How to connect Windows Server 2008 and Windows Vista to iSCSI server (Part 1)

iSCSI is a protocol that allows two hosts to send SCSI commands over a TCP / IP network. By doing this, you can still use SCSI but free yourself from the limitations of connecting a traditional SCSI cable instead of using a LAN to connect your SCSI computers and servers to the zone. SCSI storage area.

David Davis

What is iSCSI?

iSCSI is a protocol that allows two hosts to send SCSI commands over a TCP / IP network. By doing this, you can still use SCSI but free yourself from the limitations of connecting a traditional SCSI cable instead of using a LAN to connect your SCSI computers and servers to the zone. SCSI storage area.

iSCSI is a storage area network (SAN) type and is typically compared with Fiber Channel (FC) - its much more expensive competitor.

With iSCSI, you have a client. This client uses the initialization software to connect to the storage server (called a target). While the iSCSI client software initializer is available in Windows Vista and Windows Server 2008, the iSCSI target (server) still has a very high cost.

How to create a free iSCSI storage target server

Maybe you already have a hardware iSCSI server. If so, what a great thing! However, in the absence of this you should consider OpenFiler. OpenFiler is an open source iSCSI target server that can run on computers or server systems. This is a changed Linux kernel with GUI front-end interface. You don't need to worry if you don't know Linux. With OpenFiler, you never have to use the Linux command line utility.

Like other storage servers, OpenFiler can convert regular disks into RAID disks and provides many sharing options besides iSCSI, such as SMB, FTP, HTTP and NFS.

With this simple software you can create an iSCSI target server for your Windows Server 2008 and Windows Vista systems to be accessible.

To get OpenFiler, go to the OpenFiler site to download 370MB ISO. This ISO is the OpenFiler installer. All you need to do here is insert the disc into the system. When booting from CD, you must press Enter to install OpenFiler. This installation process is very simple, just click **Next** three times, **Yes** twice, . configure static IP address on **OpenFiler (** recommended not required **),** change zone time, set root password Next, click Next, restart the server and the installation is complete.

Although this article introduces connecting the Windows servers to the iSCSI target server, not talking about how to manage or configure this server, but we will show you a little more about how to configure it. OpenFiler.

How to configure OpenFiler to allow access to iSCSI clients

These are the basics of configuring OpenFiler to allow access to iSCSI clients:

- Log in to the Admin interface by going to ***https: // xxxx: 446***

Figure 1: OpenFiler administrator login interface

- The default username and password are **openfiler** and **password**
- Go to the services and activate the iSCSI Target service
- Go to **Volumes** , then **Physical Storage Management** , click on the name of the drive, this is where you want to create a new partition (we did the second drive in the server next to the boot disk). In our case, click **/ dev / sdb**
- Create a partition on that disk
- Now go to **Volume Group Management** , name the new VG, check the **Select** checkbox and click **Add volume group.**
- Now click **Create new Volume** . Create an **iSCSI** file system partition in VG with the size you want.
- Go to the General tab and add your local network to the networks tab. This works the same in the same network that the Win 2008 Server or Vista servers are located in.
- Returning to the Volume properties, edit it a little, change the internal network to **Allow** instead of the default block. Click **Update.**
- Now disable and enable iSCSI service.

Get the IP address of the OpenFiler iSCSI server, and you are now ready to access from Windows Server 2008 or Windows Vista systems.

How to connect Windows Vista to iSCSI SAN

To connect Windows Vista to the iSCSI target, you need to go to Control Panel, double-click the iSCSI Initiator initializer.

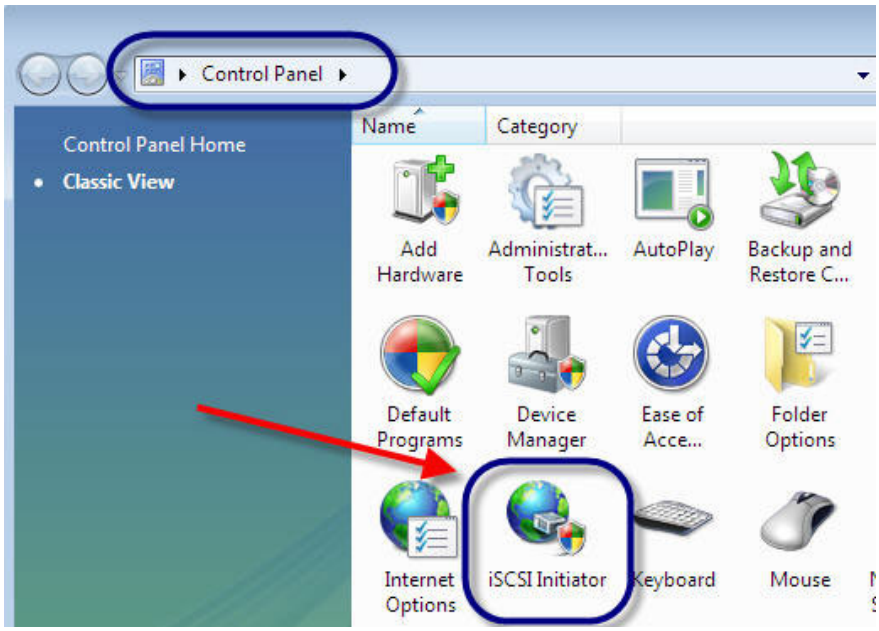

Figure 2: Vista's iSCSI Initiator - Control Panel initializer

When you see the dialog box below, answer **Yes** to start the iSCSI service each time the system boots up later.

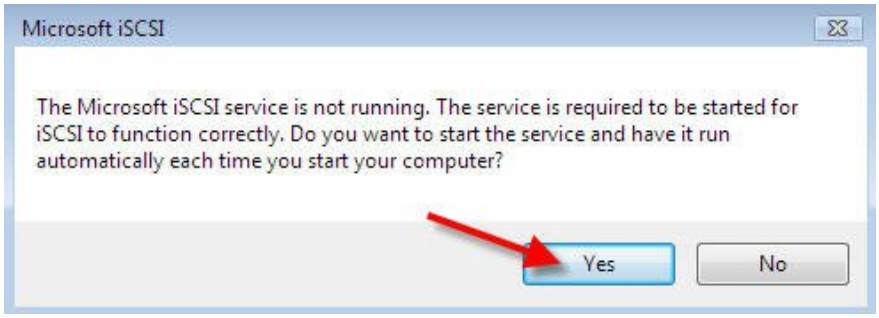

Figure 3: Vista - start the iSCSI auto initializer

When you see the dialog box below, answer **Yes** to unlock the iSCSI service for the Windows firewall.

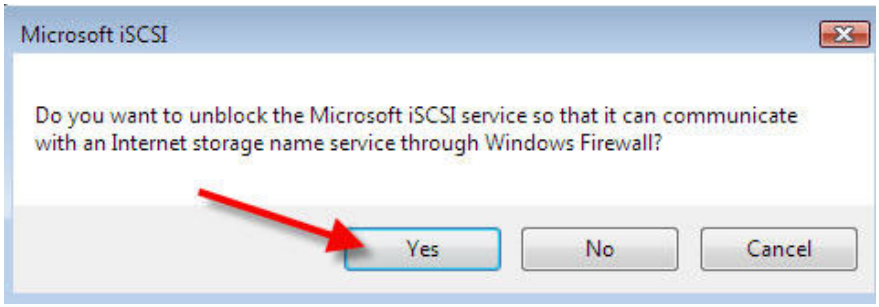

Figure 4: Vista - allows iSCSI to pass through the firewall

When the iSCSI Initiator Properties appears, click the **Discovery** tab. Click **Add Portal** .

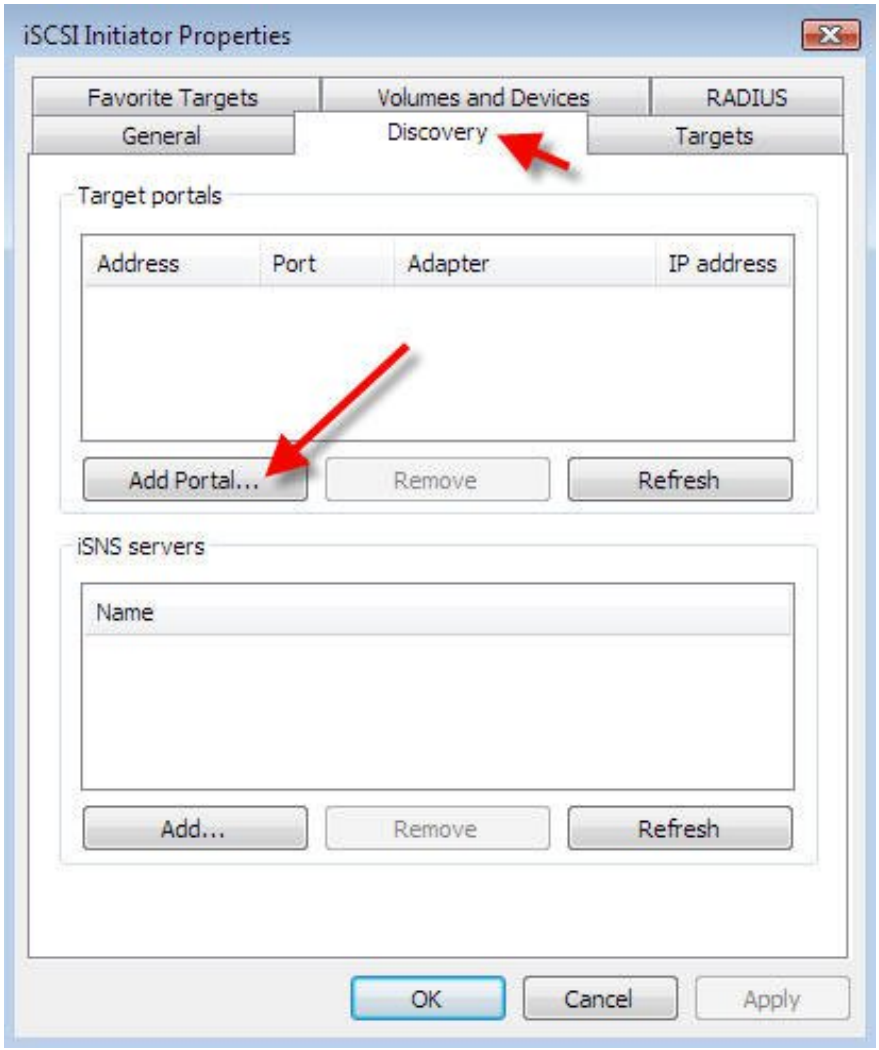

Figure 5: Vista - Add the iSCSI Portal

Enter the IP address or DNS name of the iSCSI server when the **Add Target Portal** window appears as follows:

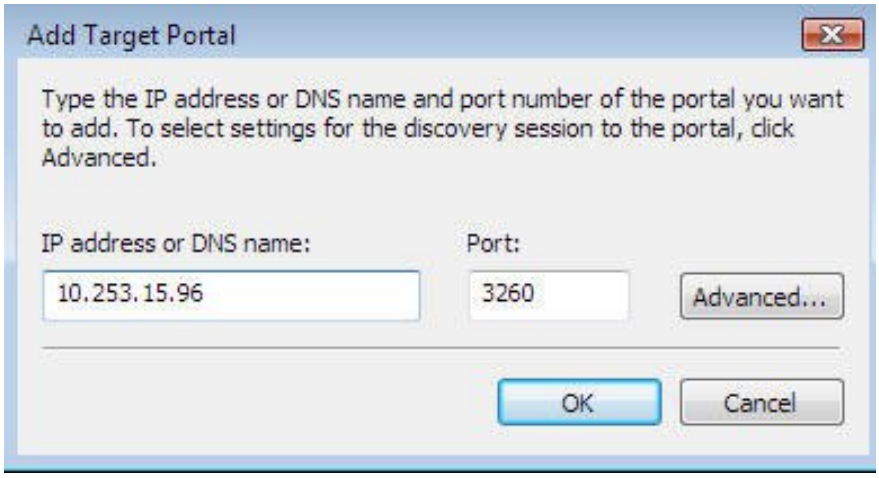

Figure 6: Vista - iSCSI is adding Target Portal

(port number 3260 is already here since this is the default iSCSI port number)

Click **OK** .

Go to the **Targets** tab and click **Refresh** . You will see the name of iSCSI Target in the list.

Select your target server and click **Log on** .

Click the **Automatically check** the option to **connect this connection when the computer starts** and click **OK** .

Figure 7: Log in to iSCSI Target

At this point you will see your status is **Connected**

Click **OK** and close the iSCSI Initiator Properties.

Click **Administrative Tools** , open **Computer Management** and click **Storage -> Disk Management** .

You will have to initialize the disk if not previously used.

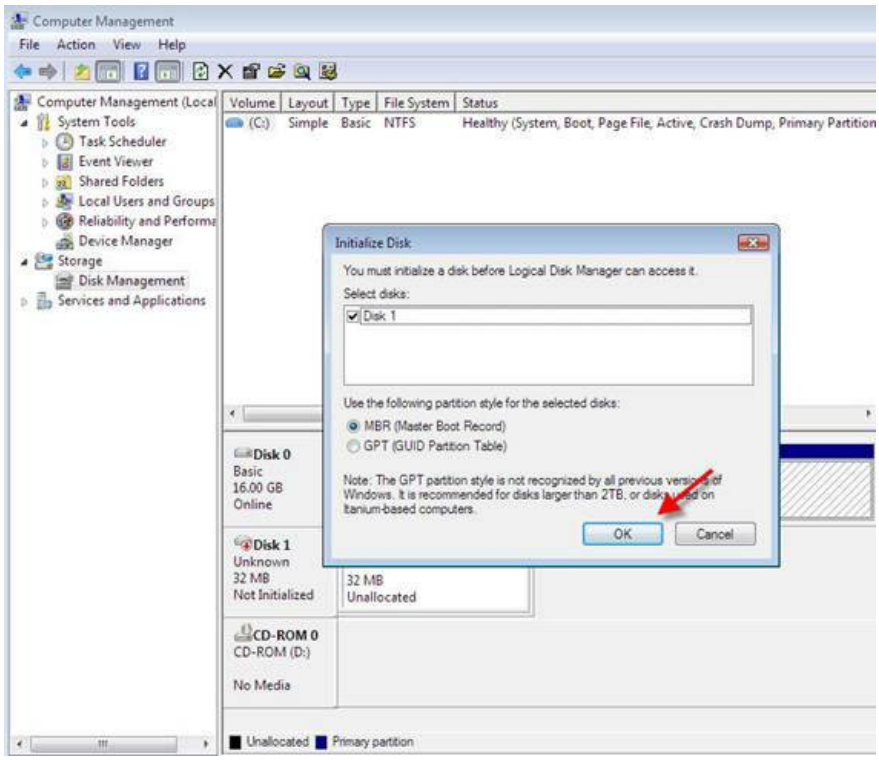

Figure 8: Vista's Disk Manager 1

You should now see the new drive in Disk Manager. In our case, you will see **Disk 1 / Basic / 32MB / Online** as shown in the image above.

(We created a disk size of 32MB for demonstration purposes only)

Right-click the disk and click **New Simple Volume.**

Take turns through the steps to format and assign drive letters.

When you're done, your disk manager will look like the following:

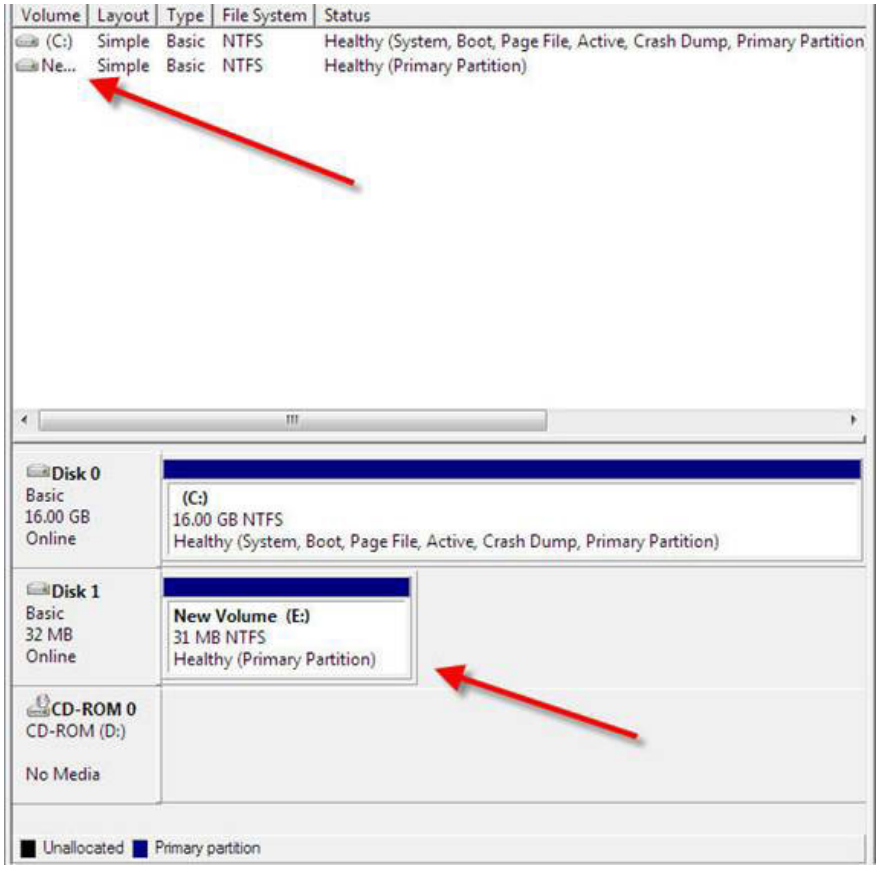

Figure 9: Vista's Disk Manager 2

You can access the shared iSCSI disk in My Computer as a regular drive letter, like this:

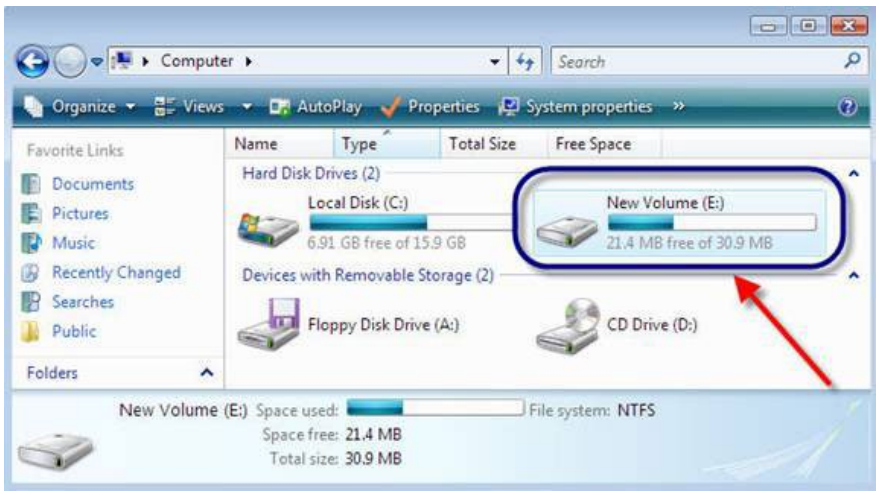

Figure 10: Observe the new iSCSI partition in My Computer

To test, we tried a file on the new iSCSI E drive.

When our Vista iSCSI connection is complete, switch to Windows Server 2008.

Connect Windows 2008 Server with iSCSI Target

Next and like Windows Vista, to connect to Windows Server 2008 with the iSCSI target, you must go to the Control Panel and double-click the iSCSI Initiator initializer.

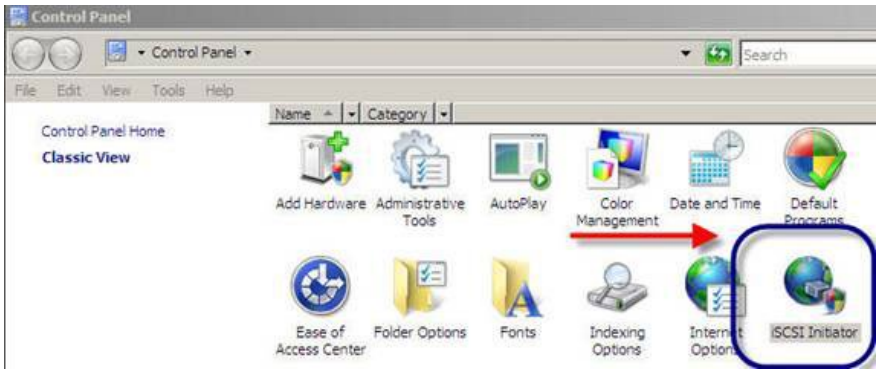

Figure 11: Windows Server 2008 - Launch iSCSI Initiator in Control Panel

Next you will be prompted to see if you want the iSCSI Service to start automatically. We have selected Yes in this case.

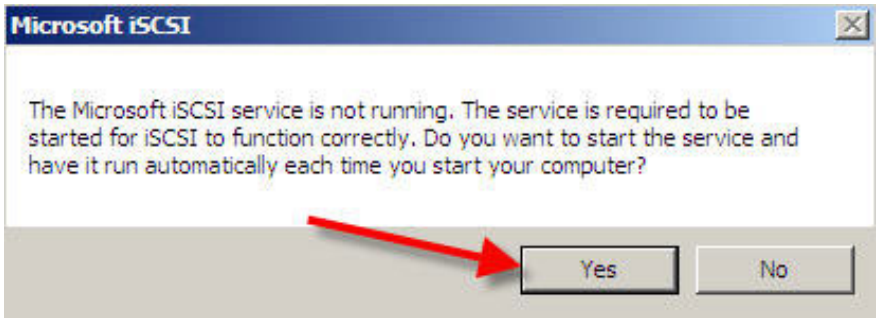

Figure 12: Windows Server 2008 - Launch iSCSI Initiator whenever Win 2008 starts

After clicking Yes, iSCSI is also enabled through the Windows Server 2008 firewall

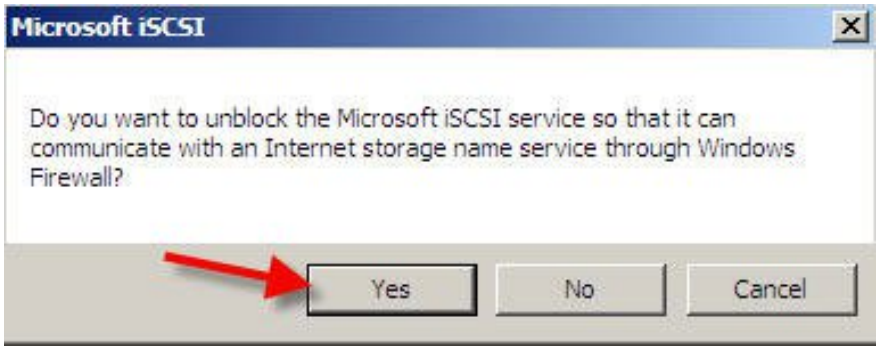

Figure 13: Windows Server 2008 - Allow iSCSI via Firewall

(The steps below are where you configure the iSCSI Initiator just like in Windows Vista).

- When the iSCSI Initiator Properties appears, click the Discovery tab and click **Add Portal** .
- Enter the IP address or domain name of the iSCSI server when the Add Target Portal window appears and click **OK** .
- Go to the Targets tab and click **Refresh** . You will see the name of your iSCSI Target in the list.
- Select your target server and click **Log on** .
- Check the **Automatically restore this connection when the computer starts option** and click **OK** .
- You should see your connected status now.
- Click **OK** and close the iSCSI Initiator Properties.

Because in our case, this iSCSI partition was initialized on a Windows Vista computer, we don't need to go into Disk Manager. However, if this is a new partition that has not yet been connected to another Windows computer, you need to use Windows Server 2008's Disk Manager to initialize the partition, format and assign the drive letter to it. .

When all these procedures are done, go to My computer and you can see this new disk partition.

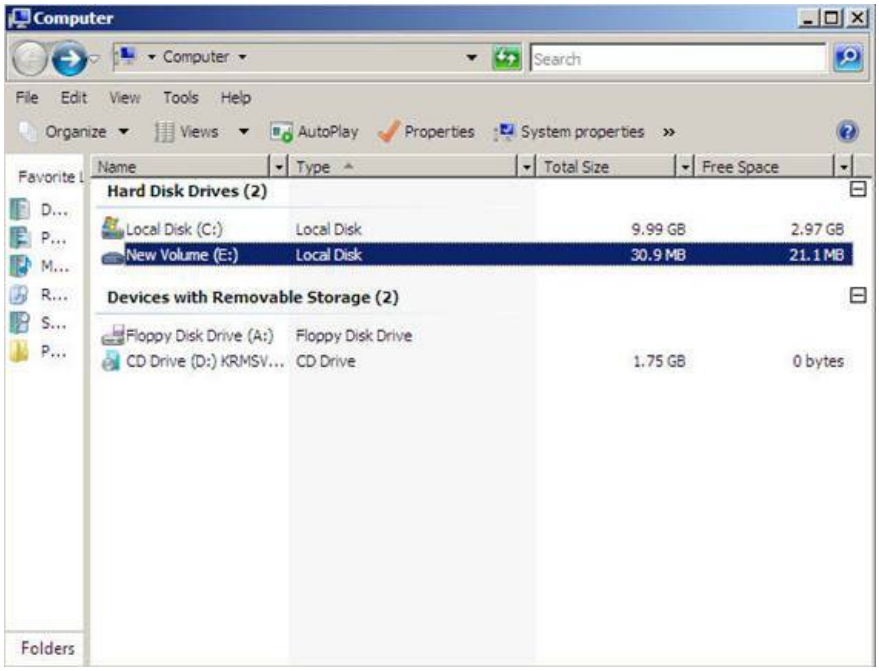

Figure 14: Windows Server 2008 - view the shared iSCSI partition

In fact, if you open this drive, you will see the file name we copied to the iSCSI shared partition from your Windows Vista computer (below).

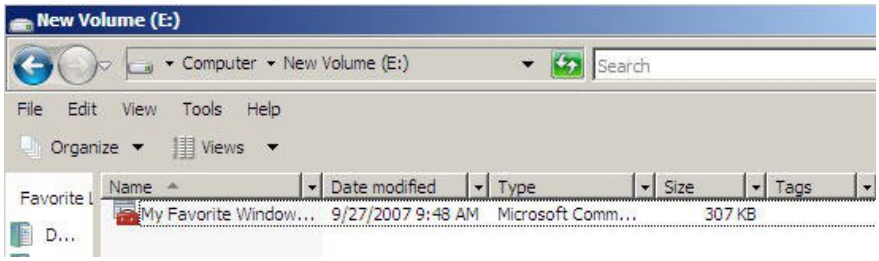

Figure 15: Windows Server 2008 - view shared iSCSI partitions and shared files

Conclude

ISCSI SAN technology is becoming more and more popular today. The ability to connect Windows Vista and Windows Server 2008 to iSCSI SAN is an extremely important skill for system administrators. Knowing how to set up iSCSI host will give you a lot of flexibility!

You finished reading the article "**How to connect Windows Server 2008 and Windows Vista to iSCSI server (Part 1)**" edited by the **TipsMake** team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.