

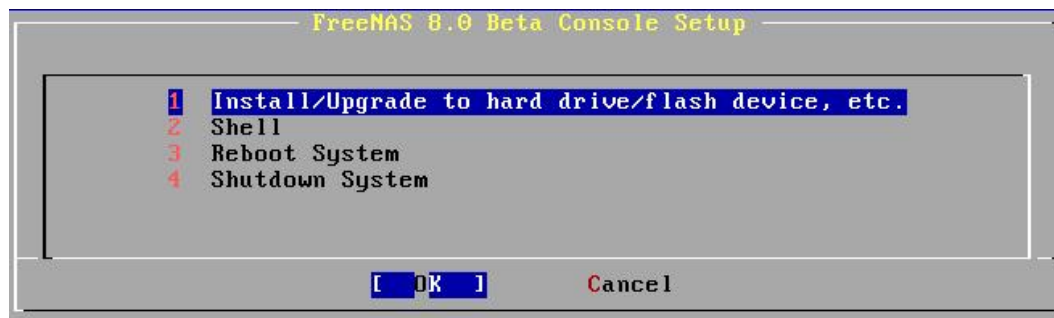
Installing from CDROM

If you prefer to install FreeNAS using a menu-driven installer, download the ISO image that matches the architecture of the system you will install onto (32 or 64 bit) and burn it to a CDROM.

NOTE: the installer on the CDROM will recognize if a previous version of FreeNAS 8.x is already installed, meaning the CDROM can also be used to upgrade FreeNAS. However, the installer can not perform an upgrade from a FreeNAS 7.x system.

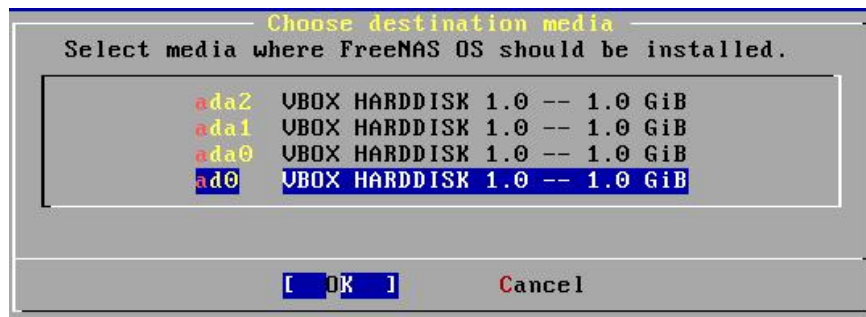
Insert the CDROM into the system and boot from it. Once the media has finished booting, you will be presented with the console setup menu seen in Figure 2.2a:

Figure 2.2a: FreeNAS Console Setup



Press enter to select the default option of "1 Install/Upgrade to hard drive/flash device, etc.". The next menu, seen in Figure 2.2b, will list all available drives, including any inserted USB thumb drives:

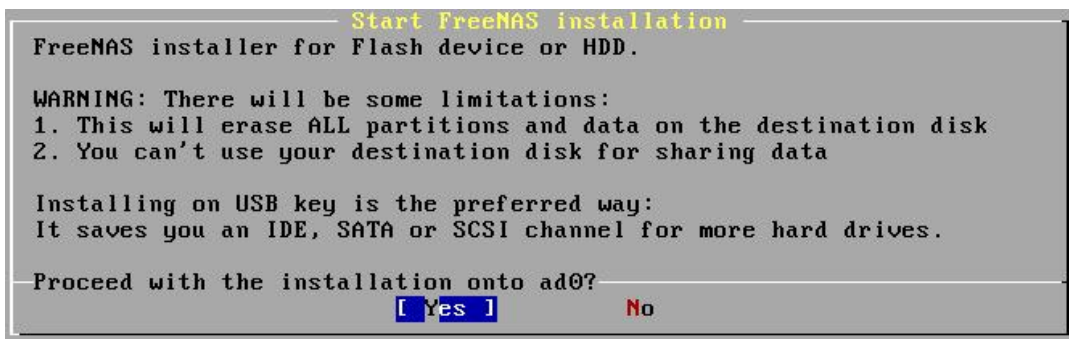
Figure 2.2b: Selecting Which Drive to Install Into



NOTE: FreeNAS is designed to be a running image that resides on a USB drive or compact flash card. On a production system, these devices are probably built-in. On a PC system, you will probably have to dedicate a USB thumb drive that remains inserted. You don't want to remove the thumb drive as it is a "running" operating system. You also don't want to install FreeNAS onto a hard drive as you will lose access to the entire hard drive, regardless of its size. While you could install an older, small drive to use for the operating system, these drives are less reliable (due to their age) and waste a disk slot. On a PC system, you're better off using a thumb drive and ensuring that it does not inadvertently get removed.

Once you make a selection and press enter, FreeNAS will issue the warning seen in Figure 2.2c:

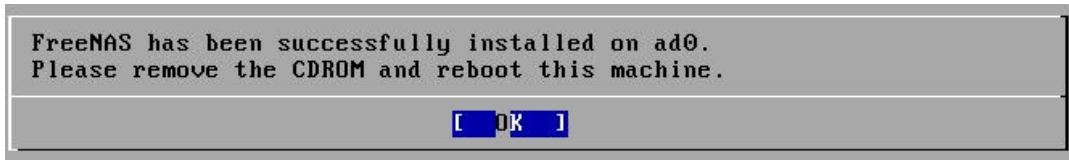
Figure 2.2c: FreeNAS Warning on Why You Should Install onto USB Flash Drive



If you wish to install to a USB thumb drive and haven't inserted it already, you can still insert a USB thumb drive, use the tab key in this menu to highlight "No", and press enter. This will return you to the Console Setup screen. If you press enter, your thumb drive should now be listed in the Drive Selection menu--it will begin with "da".

Highlight the desired device to hold the running image and press enter. This time, press Yes. FreeNAS will extract the running image from the ISO and transfer it to the device. Once the installation is complete, you should see the message in Figure 2.2d:

Figure 2.2d: FreeNAS Installation Complete

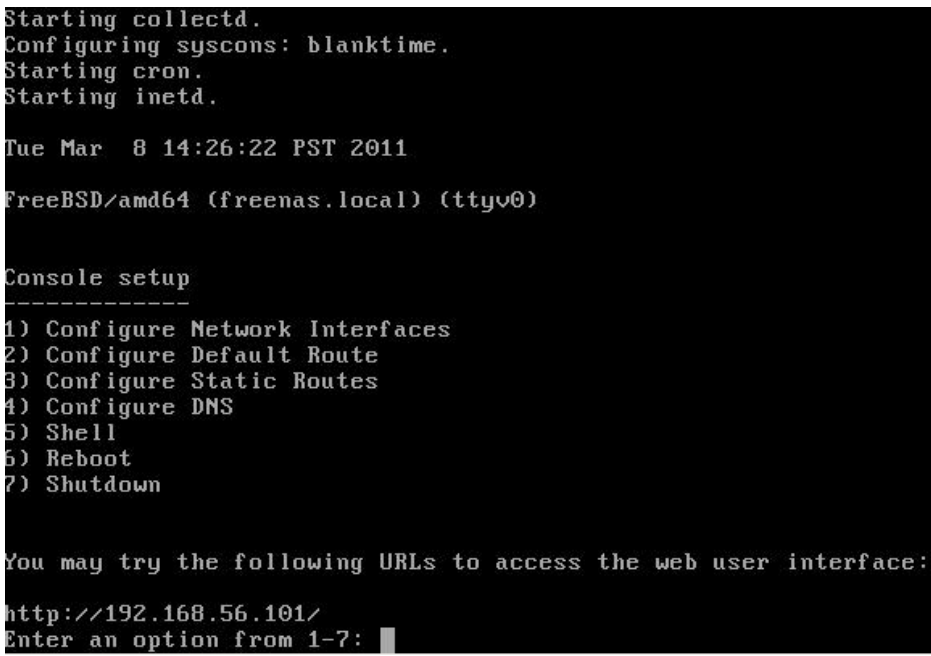


Press enter and you'll return to the first menu, seen in Figure 2.2a. Highlight "3 Reboot System" and press enter. Remove the CDROM. If you installed onto a USB thumb drive, leave the thumb drive inserted. Make sure that the device you installed to is listed as the first boot entry in the BIOS so that the system will boot from it. It should boot into the Console setup menu described in [Initial Setup](#).

Initial Setup

The first time you reboot into FreeNAS, you will be presented with the Console Setup screen shown in Figure 2.4a:

Figure 2.4a: FreeNAS Console Setup Menu



FreeNAS will automatically try to connect to a DHCP server on any live interfaces. If it successfully receives an IP address, it will display what IP address can be used to access the graphical console. In the example seen in Figure 2.4a, the FreeNAS system is accessible from <http://192.168.56.101>.

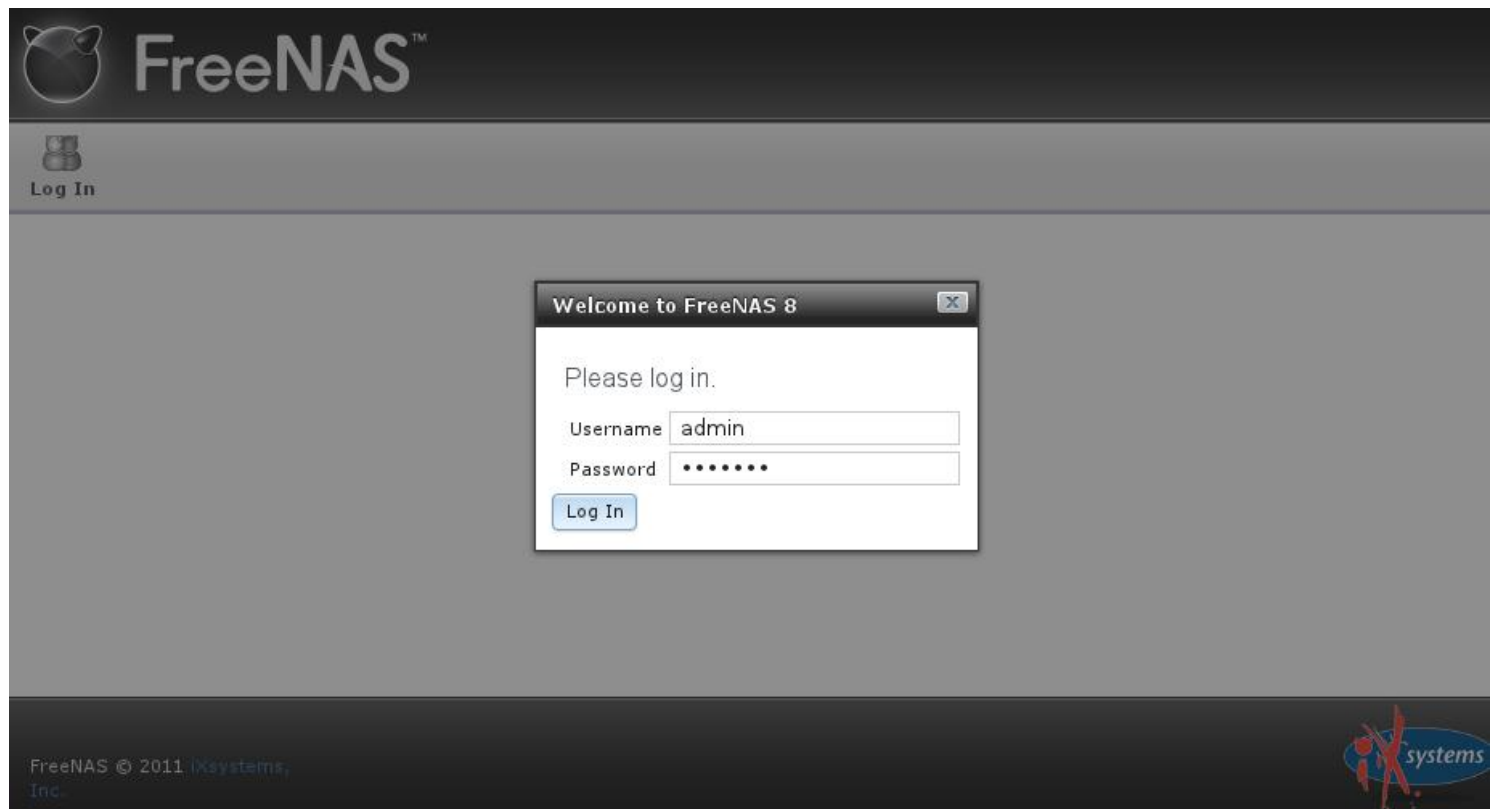
If your FreeNAS server is not connected to a network with a DHCP server, you will need to manually configure the interface as seen in Example 2.4a. In this example, the FreeNAS system has one network interface (em0):

Example 2.4a: Manually Setting an IP Address from the Console Menu

```
Enter an option from 1-8: 1
1) em0
Select an interface (q to quit): 1
Configure interface for DHCP? (y/n) n
Configure IPv4? (y/n) y
Interface name: (press enter as can be blank)
Several input formats are supported
Example 1 CIDR Notation:
192.168.1.1/24
Example 2 IP and Netmask seperate:
IP: 192.168.1.1
Netmask: 255.255.255.0, or /24 or 24
IPv4 Address: 192.168.1.108/24
Saving interface configuration: Ok
Configure IPv6? (y/n) n
Restarting network: ok
You may try the following URLs to access the web user interface:
http://192.168.1.108
```

From another system with a graphical web browser, input the IP address for your FreeNAS installation. The graphical logon should appear, as seen in Figure 2.4b:

Figure 6.4b: Logging into FreeNAS Using a Browser



Tip: If the graphical login does not appear, check that your browser configuration does not have any proxy settings enabled. If it does, disable them and try again.

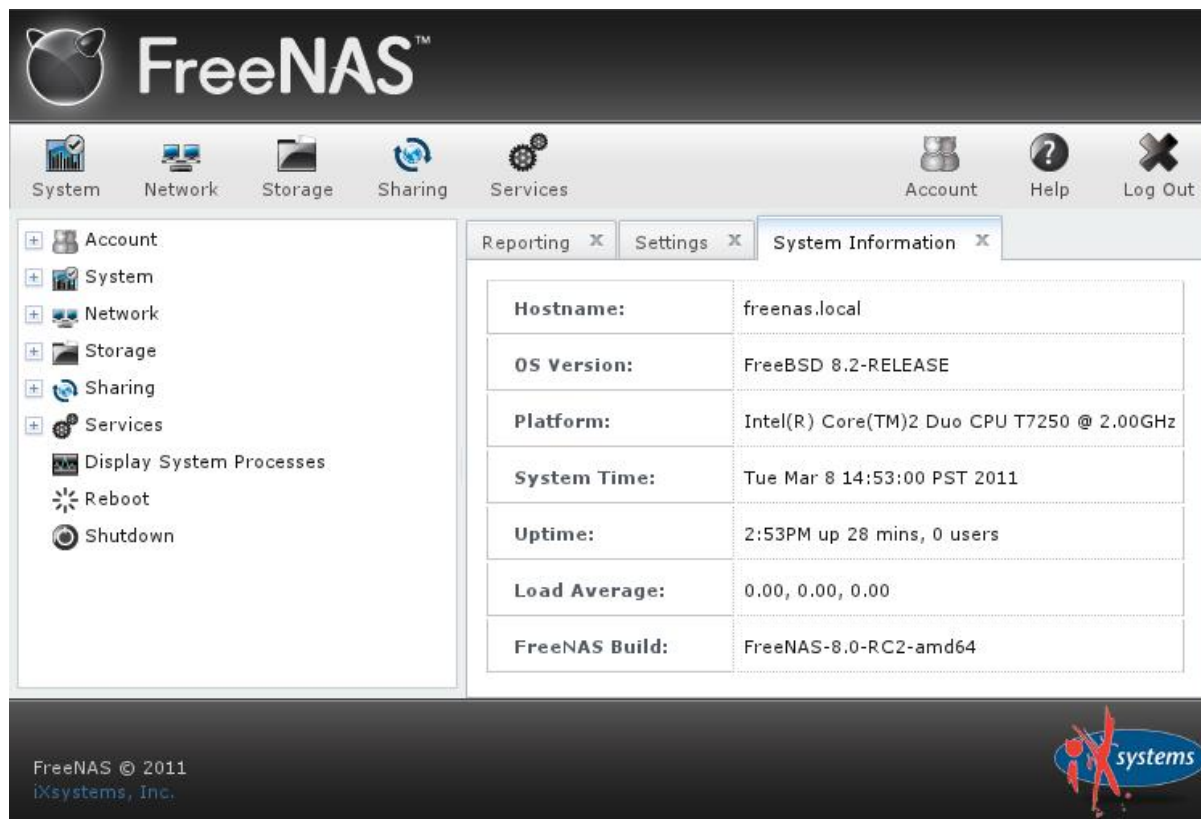
Enter the initial login information:

Username: admin

Password: freenas

The main page will now be displayed, as seen in Figure 2.4c:

Figure 2.4c: FreeNAS Graphical Configuration Menu



Windows Shares

FreeNAS uses Samba to share volumes with Microsoft operating systems. Before using Windows shares, you **MUST** enable Samba. To do that, click on Services and turn CIFS on.

Now you should create Windows Shares -> Add Windows Share you'll see the screen shown in Figure 6.3a:

Figure 6.3a: Adding a Windows Share

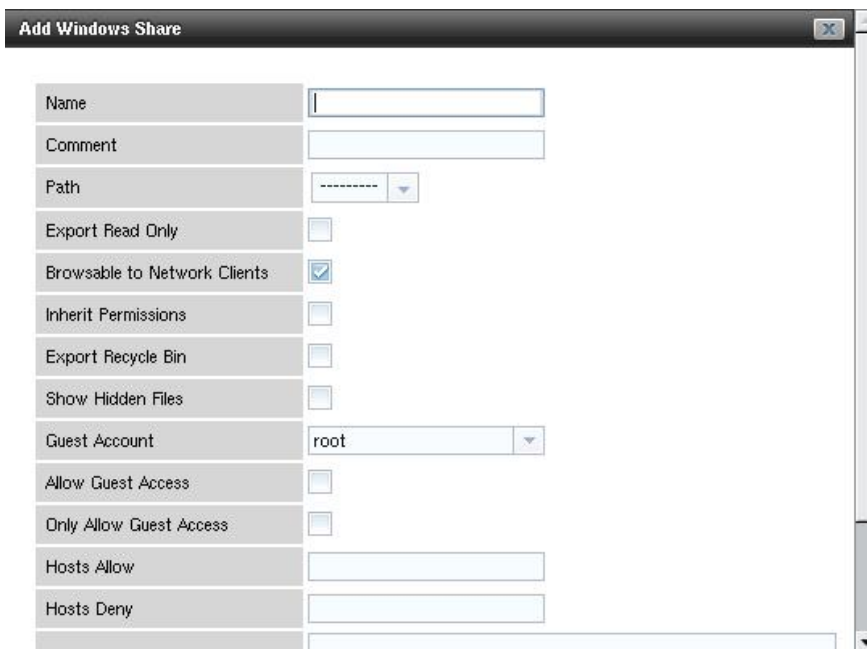


Table 6.3a summarizes the options when creating a Windows share:

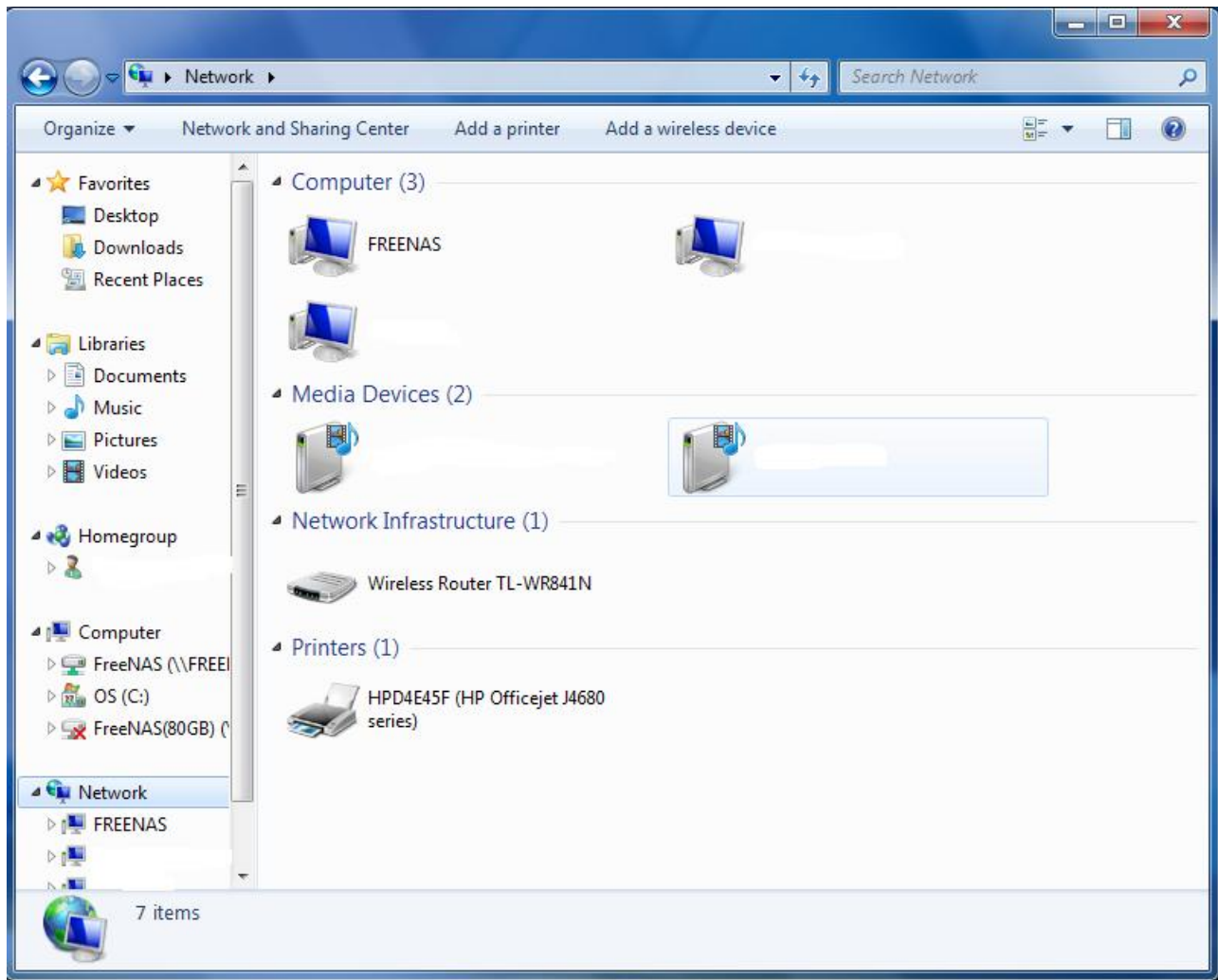
Table 6.3a: Options for a Windows Share

Setting	Value	Description
Name	string	mandatory. The sharename visible when browsing the NAS computer from the network. Eg. <i>Movies</i>
Comment	string	optional
Path	drop-down menu	select volume to share
Export Read Only	checkbox	prohibits write access to the volume
Browsable to Network Clients	checkbox	enables Windows clients to browse the shared directory using Windows Explorer
Inherit Permissions	checkbox	if checked, permissions on new files and directories are inherited from parent directory
Export Recycle Bin	checkbox	deleted files are moved to a recycle directory instead of being deleted
Show Hidden Files	checkbox	
Guest Account	drop-down menu	account to use for guest access
Allow Guest Access	checkbox	
Only Allow Guest Access	checkbox	forces guest access
Hosts Allow	string	comma, space, or tab delimited list of allowed hostnames or IP addresses
Hosts Deny	string	comma, space, or tab delimited list of denied hostnames or IP

		addresses. Allowed hosts take precedence so can use ALL here and specify allowed hosts in Hosts Allow
Auxiliary Parameters	string	add additional smb.conf parameters not covered by other option fields

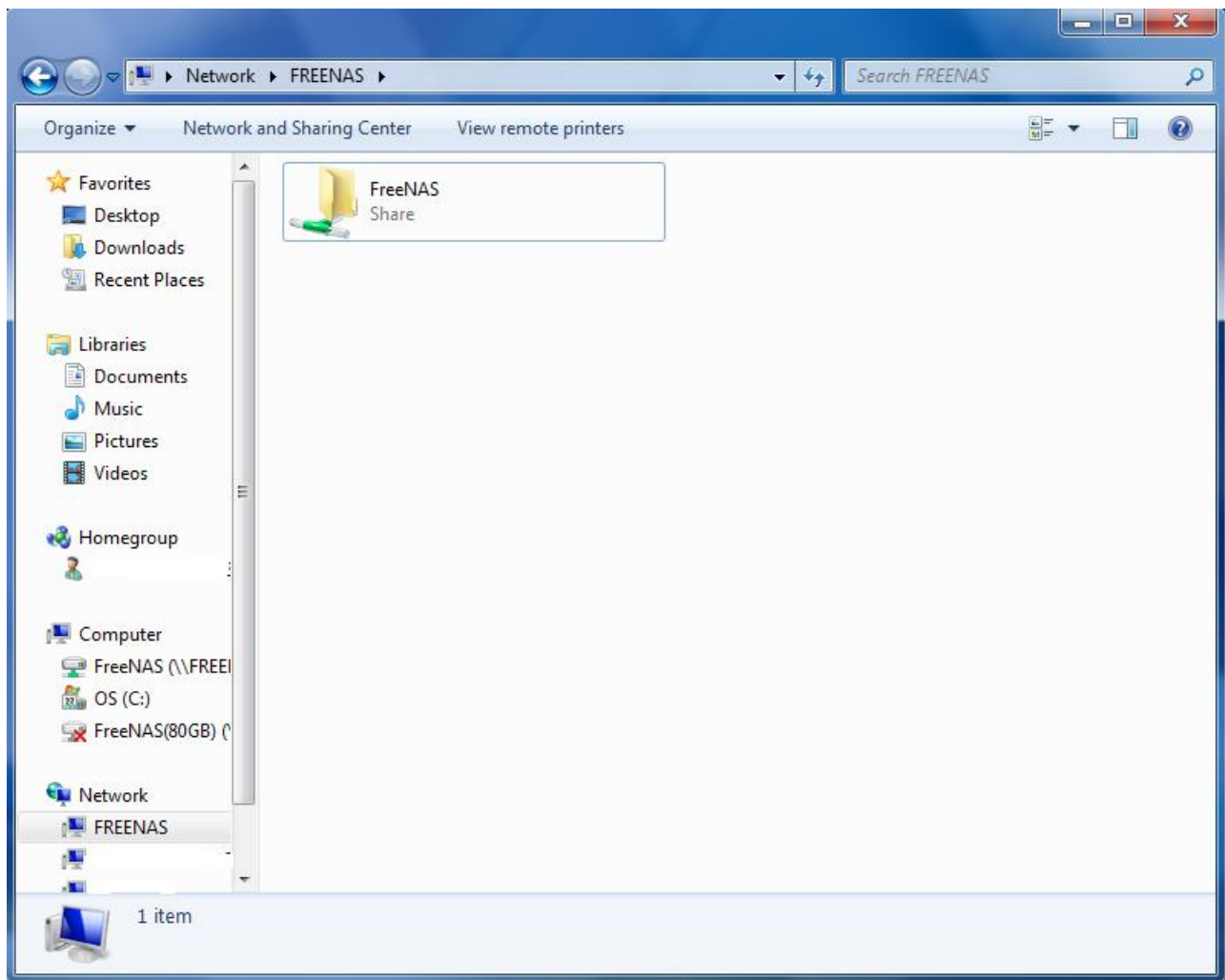
After creating your Windows share(s), don't forget to enable and configure the Active Directory or CIFS service in Services -> Control Services. Once the appropriate service is activated, you should be able to access the share from a Windows system. From the Windows system, open Explorer, click on Network and you should see an icon named FREENAS. An example is seen in Figure 6.3b:

Figure 6.3b: Accessing the Windows Share from a Windows Computer



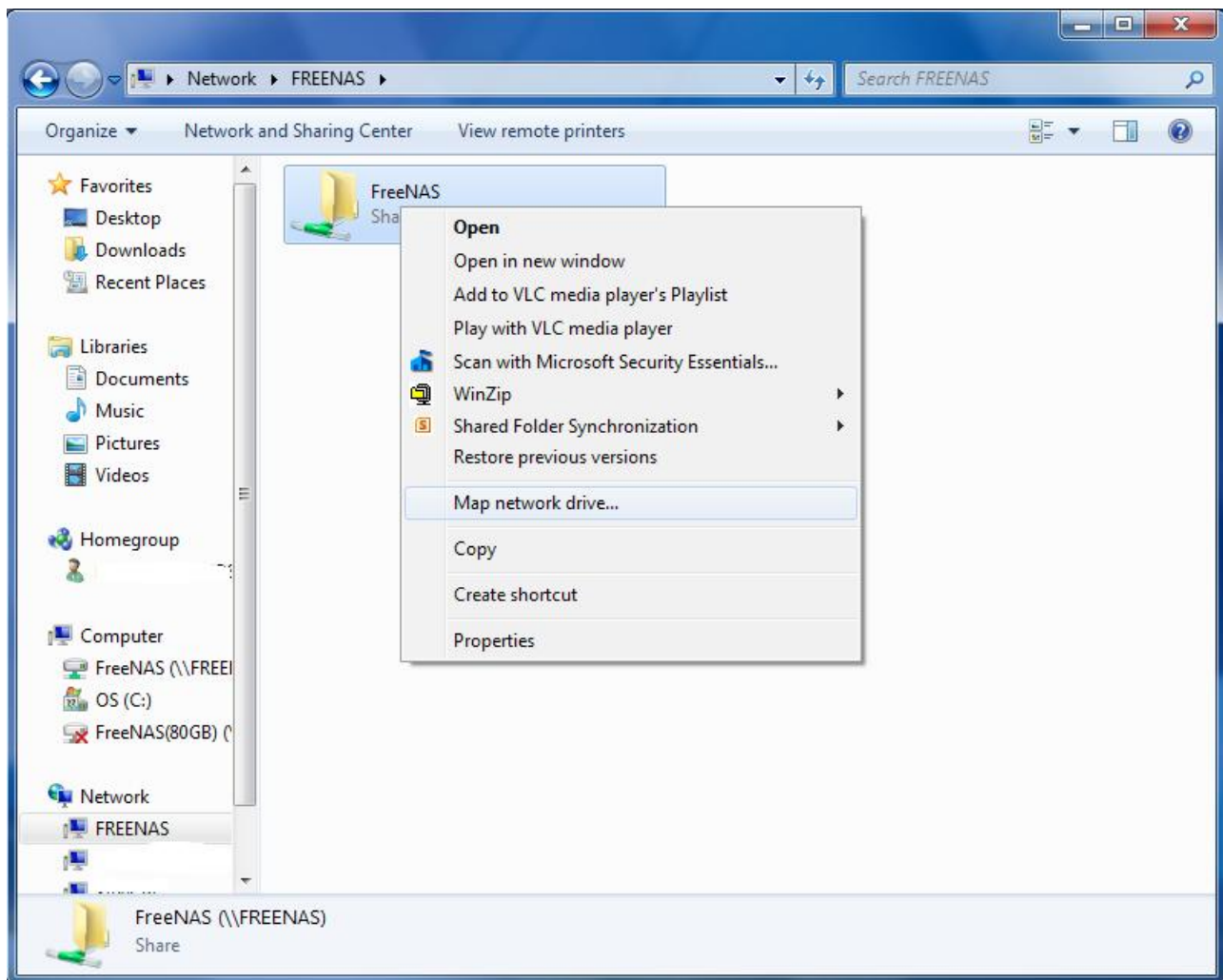
If you click on the FREENAS icon, you can view the Windows shares you created on the FreeNAS system. In the example shown in Figure 6.3c, the FreeNAS administrator has created one share:

Figure 6.3c: Viewing the FreeNAS Windows Share from Explorer



To map the share as a network drive, right-click the share and select "Map network drive..." as seen in Figure 6.3d:

Figure 6.3d: Mapping the Share as a Network Drive



Choose a drive letter from the drop-down menu and click the Finish button as shown in Figure 6.3e:

Figure 6.3e: Selecting the Network Drive Letter

