StarWind Software
Technical Reference Series

StarWind iSCSI SAN Software: Configuring High Availability storage for Windows Server 2003 and 2008

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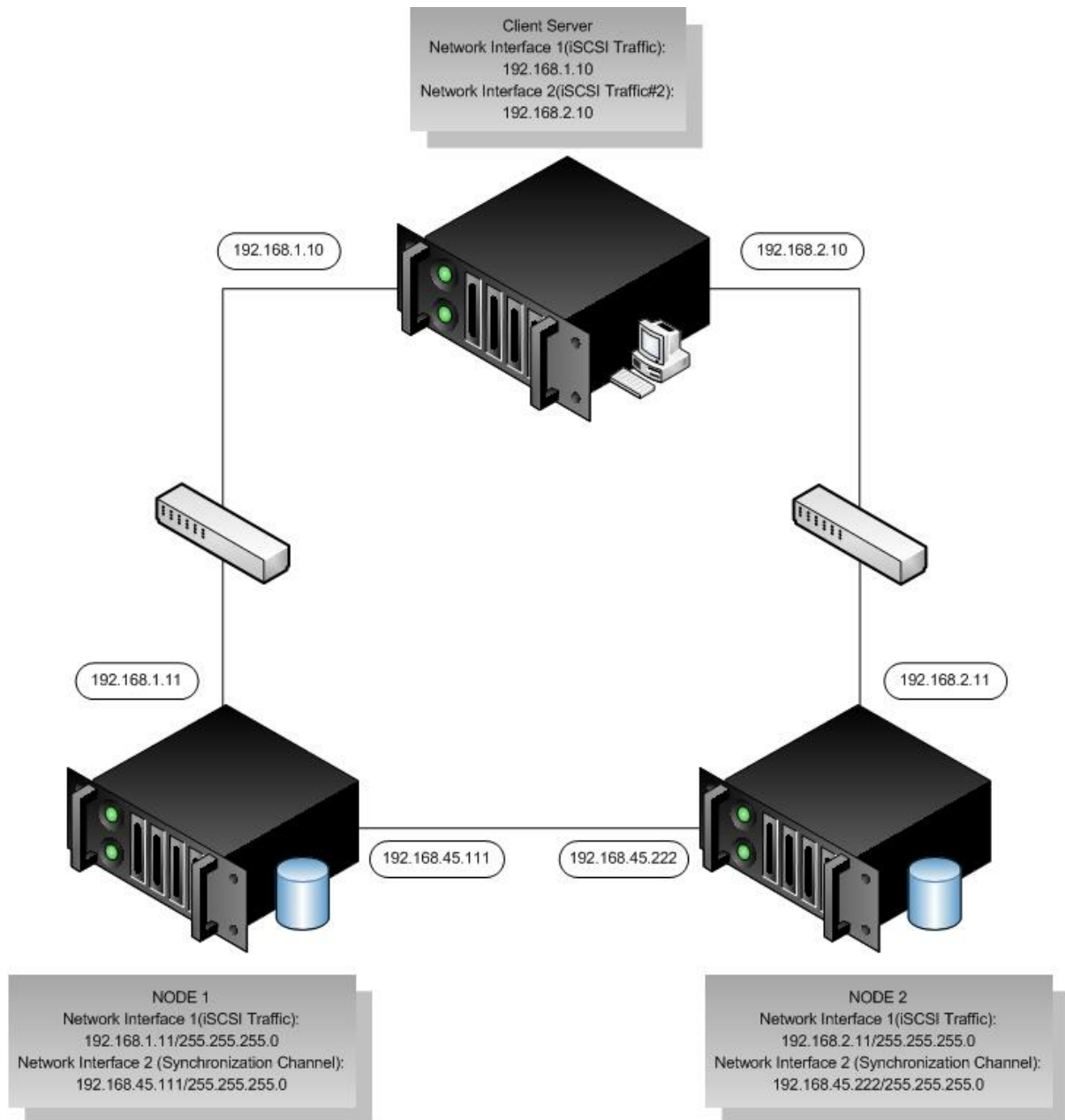
TECHNICAL SUPPORT AND SERVICES

If you have questions about installing or using this software, check this and other documents first - you will find answers to most of your questions here or there. If you need further assistance, please contact us.

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Introduction

Client Server
Network Interface 1(iSCSI Traffic):
192.168.1.10
Network Interface 2(iSCSI Traffic#2):
192.168.2.10

192.168.1.10   192.168.2.10

192.168.1.11   192.168.2.11

192.168.45.111   192.168.45.222

NODE 1
Network Interface 1(iSCSI Traffic):
192.168.1.11/255.255.255.0
Network Interface 2 (Synchronization Channel):
192.168.45.111/255.255.255.0

NODE 2
Network Interface 1(iSCSI Traffic):
192.168.2.11/255.255.255.0
Network Interface 2 (Synchronization Channel):
192.168.45.222/255.255.255.0

Note: Data Synchronization Channel redundancy is required; use NIC teaming (link aggregation).

Both StarWind servers must have StarPort installed and registered.

Configuring StarWind Server

Preparing Storage

Launch the StarWind Console: **Start -> All Programs -> StarWind Software -> StarWind**. Whenever the StarWind Console is running, its icon will appear in the system tray.

The StarWind Console may be accessed by double-clicking the icon using the left mouse button, or with a single click using the right mouse button and selecting Start Management from the pop-up menu.

From the Connections tree, select the computer you want to provision the iSCSI target device on.
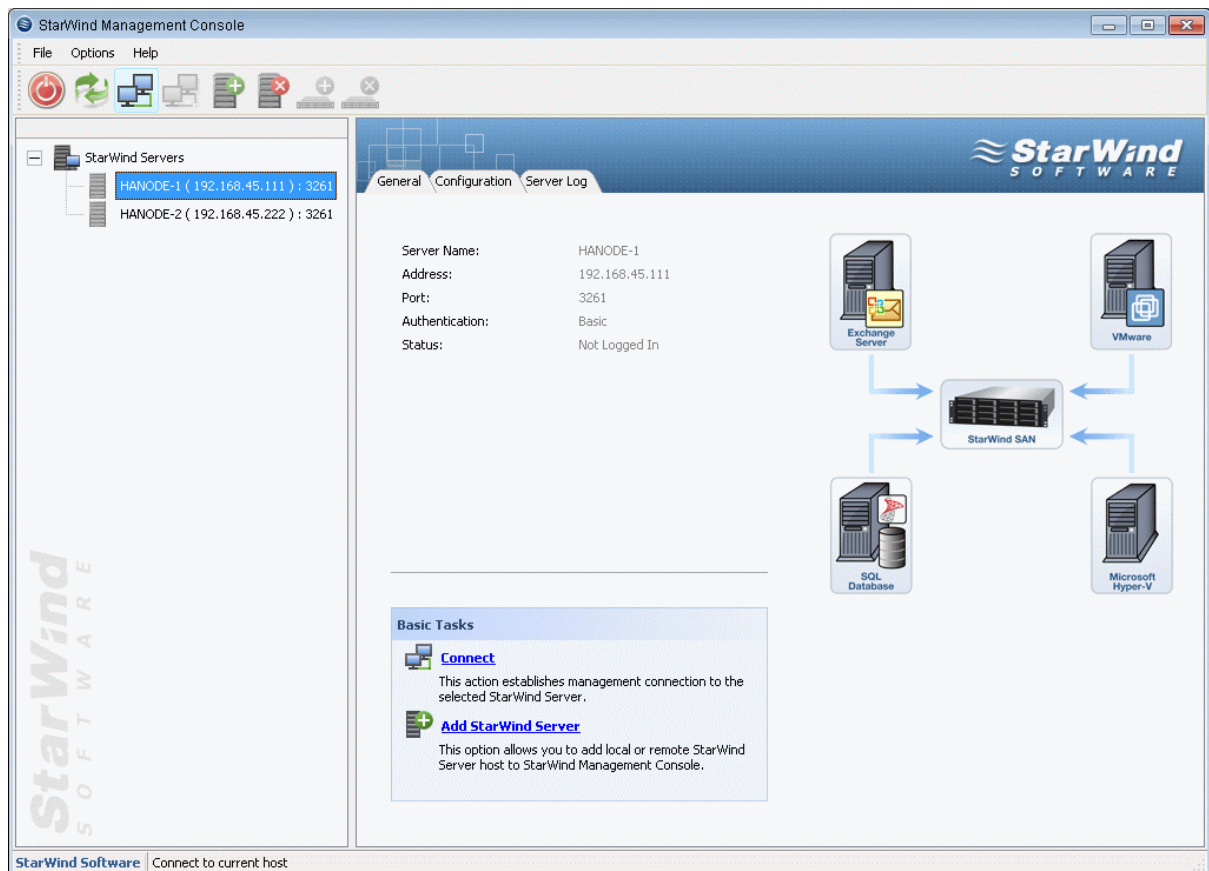
Double-click the host to connect.

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You will be prompted to enter the login and password.
The default login and password are "root" and "starwind." You can always change them later.
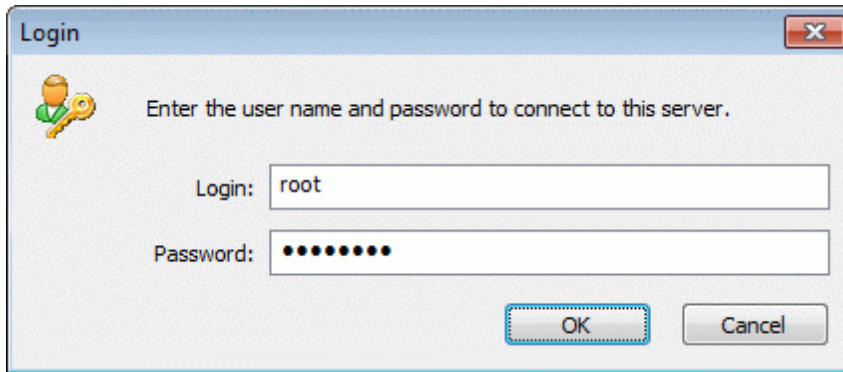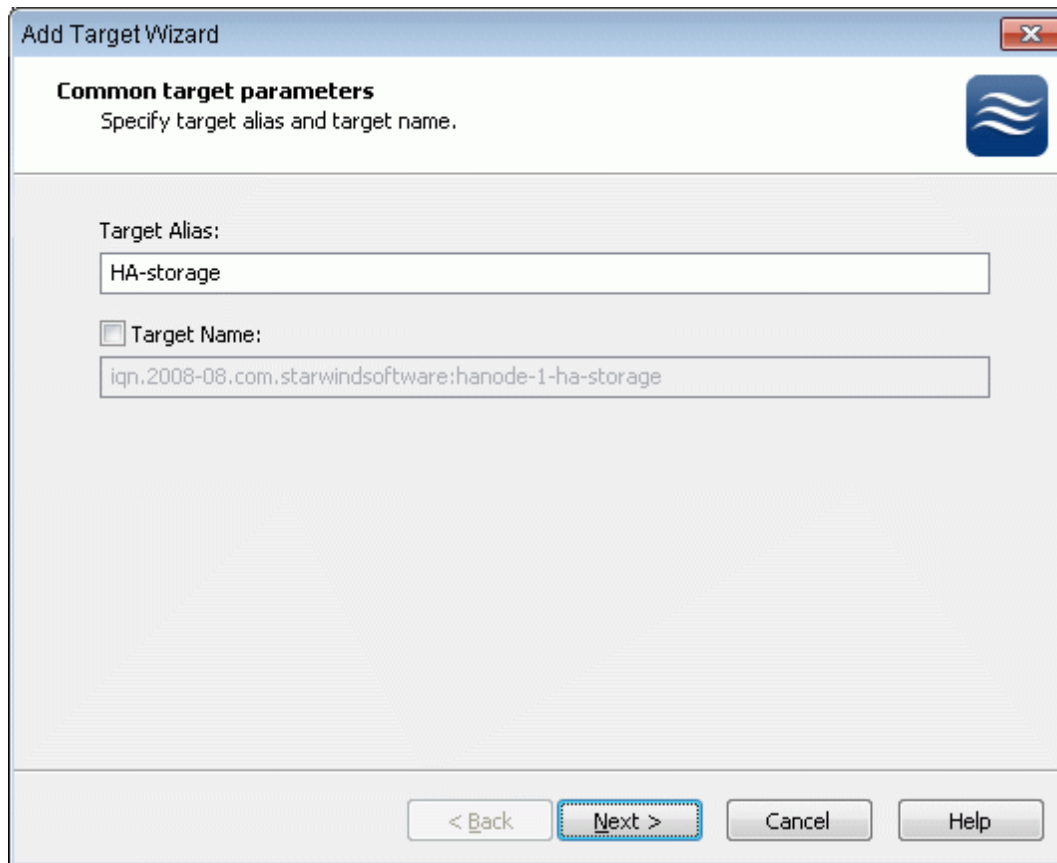

Click the **OK** button to continue.

Now when You are connected to the StarWind Service on the machine you can create targets on it.
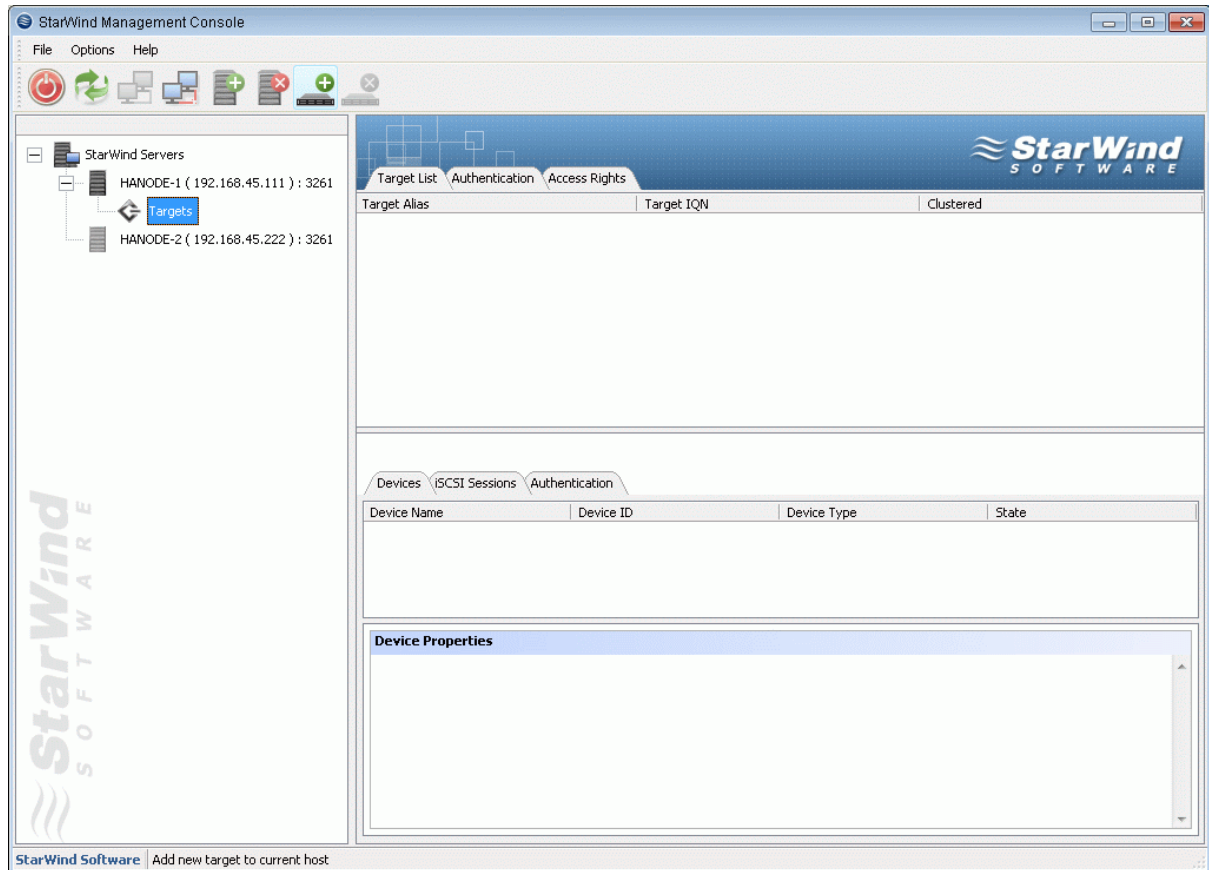
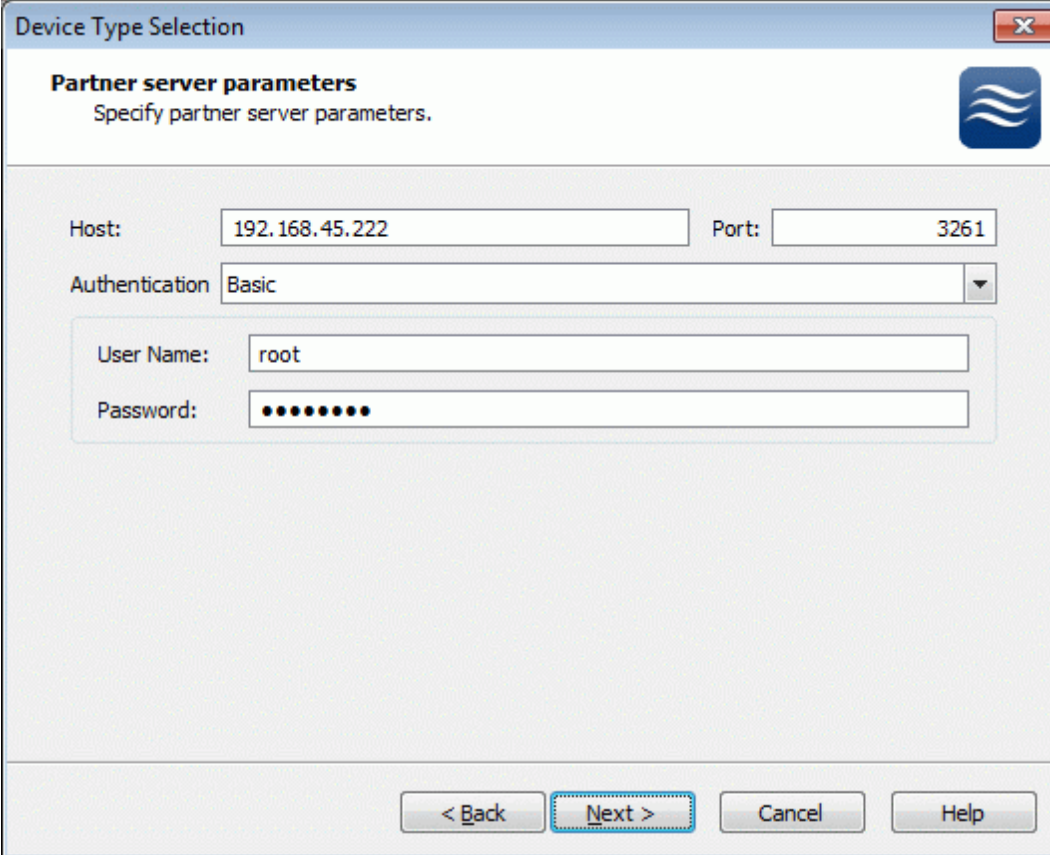Click **Add Target** button to continue.

In the wizard that appears, specify a target name. The name must be a unique name by which the device will be declared to the iSCSI initiators connecting to StarWind over an IP network.

Click the **Next** button to continue.

Select the HA device type by going to **Hard Disk->Advanced Virtual->High Availability device.**

Specify the partner server parameters. Enter the server's IP address or host, and specify the user name and password for the StarWind Service.
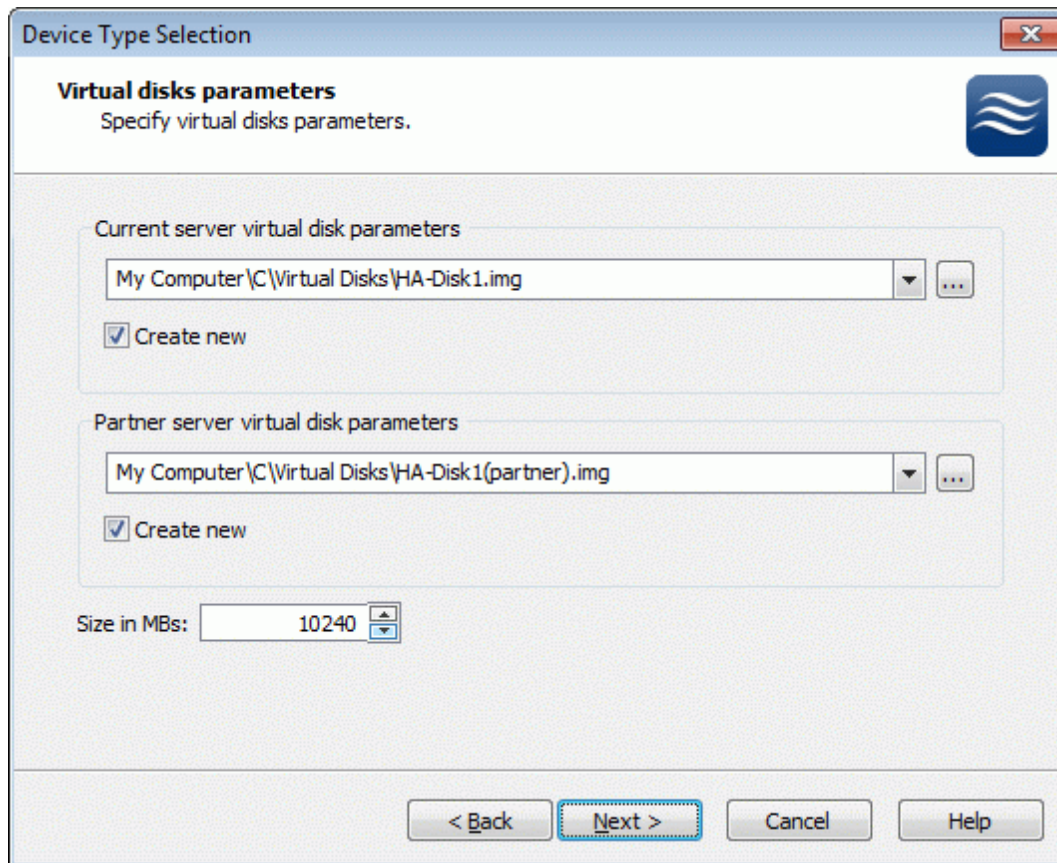

Click the **Next** button to continue.

Enter target alias and name to be assigned to the partner target.
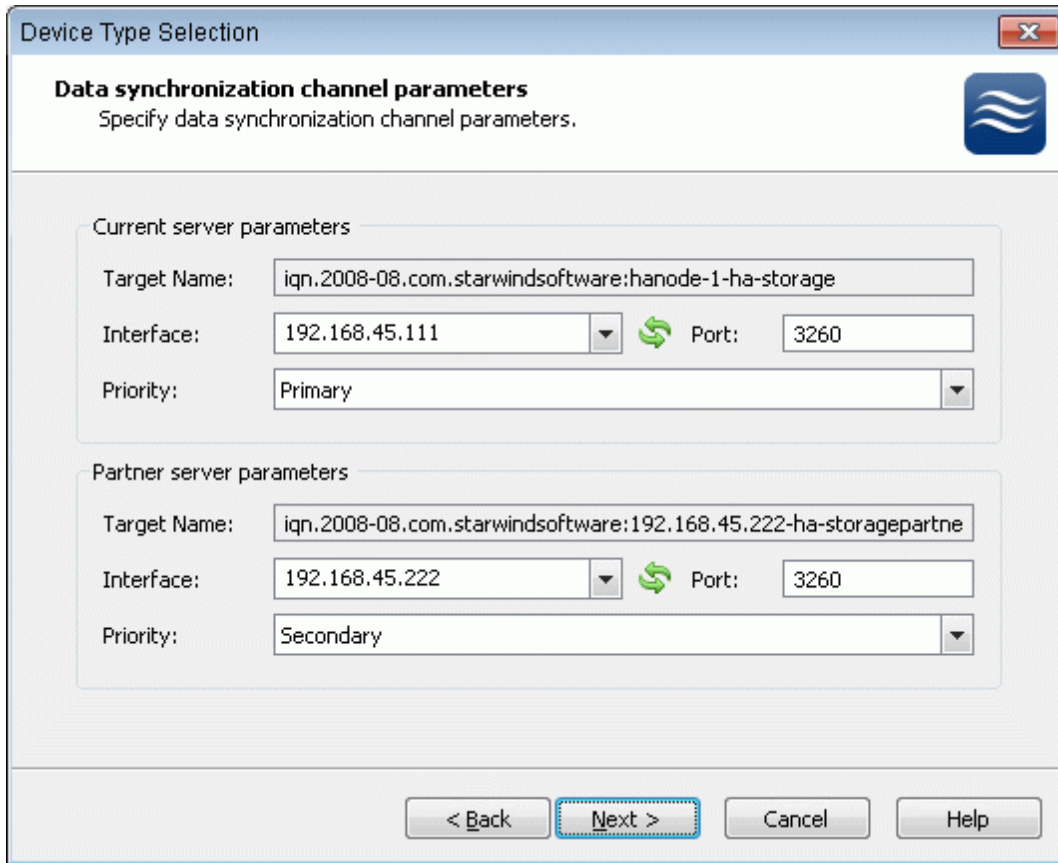

Click the **Next** button to continue.

Specify the location and name of your local virtual disks and your partner's virtual disks by clicking the "..." button. If you want to create new virtual disks, tick the Create New checkbox.

Click the **Next** button to continue.

Configure the data synchronization channel parameters by specifying the network interface for synchronization. You can also decide node priority by designating it as Primary or Secondary.

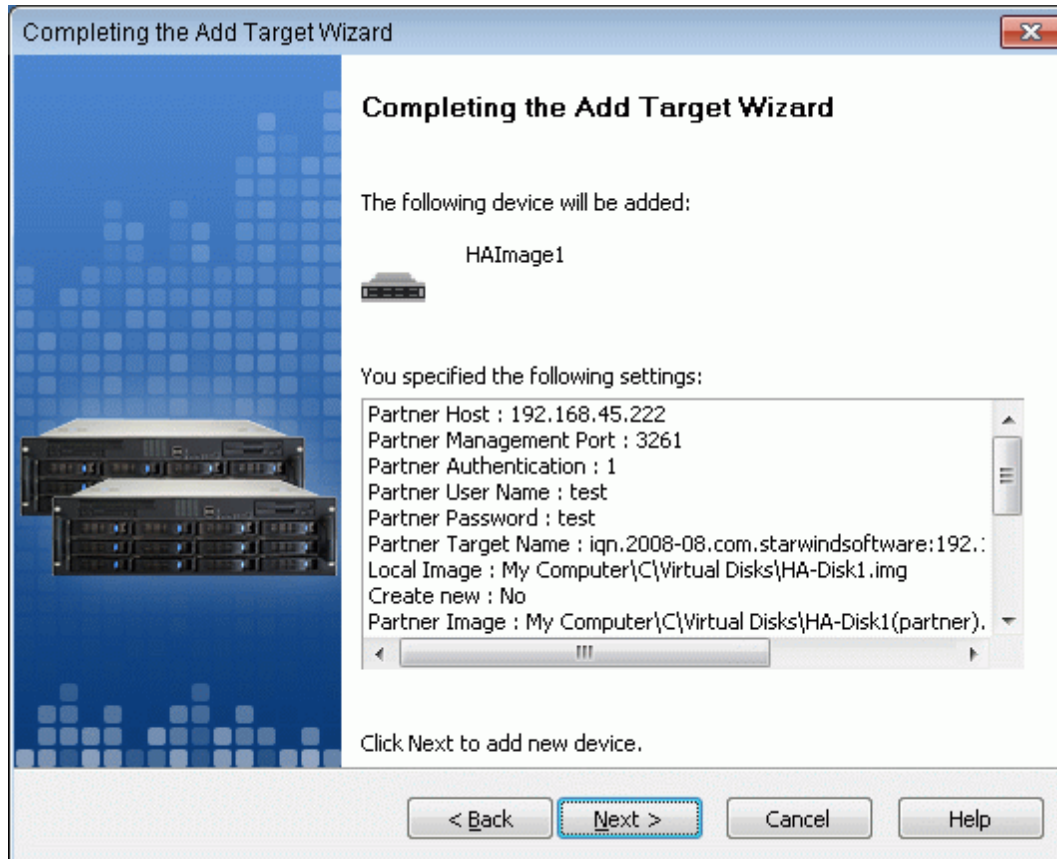Click the **Next** button to continue.

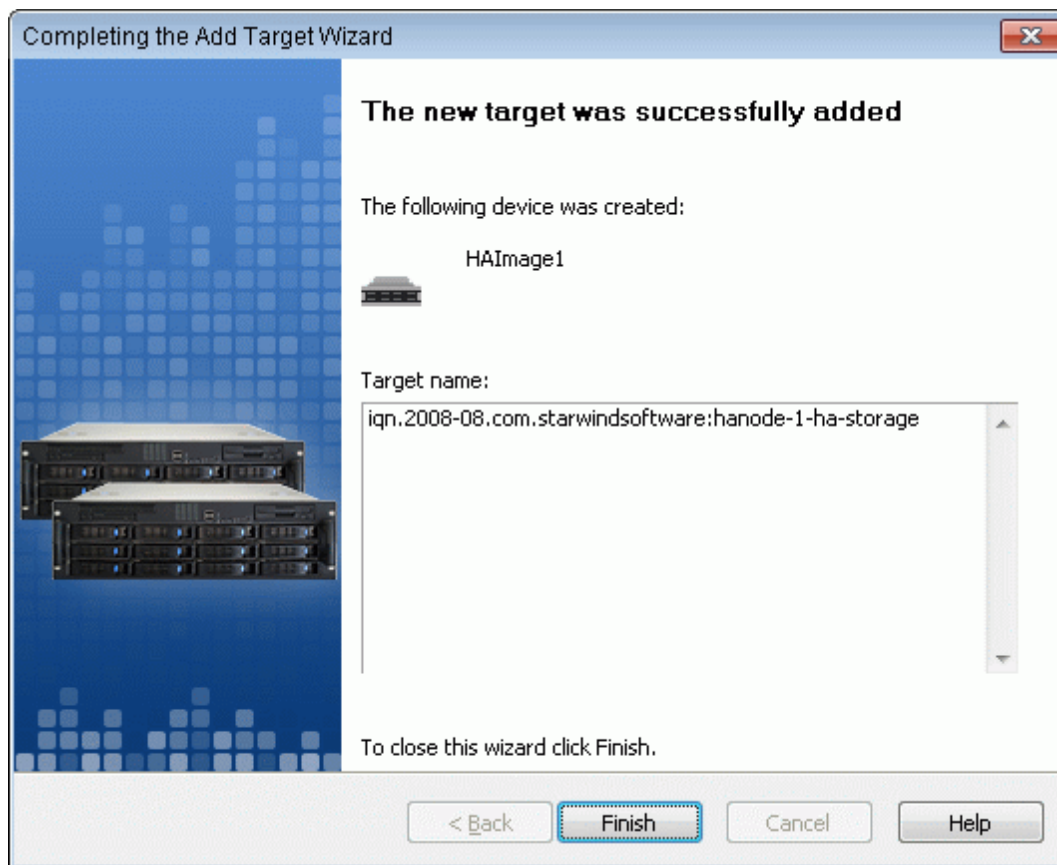Specify the method to initialize your HA device.
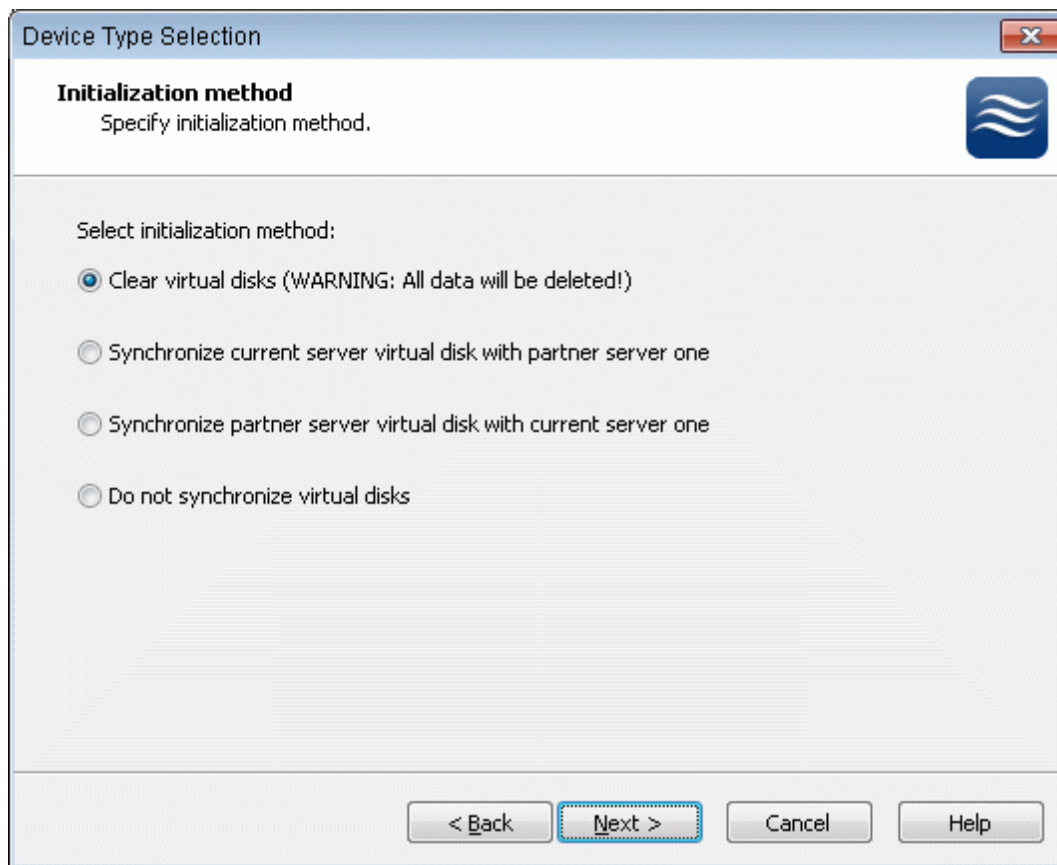
Click the **Next** button to continue.

Check that the device parameters are correct. Click the **Back** button should any changes be required.

Click the **Next** button to continue.

A summary is displayed on the last wizard page.

Click the **Finish** button to close the wizard.

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## Configuring Windows Server 2008

Install MPIO Feature

Open **Server Manager** (Start->Administrative Tools->Sever Manager). Go to **Features** item. Click **Add Features**.

An **Add Features Wizard** will appear. In the features list select **Multipath I/O** feature and install it**.**
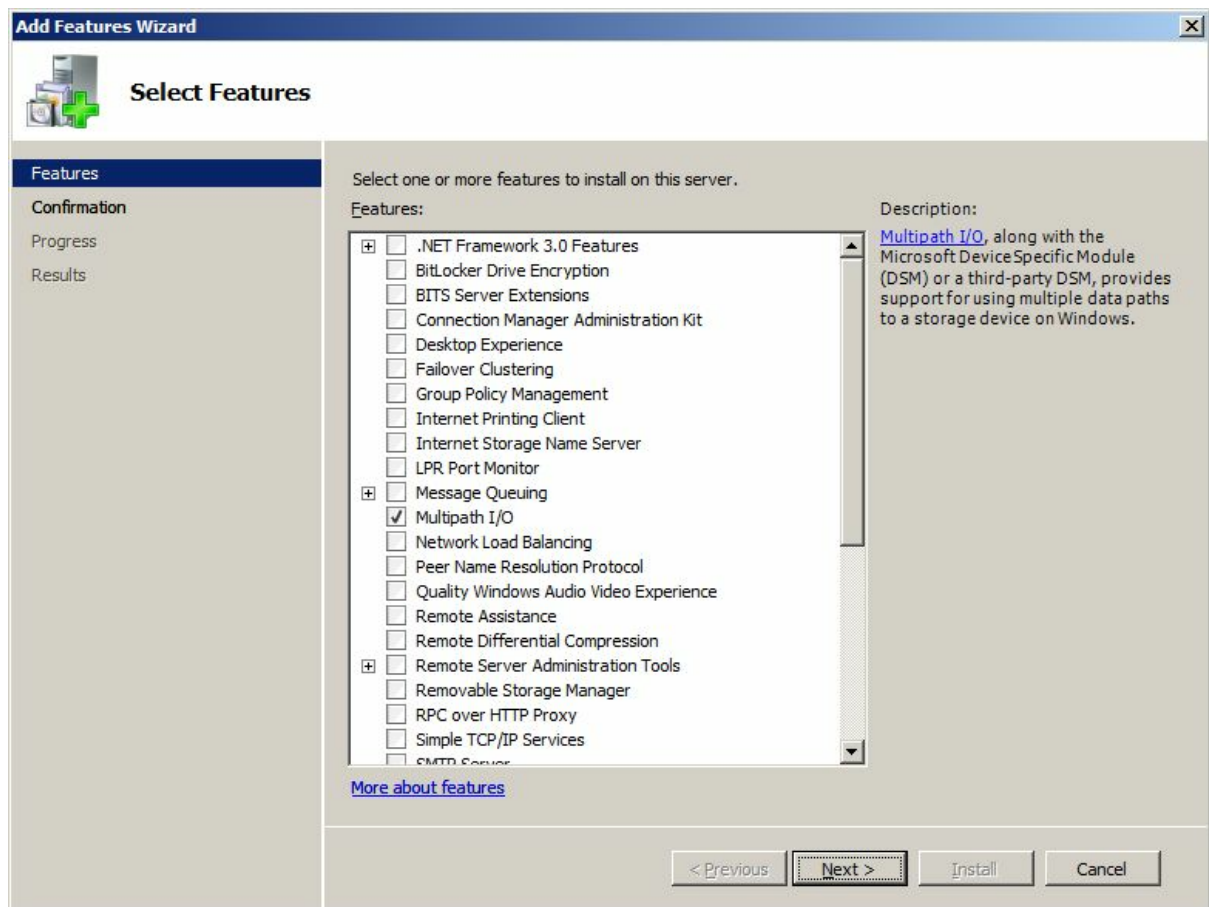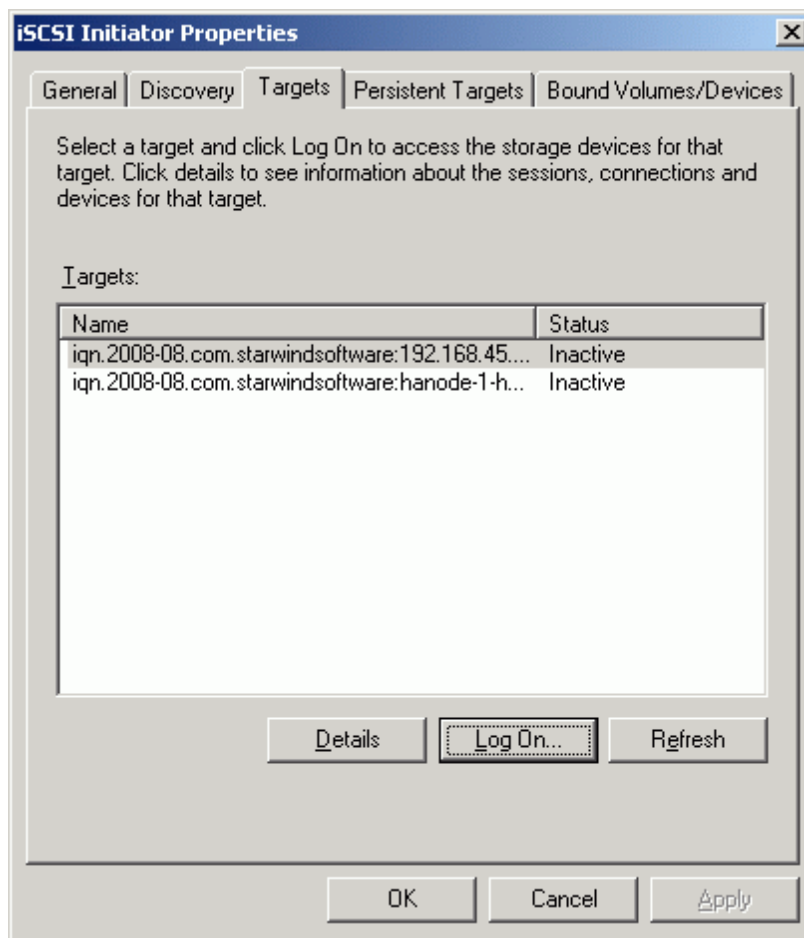
Connect Targets

Open the Microsoft iSCSI Initiator by going **Start -> Administrative Tools -> iSCSI Initiator**. Go to the **Discovery** tab. Add each of the StarWind servers by pressing the **Add Portal ...** button and specifying servers IP address.
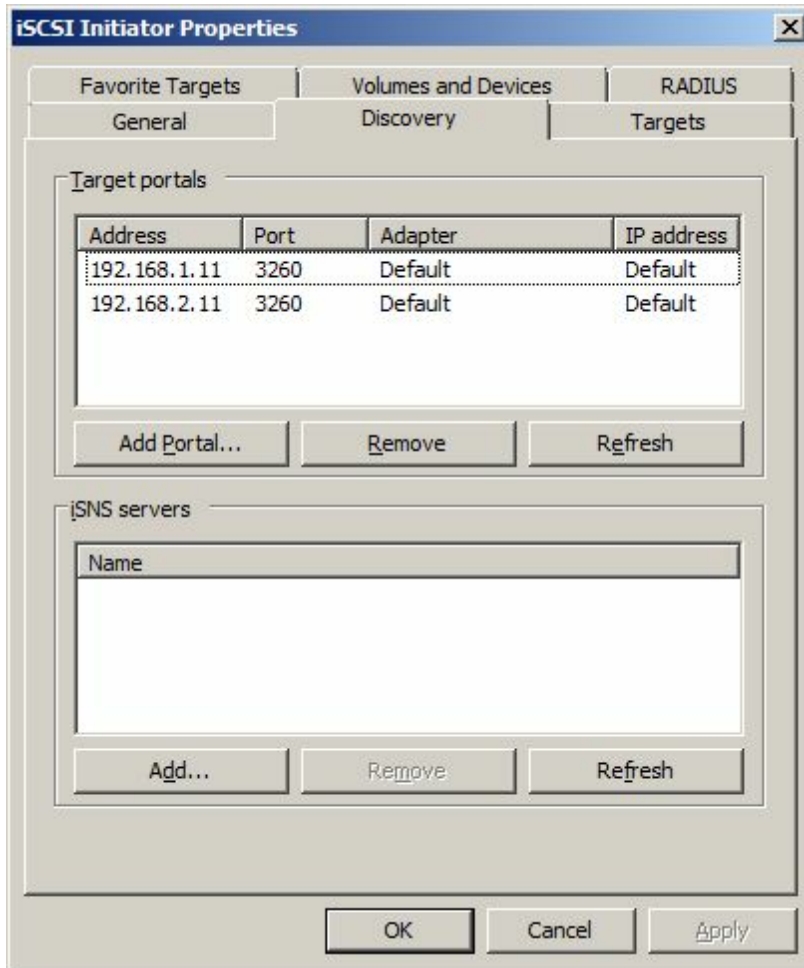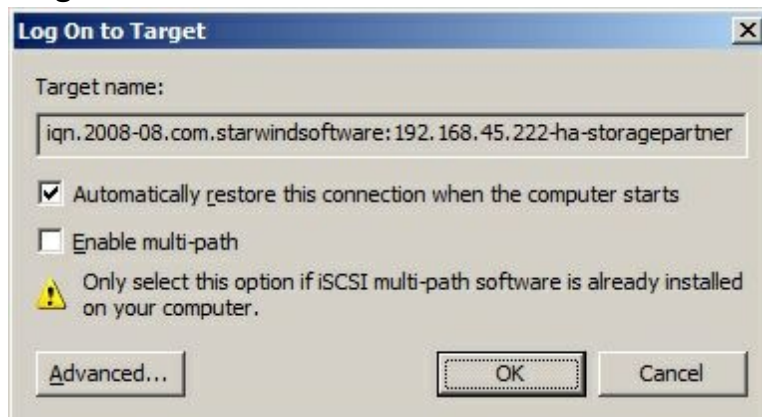
Switch to the **Targets** tab.

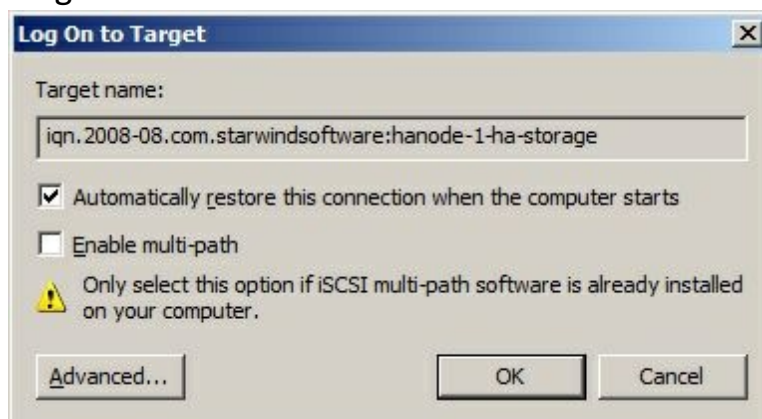Connect the targets by clicking the **Log On…** button.

A **Log On to Target** dialog will now appear.

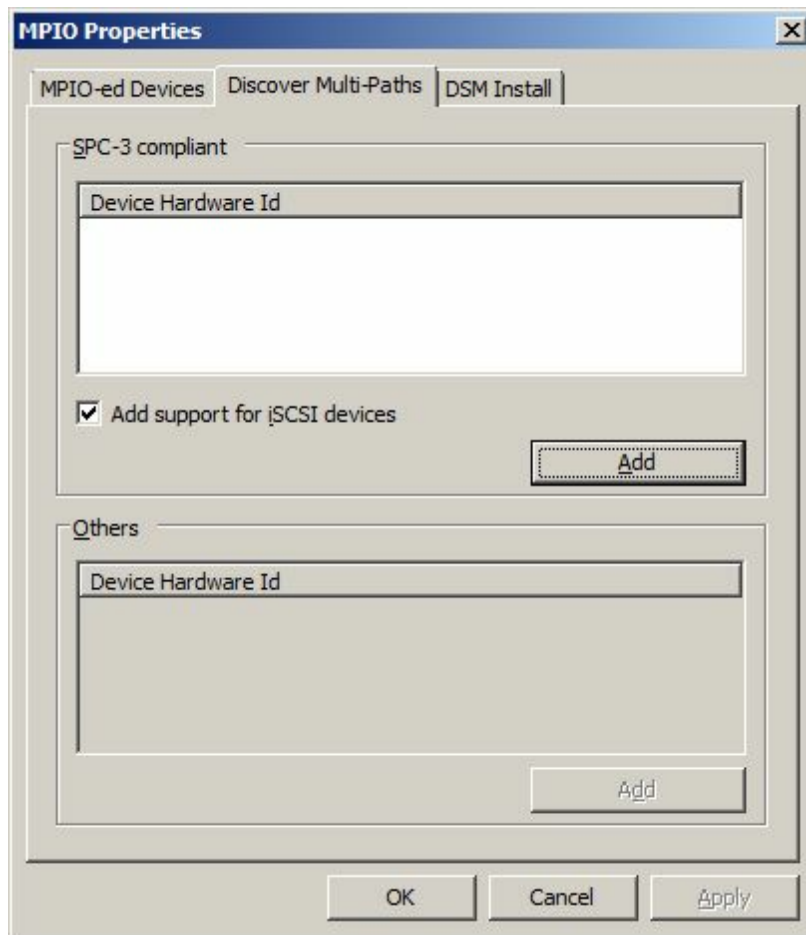Tick the **Automatically restore this connection when the system boots** checkbox.

Target 1

Target 2

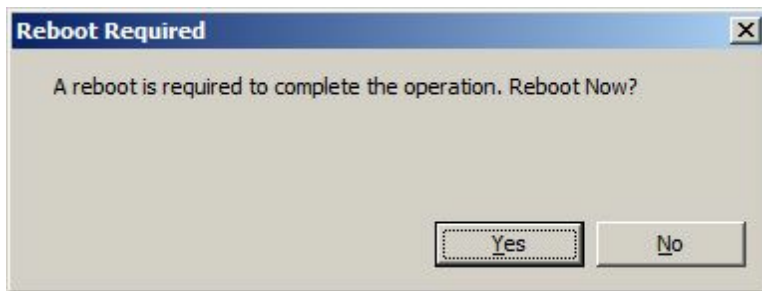Click the **OK** button to connect the target.

Enable Multipath Support

Now open the MPIO manager (**Start->Administrative Tools->MPIO**). Go to **Discover Multi-Paths** tab. tick the **Add support for iSCSI devices checkbox**.

Click the **Add** button.

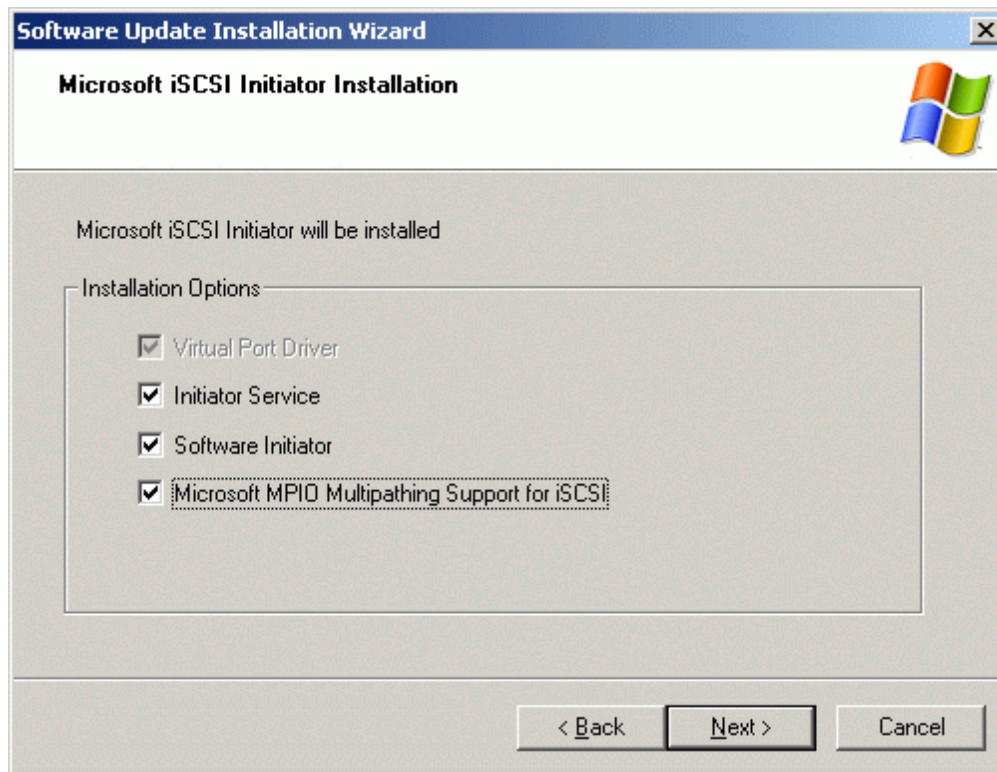Windows will prompt you to reboot the server.

Click the **Yes** button to restart tour server.

Configuring Windows Server 2003

Enable Multipath Support

Download Microsoft iSCSI Initiator and install it with the Microsoft MPIO Multipathing Support for iSCSI option enabled.
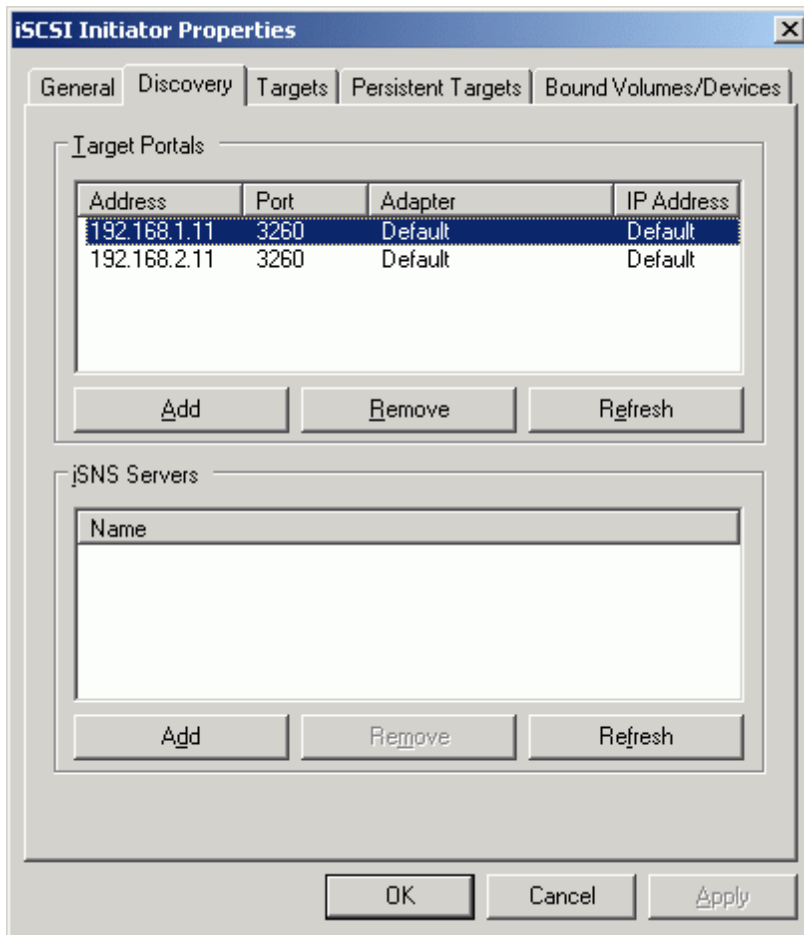

You will need to restart the computer, before continuing.
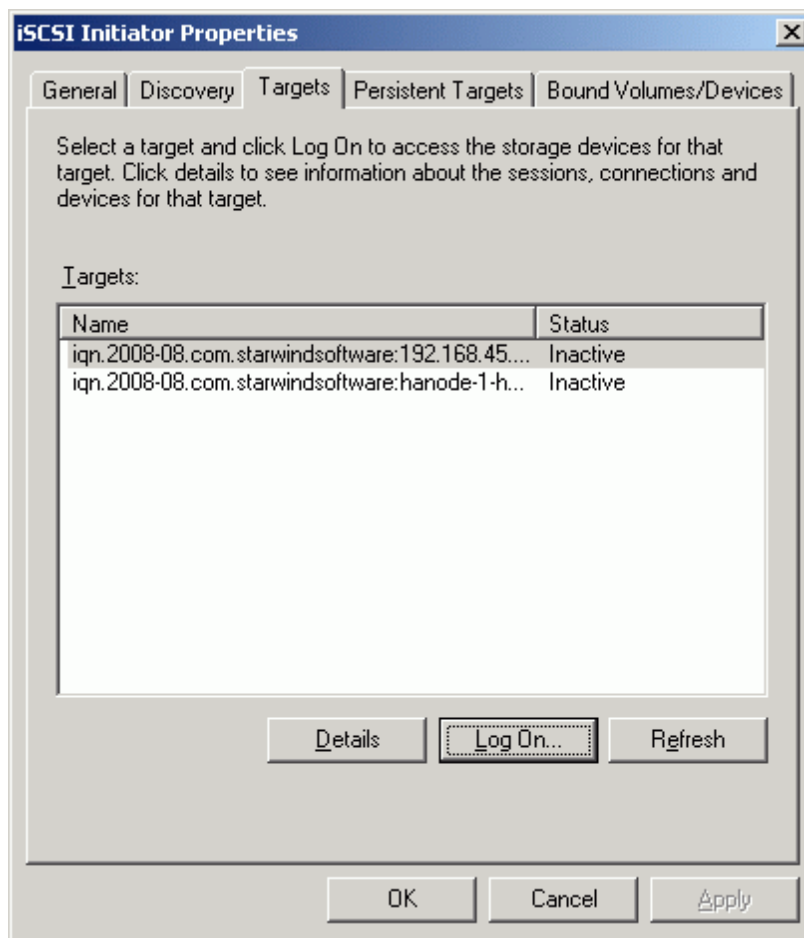

Connect Targets

Launch the MS iSCSI Initiator by selecting **Start->All Programs->Microsoft iSCSI Initiator**.

Switch to the Discovery tab. Add each of the StarWind servers by clicking the **Add** button and specifying server IP address.
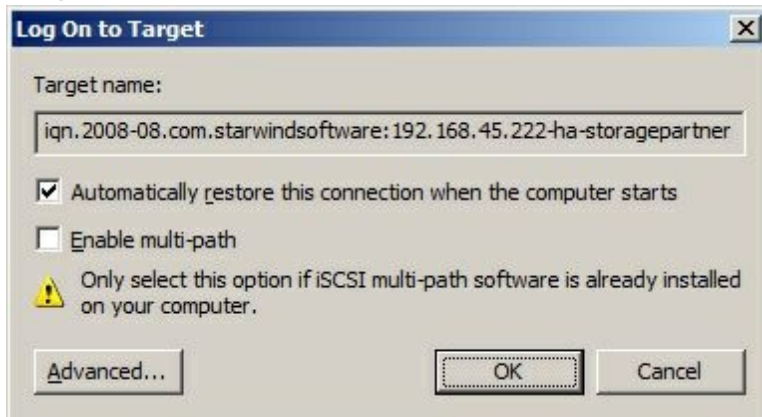
Switch to the **Targets** tab.

Connect the targets by clicking the **Log On...** button.

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A **Log On to Target** dialog will now appear.

Tick **Automatically restore this connection when the system boots** checkbox.

Target 1

Target 2

Click the **OK** button to connect the target.

Conclusion

Contacts

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