Drobo How-To Guide

Set Up and Configure a Drobo iSCSI SAN as Shared Storage for Citrix XenServer

SAN storage is a must when you need to maximize mobility and availability for Citrix XenServer. Drobo® provides sophisticated data protection with BeyondRAID™ technology in a package that is easy to use and affordable. Customers can experience the significant benefit of XenMotion between servers at a price they can afford.

Topics

- Initial configuration
- Creating a Smart Volume
- Adding the new Smart Volume onto a storage pool in XenServer

Initial Configuration

STEP 1

Start with the basic configuration of the Drobo before creating a Smart Volume to be presented to the XenServer storage pool.

STEP 2

Before going any further, record the serial number of the Drobo so that you'll have it if you need to call support. You will also be able to track down Smart Volumes if you have more than one Drobo.

At the same time, record the firmware and Drobo Dashboard versions.

STEP 3

In the left panel, select **Settings > General**.

a) Select **Dual Disk Redundancy** so that Drobo will be able to protect you against a failure of more than one drive.

NOTE: While it is possible to take advantage of Drobo BeyondRAID technology by switching back and forth between single- and, dual-disk redundancy, it is strongly recommended that you plan ahead for when the Drobo will be used in virtualized environments.

b) Set the **Disk Drive Spin Down** to **Never** in order to prevent spin up times when drives spin down to conserve energy.

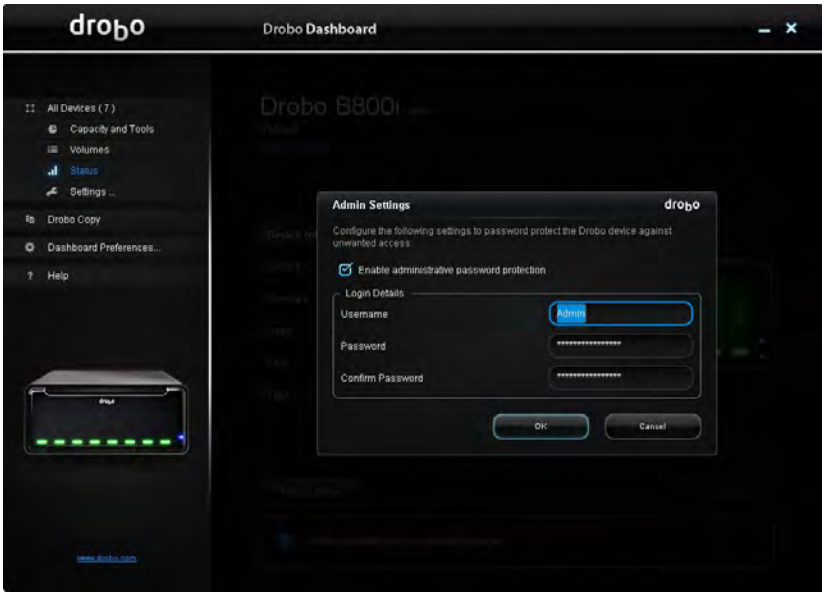
STEP 4

When setting up IP addresses, keep in mind that each interface acts independently. Interfaces can be configured either on the same subnet or separate subnets.

NOTE: Drobo supports frames larger than 1500MTU (aka "jumbo frames"). When you configure larger frames sizes, take the following steps:

- Configure the interface to the desired frame size (make sure that interfaces in the data path are also capable of supporting the size you select).
- Test that you have connectivity via the IP address associated with the interface where you have set the frame size.
- If for any reason the frame size is set on both interfaces and you can no longer connect to the Drobo, connect to the system that has Drobo Dashboard installed via a USB cable.

STEP 5



It is strongly recommended that you set a **username** and **password** in order to prevent unauthorized access to the configuration side of the Drobo.

Creating a Smart Volume

STEP 1

When a volume is created, Drobo automatically configures all the settings necessary to present a Smart Volume. By default all Smart Volumes are thin provisioned and are presented as LUNs (Logical Unit Number) on both IP addresses.

To better understand how BeyondRAID works, visit the following web page: http://www.drobo.com/webinar/BeyondRAID/replay/index-template.php

STEP 2

To create a Smart Volume on the Drobo, click the plus sign (**+**).

STEP 3

Select **Multi-Host** for the Smart Volume type.

Multi-host is required to present a shared Storage Repository (SR) in XenCenter to a storage pool.

If you do not select this option, only one host is allowed to connect to the Smart Volume/SR, at a time. This will prevent you from using XenMotion if you were to move a VM from one XenServer host to another within the storage pool.

STEP 4

While it is theoretically possible to extend the size of a Smart Volume that is set to use LVM2 to more than 2TB (16TB on a 32-bit system and LVM2 with 2.6 kernel), Drobo supports only SRs smaller than 2TB.

STEP 5

After the changes are submitted, the Smart Volume appears at the bottom of the list.

When a Smart Volume is created its identifier will be the ID as shown on the screen to the left:

*iqn.2005-06.com.drobo:b800i.tdb1048b0418.**id8***

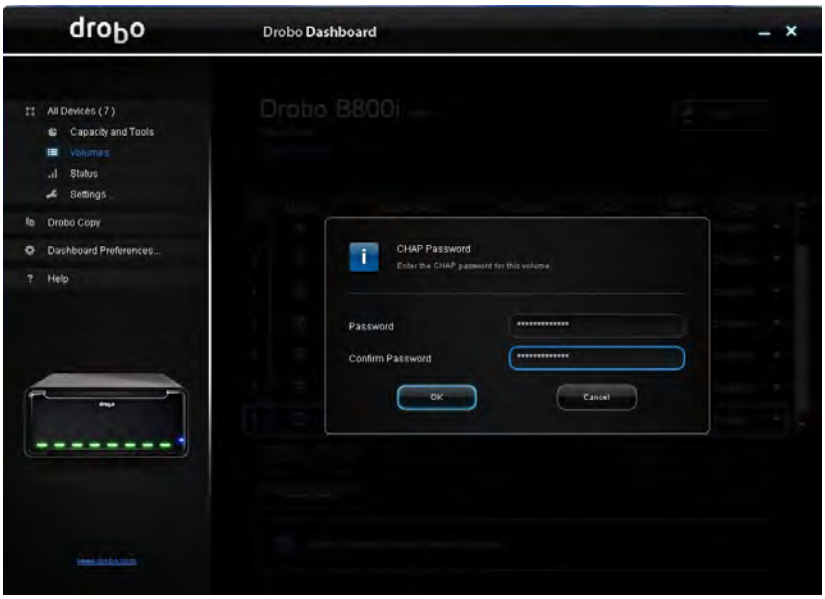
This information is important if you need to track a Smart Volume presented to the Storage Pool.

STEP 6

While it is not necessary to set a CHAP password, it is recommended if Smart Volumes will be accessed from multiple hosts in a hybrid environment (for example, XenServer, Windows guest VMs, and physical servers). Setting a CHAP password guarantees that only authorized systems will be able to probe/connect to the specified Smart Volume.

Click **Enable**.

STEP 7

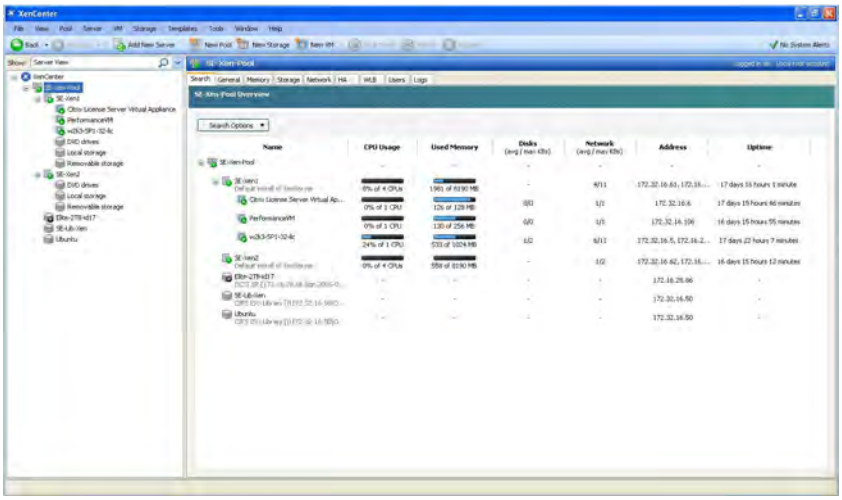


Notice that the Username is Drobo (case sensitive).

Set the password and click **OK.**

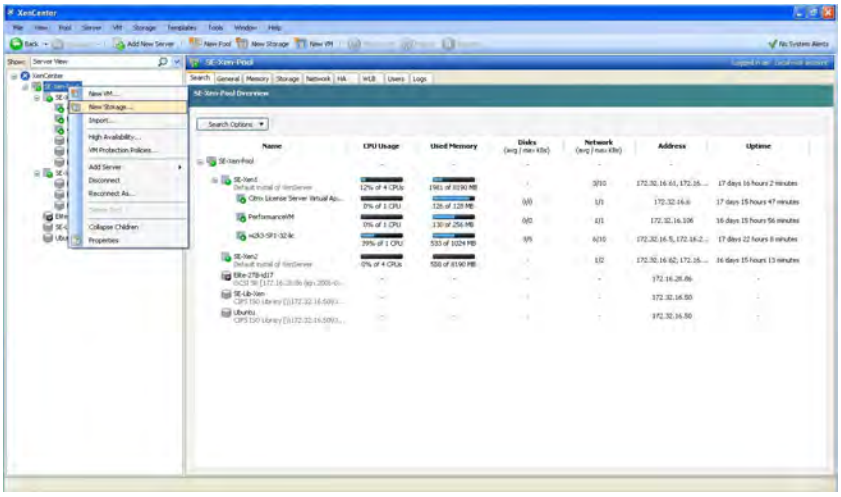
Adding the New Smart Volume into a Storage Pool In XenCenter

STEP 1



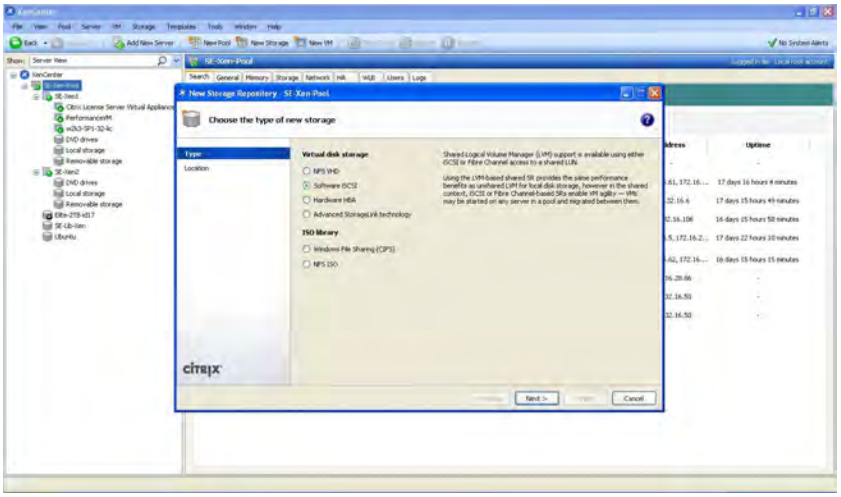
A LUN created in the Drobo iSCSI SAN can coexist in a storage pool with a single or multiple hosts.

STEP 2



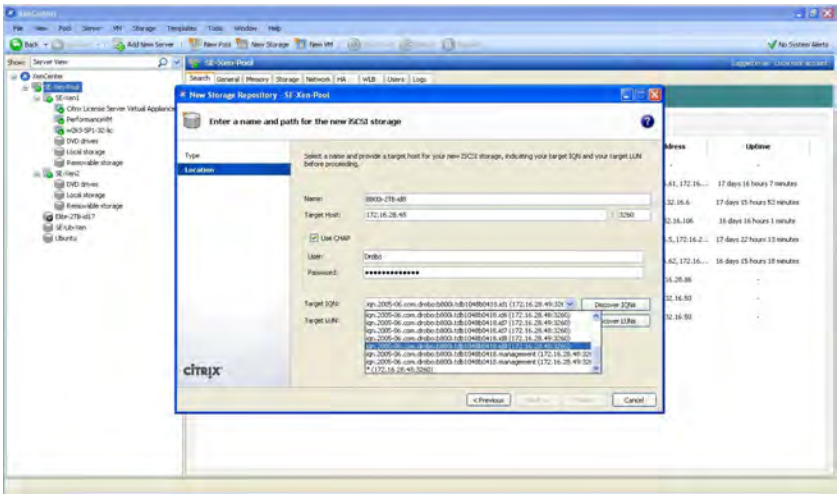
To create an SR, select **Storage Pool > Storage > New SR.**

STEP 3



Select **Software iSCSI** and click **Next**.

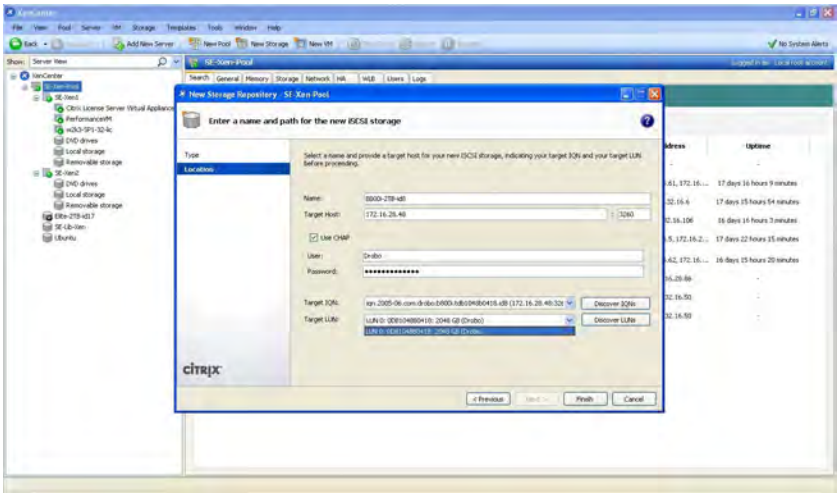
STEP 4



Fill in the following fields:

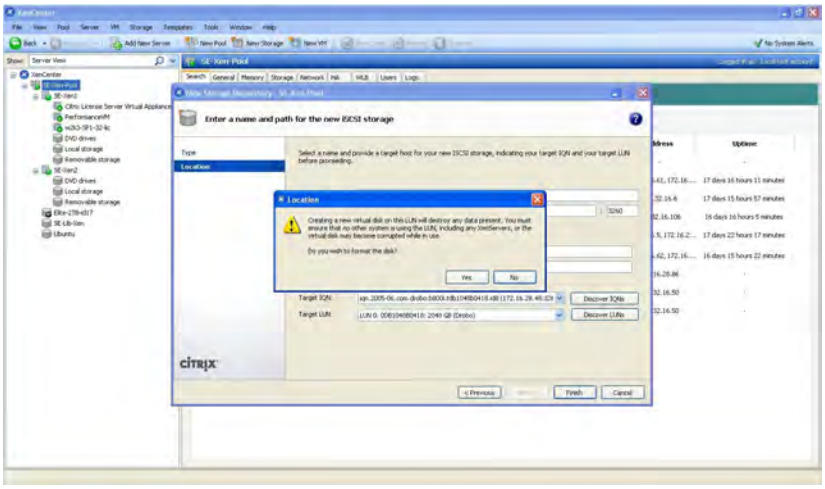
- Name of the new SR
- Target Host IP address of the interface through which you want iSCSI traffic to flow
- If CHAP was set in Drobo Dashboard:
  Set username to "Drobo" (case sensitive)
  Set a password

STEP 5



Click **Discover LUNs**, and at this point you will see the 2TB Smart Volume that was created in the previous steps.

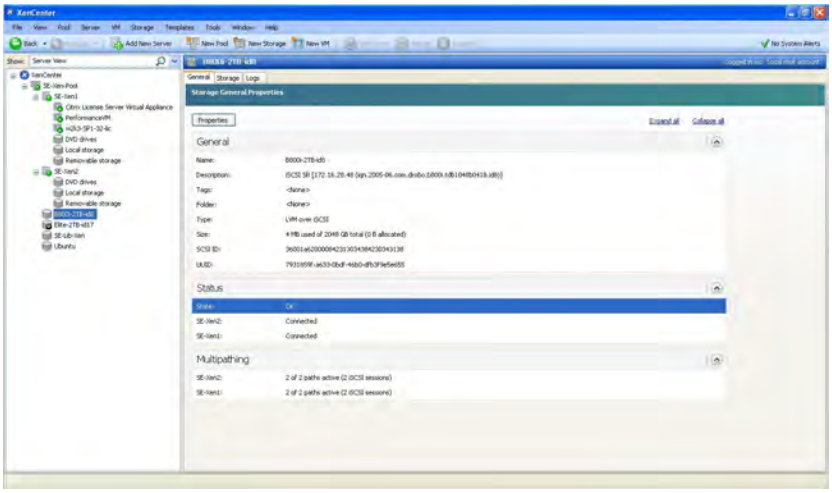
STEP 6



XenCenter will prompt you to verify that you want to use the LUN for the newly created SR. This step will destroy any existing data on the LUN.

NOTE: Do not confuse the process of creating an SR with detaching or re-attaching an SR. For more information, see: http://docs.vmd.citrix.com/XenServer/5.6.0/1.0/en_gb/reference.html - destroying_or_forgetting_a_SR
The XenServer Administrator's Guide explains the differences and uses the command line interface (CLI) to describe the process. Drobo strongly recommends that you use the XenCenter GUI instead of the CLI.

STEP 7



After the process has been completed, the SR is created and is now available as shared storage for both XenServer hosts in the storage pool.

In the right pane, the SR is now displayed. If needed, you can identify where it physically resides by consulting the IP number, iqn, and serial number associated with it.

Copyright 2011 Data Robotics, Inc. Data Robotics, Drobo, DroboEllite, DroboPro, BeyondRAID, and Smart Volumes are trademarks of Data Robotics, Inc., which may be registered in some jurisdictions. All other trademarks used are owned by their respective owners. All rights reserved. Specifications subject to change without notice. • HT-0028-00 • May 2011