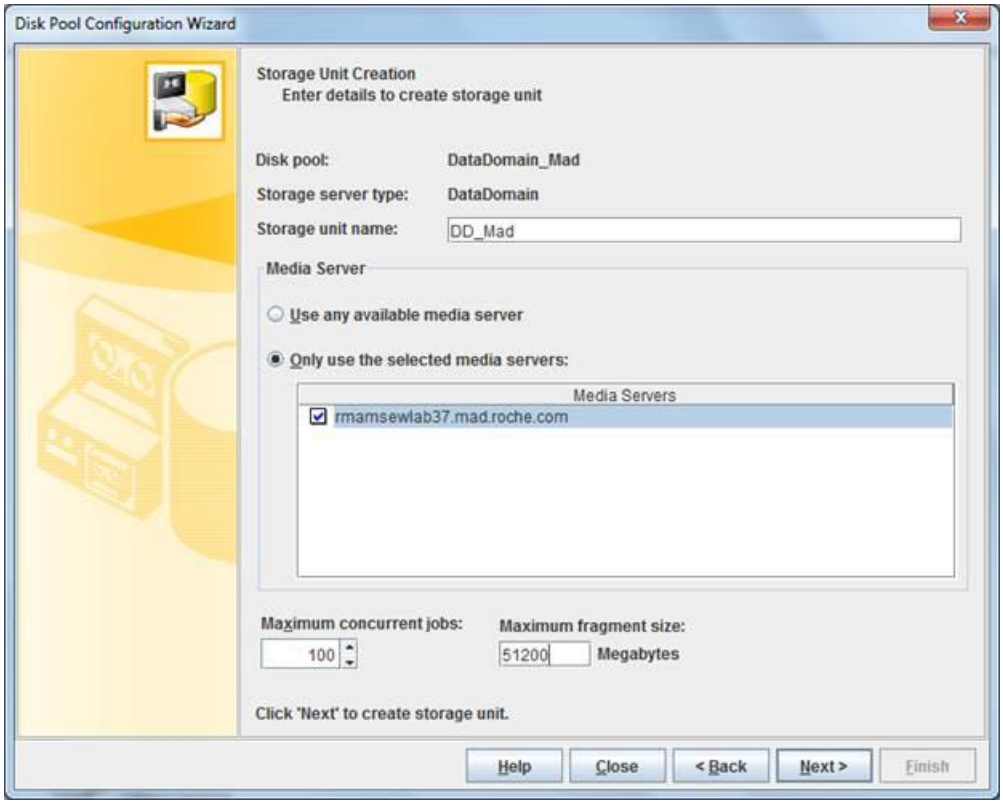
13. The Disk Pool should now be create, click next to proceed.



14. You will now be presented with the Storage Unit wizard, click next.

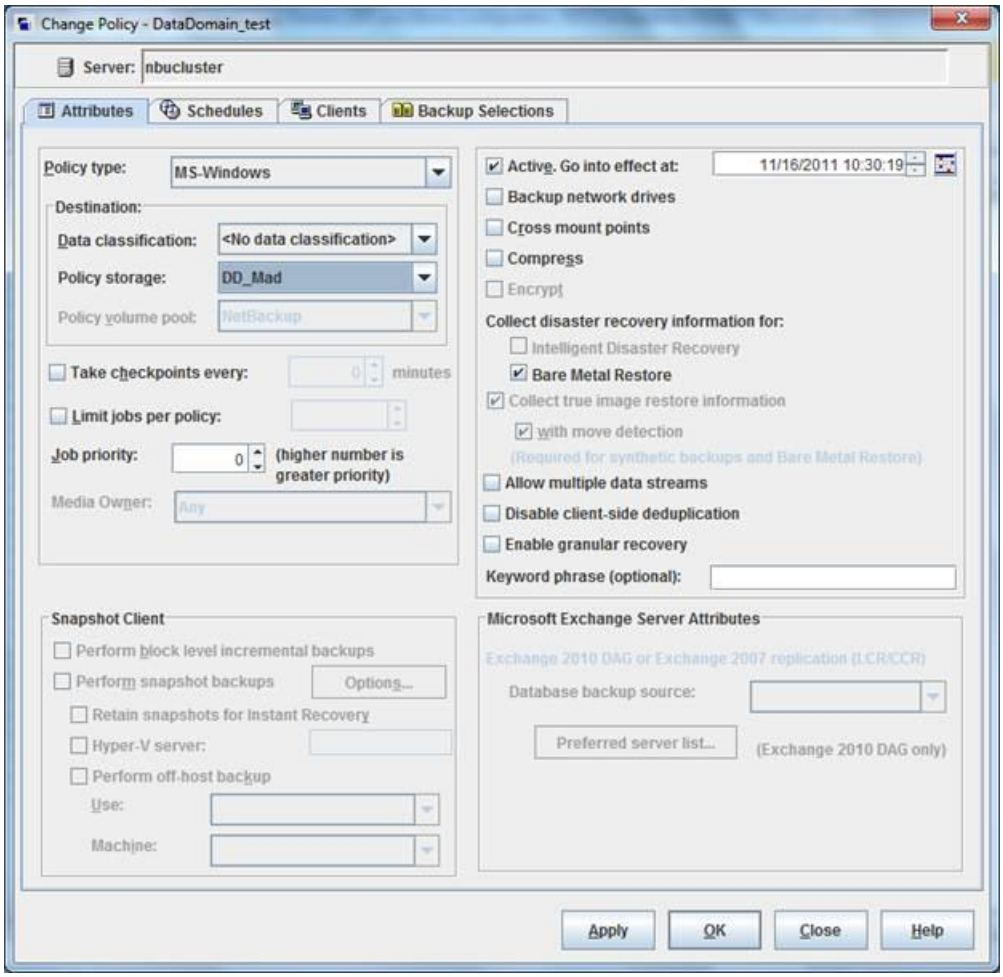


15. Enter a name for the Storage Unit, select the Only use the selected media servers and tick the box for the media server you are configuring.
16. Enter the Maximum concurrent jobs as 100
17. Enter the Maximum fragment size as 51200



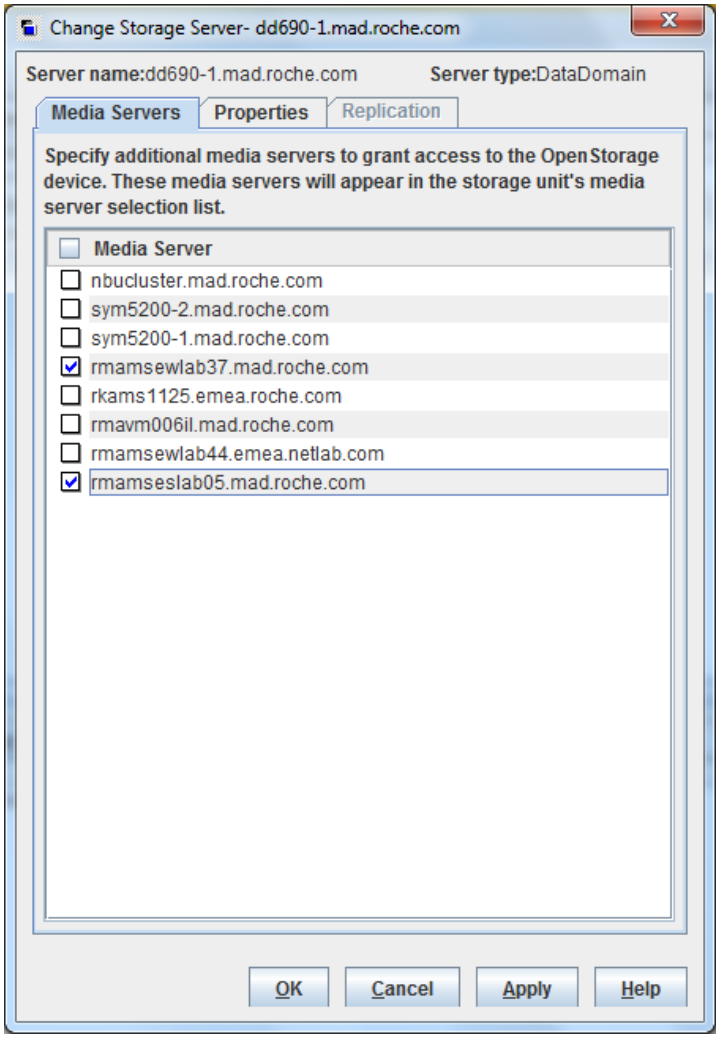
18. Click next to complete the setup.

19. Finally setup a NetBackup policy and select the DataDomain storage unit as shown below.



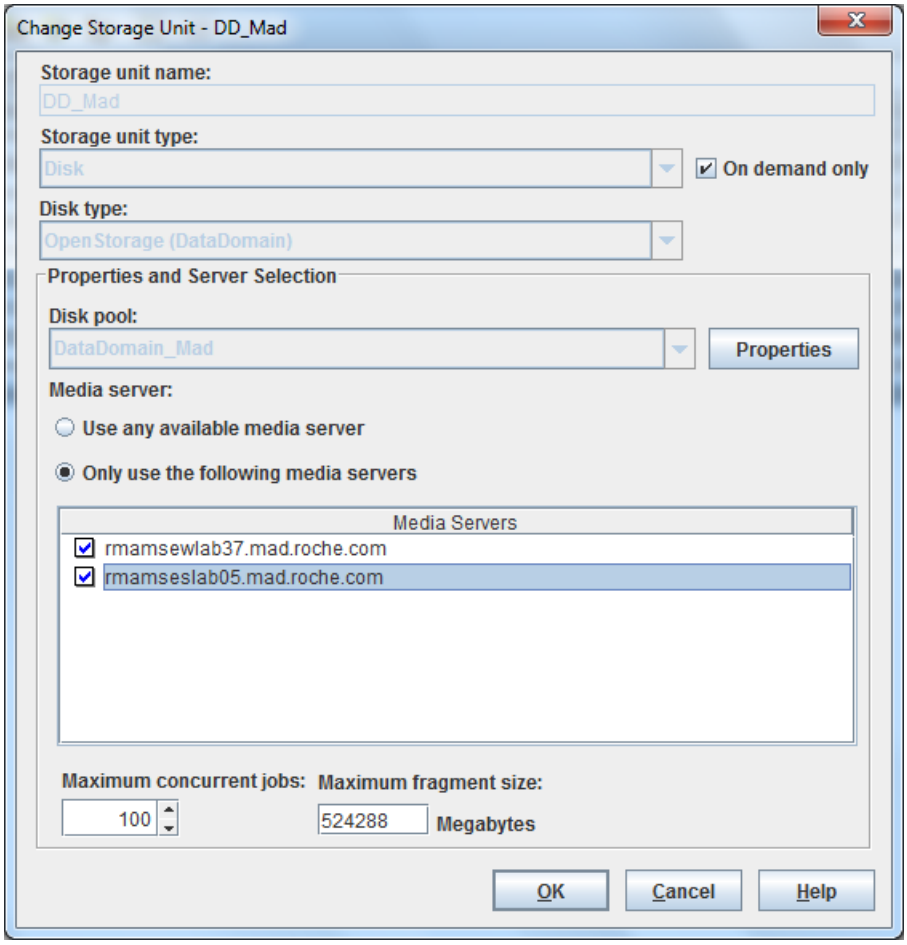
5. Adding additional NetBackup Media servers to OpenStorage disk pools

When additional media servers need to be configured to backup to existing Data Domain OST disk pools there is no need to run the Configure Disk Storage wizard again as detailed in section 6. Instead just make sure the media server has the OST plug-in installed and then go to the NetBackup GUI and navigate to Media and Device Management > Credentials > Storage Servers and then double click on the Data Doman disk pool. A dialog box like the one below should appear.



Check the box of the media server you are adding to the Data Domain disk pool and click ok.

Then navigate to the appropriate storage unit located under NetBackup Management > Storage > Storage Units, double click on the Data Domain storage unit and check the box of the media server you are adding to the disk pool and click ok, refer to screenshot below.



The additional media server can now backup to the Data Domain disk pool.