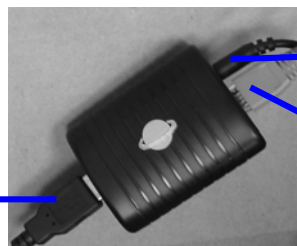


mini-NAS (DS-NU100) User Guide

1. Install storage

Connect to USB device,
something like USB enclosure,
printer, USB raid box, Xbox, PS3



DC 5V / 2A adapter

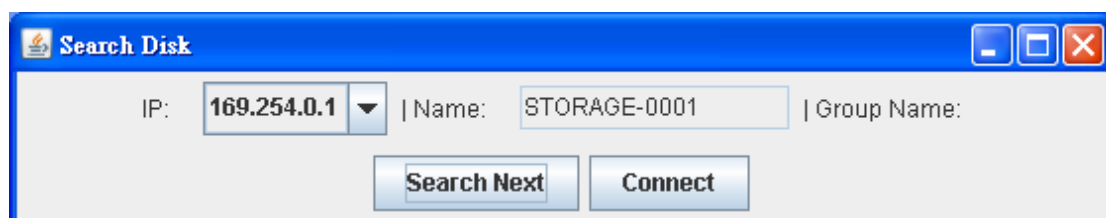
Connect to router
or [Ethernet hub](#)

1.1 Search Storage

1.1.1 Search Disk

Note: If your PC doesn't install Java Runtime Environment, please download from <http://www.java.com/>

A. Execute "Search Disk" Utility from PC & click in "Search Next"



B. Configure PC be AUTO IP

If your network environment have DHCP server: Storage will get the IP from DHCP server. Storage role in the DHCP client in this condition

If your network environment has no DHCP server: Storage automatically

becomes DHCP server itself. Storage role in the DHCP server in this condition .Storage default IP is 169.254.0.1 and your PC will connect Storage from browser


Click in "**Connect** " button and pop authentication dialog



Default user name and password "**admin/admin**"

2. WEB Control Page

2.2 Status

 mini Network Attached Storage

Status

IP Config

Disk Utility

Tools

SMB Server

FTP Server

Media Server

Printer Server

BitTorrent

System Information

| | | |
|------------------|---------------------------------|--------|
| Host Name | STORAGE-0001 | Change |
| Group Name | WORKGROUP | Change |
| Administrator | admin | Change |
| Date/Time | 2009/04/17 11:20:10 GMT -8:00 | Change |
| Firmware Version | R3282-1.40b LOADER32 1.15 W1.11 | |

Network Information

| | | |
|-------------|---|-------|
| IP Address | 192.168.1.100 | Apply |
| MAC Address | 00:0b:b4:00:00:00 | |
| DHCP Server | OFF <input type="radio"/> ENABLE <input checked="" type="radio"/> DISABLE | |

Service Information

| | | |
|-------------|---|-------|
| SMB Service | <input checked="" type="radio"/> ENABLE <input type="radio"/> DISABLE | Apply |
| FTP Service | <input checked="" type="radio"/> ENABLE <input type="radio"/> DISABLE | Apply |

Disk Information

| | |
|------------|-----------------|
| Disk ID | USB 2.0 Storage |
| Free Size | 57207 MB free |
| Total Size | 57231 MB |

Display storage current status

2.1.1 System Information

2.1.1.1 Host Name / Group Name

Click "**Status**" -> "**Change**" button (beside host and group name) to get into Identification page

Host Name: default value is STORAGE-XXXX. The last 4 digital xxxx depend on storage MAC address °

Storage on a network needs unique names so they can identify and communicate with each other. It's best to keep host names short (fifteen characters or less) and easily recognizable.

We recommend that you use only Internet-standard characters in the computer name. The standard characters are the numbers 0 through 9, uppercase and lowercase letters from A through Z, and the hyphen (-) character. Computer names cannot consist entirely of numbers, nor can they contain spaces. The name also cannot contain special characters, such as the following:

< > ; : " * + = \ | ? ,

Group Name: default value is WORKGROUP

A group of computers that is connected to a network and share resources: such as printers and files. When you set up a network, Windows automatically creates a workgroup and gives it a name.

2.1.1.2 Administration

Click "**Status**" -> "**Change**" button (beside administrator) to get into administration page

Administrator: default is "**admin**" and this field can't change by user

Password: default is "**admin**", this field will change logon WEB password by user

Verify password: confirm password

After input password and click "**ok**" button, browser will re-login, and pop login dialog

2.1.1.3 Date/Time

Click "**status**" -> "**Change**" button (beside Date/Time) to get into Date and Time page

Date: set manual Date (yyyy/mm/dd)

Time: set manual Time (hh:mm:ss)

SNTP: enable/disable SNTP client

Time server: locate time server

Time Zone: click your current time zone in the list, and then click **OK**.

Daylight saving time : If your time zone observes daylight saving time and you want your storage clock to be adjusted automatically when daylight saving time changes, make sure the Automatically adjust clock for Daylight Saving Time check box is selected

2.1.1.4 Firmware version

Display firmware and loader current version

2.1.2 Network Information

2.1.2.1 IP Address

Display storage IP address

2.1.2.2 MAC Address

Display storage MAC address

2.1.2.3 DHCP Server

Enable / Disable DHCP server.

Enable DHCP server, Storage default IP is 169.254.0.1

Disable DHCP server with no DHCP server environment, the storage IP is 169.254.X.X

Disable DHCP server with DHCP server environment, the storage get the IP from DHCP server

2.1.3 Service Information

SAMBA Service: Disable / Enable SAMBA server

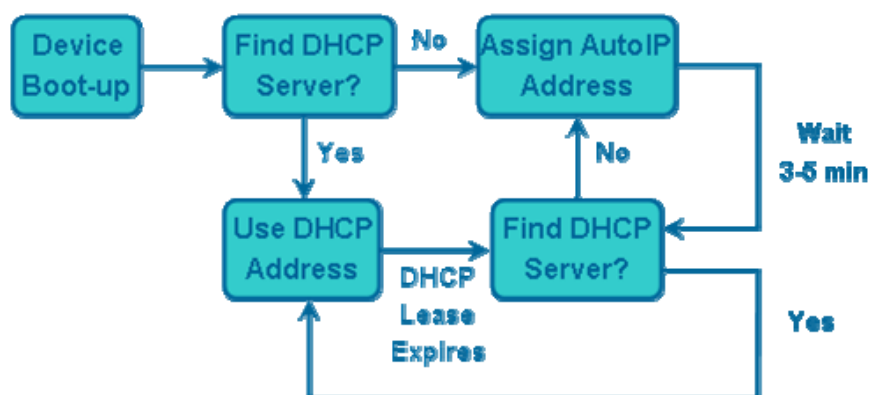
FTP Service: Disable / Enable FTP server

2.1.4 Disk Information

Display Hard Disk model / Free Size / Total Size information

2.2 IP config

2.2.1 Auto IP



Upon boot-up the device must check for DHCP servers on the network

If a DHCP server is active/available, then the device must assign itself a DHCP address according to the instructions provided by the DHCP server

If no DHCP servers are active/available, the device must assign itself an Auto IP address and role play as DHCP server (169.254.0.1 / 255.255.0.0 / no gateway)

2.2.2 Static IP

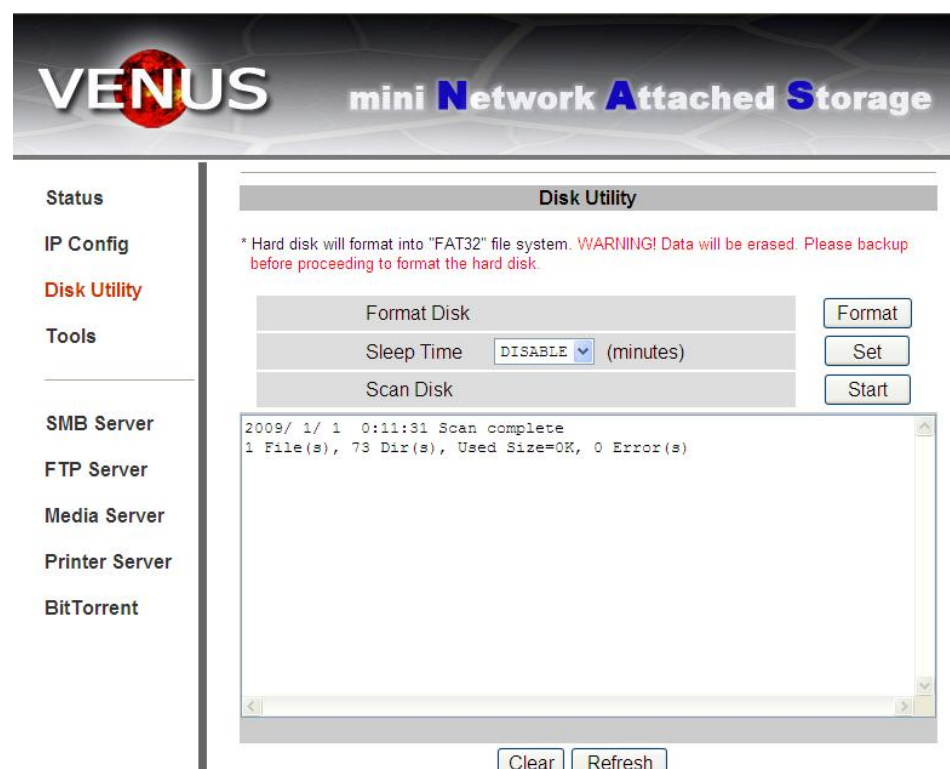
IP address: this is the IP address assigned by your Router for your Storage. You shall specify the IP address of the storage here. e.g. 192.168.1.123

Subnet Mask: an address code that determines the size of the network; this is the subnet mask of the storage, when seen by external users on the Internet (including your ISP). The subnet mask is provided by your ISP.
e.g.255.255.255.0

Gateway IP Address: an IP address forwards Internet traffic from your local area network (LAN). e.g. 192.168.1.1

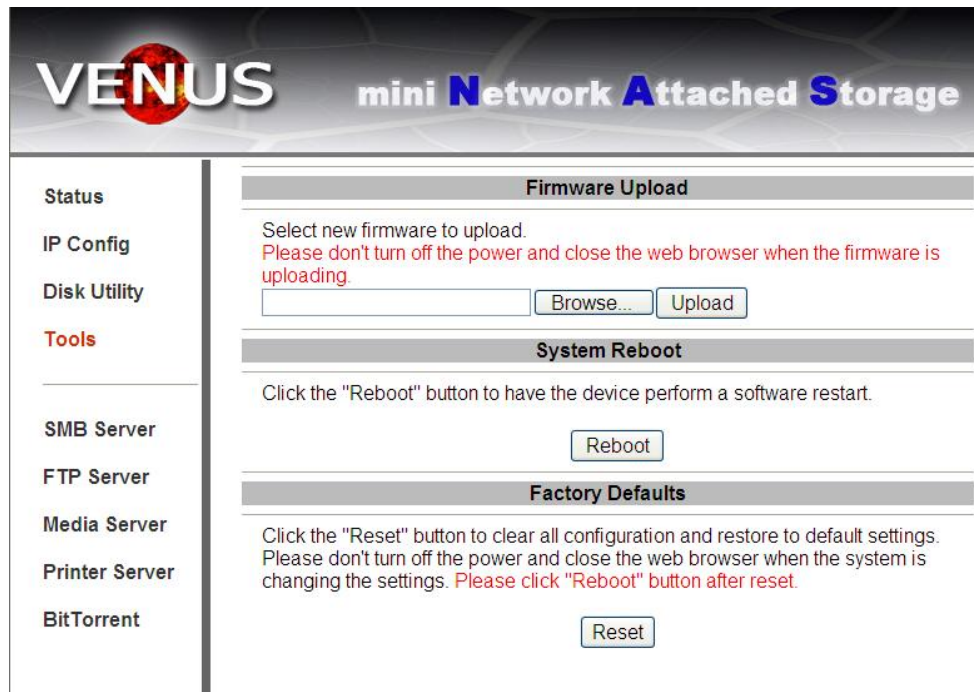
DNS Server IP address: you must specify DNS server IP address here if your ISP has the said address.

2.3 Disk Utility



- Format Disk: the format utility ,it will erase all data on Hard Drive
- Sleep Time: configure the time Hard Drive get into sleep mode
- Scan Disk: the scan disk utility, it will check error data in Hard drive

2.4 Tools



2.4.1 Firmware Upload

You can select new firmware to upload. Please don't turn off the power and close the web browser when the firmware is uploading

2.4.2 System Reboot

Click the Reboot button to have the device perform a software restart. The SYSTEM LED will blink as the device restarts and then remain on if the restart is successful. Please wait about a minute before refreshing your browser before logging in again

2.4.3 Factory Default

Turn off the power at first. Click and hold **"Factory default setting"** button then reboot system (release it after power on 5 seconds) to clear all configurations and restore to default settings.

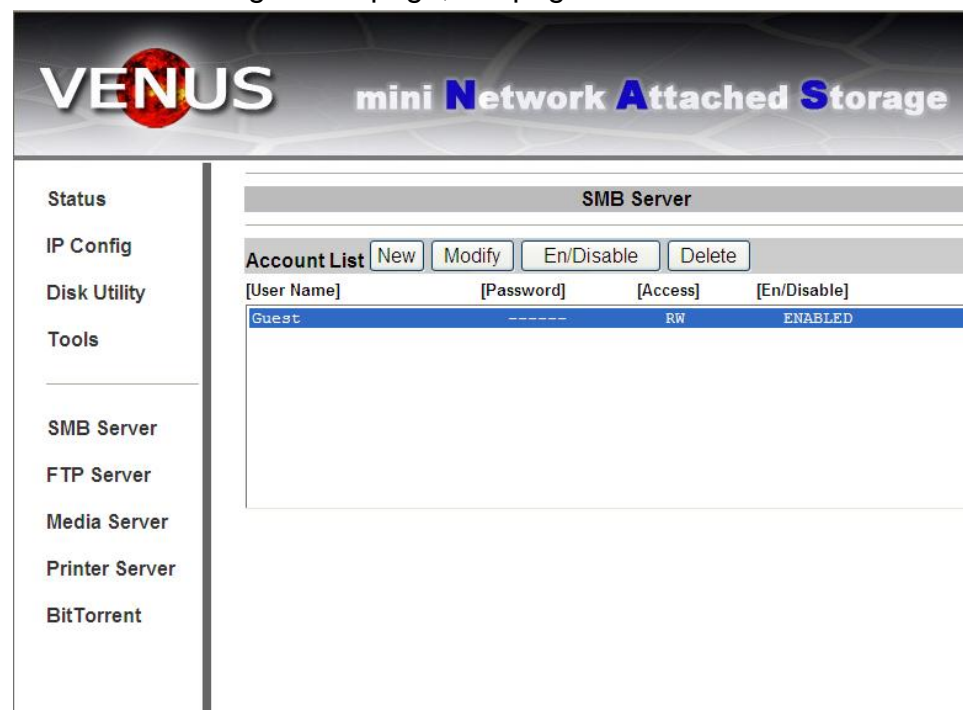
2.5 SMB server

Samba is software that can be run on a platform other than Microsoft Windows, for example, UNIX, Linux, IBM System 390, OpenVMS, and other operating systems. Samba uses the TCP/IP protocol that is installed on the host server. When correctly configured, it allows that host to interact with a Microsoft Windows client or server as if it is a Windows file and print server.

- Share one or more directory trees
- Share one or more Distributed file system (Dfs) trees
- Assist clients with network browsing
- Provide or assist with Windows Internet Name Service (WINS) name-server resolution
- Share printers installed on the server among Windows clients on the network (not support)
- Authenticate clients logging onto a Windows domain (not support)

2.5.1 Configure SMB Server

Connect to storage SMB page, the page as bellow:



- **NEW:** create SMB share account (folder) and password , default account :guest password: null

- **Modify:**

This page can modify as bellow

Password: password of SMB account

Access control: read only / read and write access control of SMB account

Folder sharing: **Folder List** is all of exist folder on storage; **Sharing List** is share folder of SMB account. If you want to share some folder, select this folder from Folder List and add to Sharing List.

Folder manage: create / rename /delete folder

- Enable/ Disable: this button can enable/disable SMB account
- Delete: delete SMB account

2.5.2 Setting up Windows 95/98/Me Computers

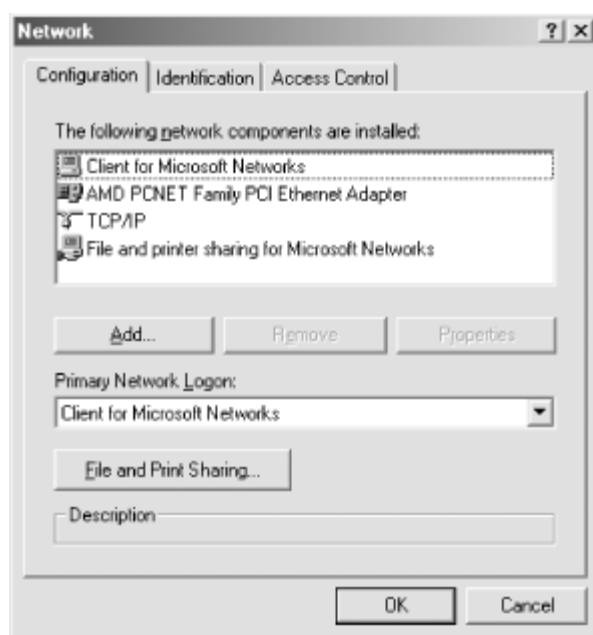
The Windows 95/98/Me operating systems are very similar to each other; it is possible to treat them with a common set of directions

- **Add "File and printer sharing for Microsoft Networks,"**

Samba uses TCP/IP to communicate with clients on the network, so you will need to make sure there is support for TCP/IP on each Windows client. Unlike UNIX operating systems, Windows does not necessarily have support for

TCP/IP installed. However, when Windows is installed on a computer with a network card or a network card is added to a system already running Windows, TCP/IP support is installed by default, along with the Client for Microsoft Networks, which supports SMB file sharing

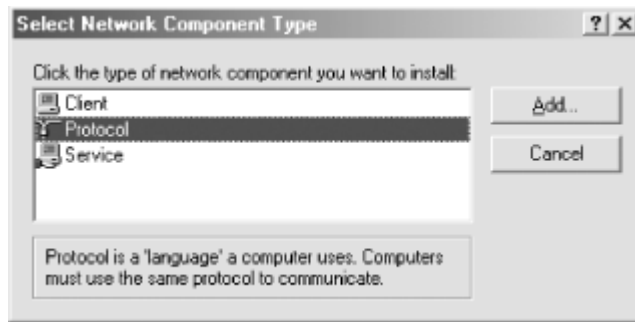
To make sure both services are installed on your Windows system, double-click the Network icon in the Control Panel to open the Network dialog box, as shown in bellow:



You might also see "**File and printer sharing for Microsoft Networks,**" which is used to make the system into a server. In addition, you might see NetBEUI or Novell Networking.

- **Adding TCP/IP**

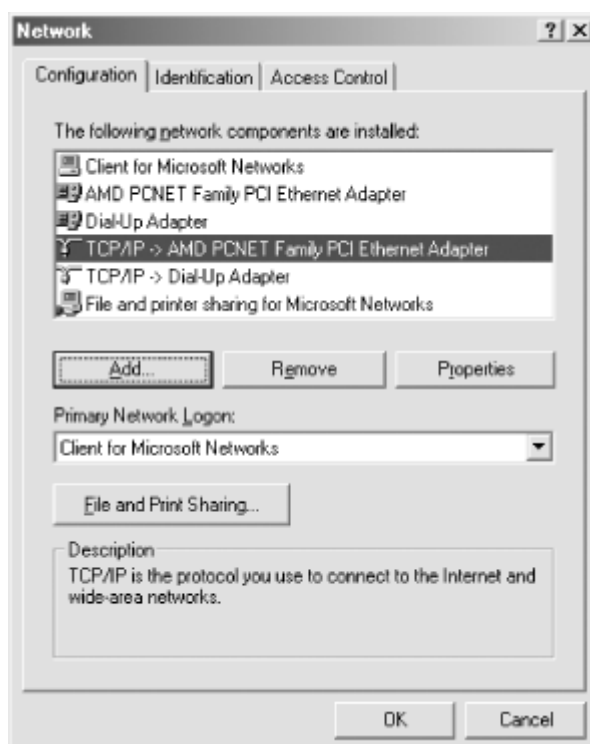
If you don't see TCP/IP listed, you'll need to install the protocol. You can add the protocol by inserting the Windows distribution CD-ROM in your CD-ROM drive and clicking the Add button below the component window. Indicate that you wish to add a protocol by selecting Protocol and clicking "Add..." on the following dialog box, which should look similar as bellow:



After that, select manufacturer Microsoft, then protocol TCP/IP, then clicks OK. After doing so, you will be returned to the network dialog. Click OK to close the dialog box, and Windows will install the necessary components from the CD-ROM and request that the system be rebooted. Go ahead and reboot the system, and you're set.

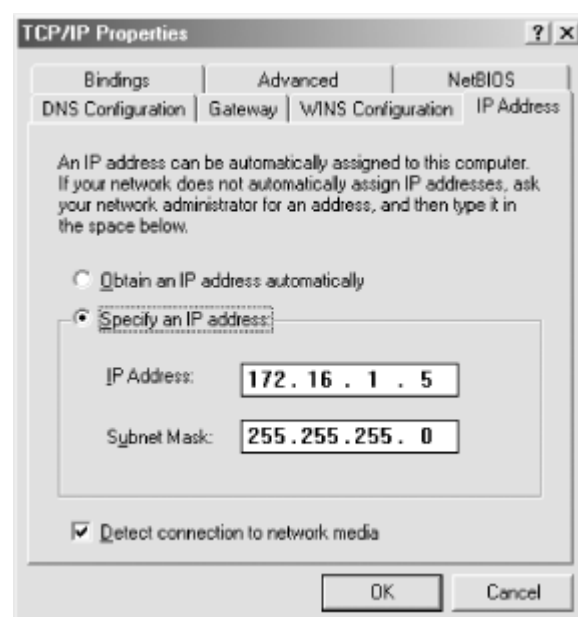
● **Configuring TCP/IP**

Select the TCP/IP protocol linked to the networking device that will be accessing the Samba network. If you have only one networking device, simply click the TCP/IP item. Now click the Properties button to open the TCP/IP Properties dialog. You should see something similar as bellow:



- **IP Address tab**

The IP Address tab is shown as bellow



If you use DHCP on your network to provide IP addresses automatically to Windows systems, select the "Obtain an IP address automatically" radio button. Otherwise, click the "Specify an IP address" radio button and enter the client's address and subnet mask in the space provided. You or your network manager should have selected an address for the client on the same subnet (LAN) as the Samba server.

- **Setting the Computer Name and Workgroup**

Finally, click the OK button in the TCP/IP configuration dialog, and you'll be taken back to the Network Configuration dialog. Then select the Identification tab, which will take you to the dialog box shown as bellow:



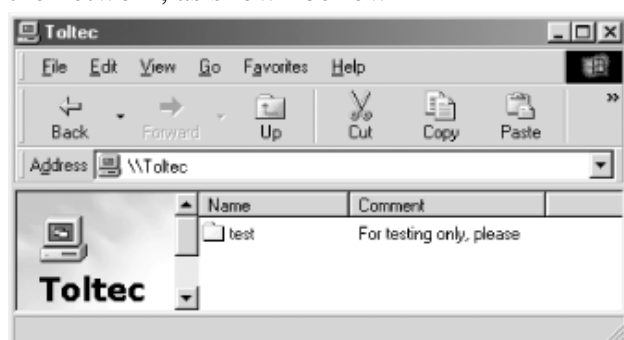
Finally, click the OK button and follow whatever instructions Windows provides. (You might have to insert your Windows distribution CD-ROM and/or reboot.)

● Accessing the Samba Server from Windows 95/98

Double-click the Network Neighborhood icon on the desktop. You should see your Samba server listed as a member of the workgroup, as shown bellow:

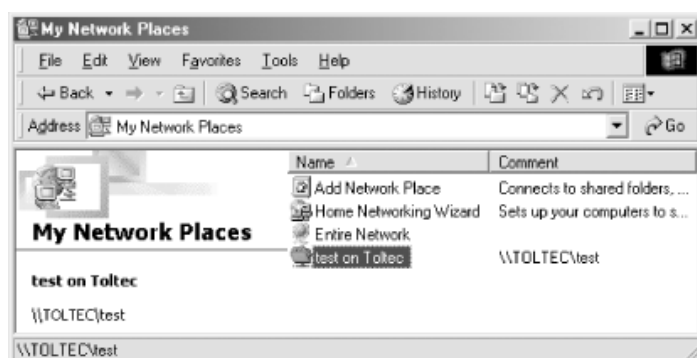


Double-clicking the server name will show the resources that the server is offering to the network, as shown bellow

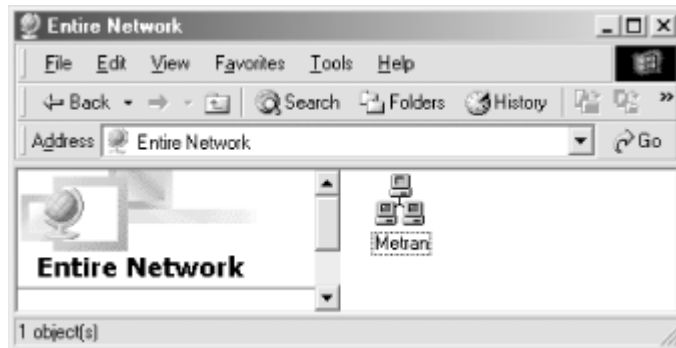


● Accessing the Samba Server from Windows Me

Double-click the My Network Places icon on the desktop. You should see the test shared directory as shown in bellow



Double-click the Entire Network icon, and you should see an icon for your workgroup, as shown in bellow



NOTE:

If you don't see the server listed, it might be that browsing is not working correctly or maybe the server is just taking a few minutes to show up in the browse list. In either case, you can click the Start button, then select "Run...". This will give you a dialog box into which you can type the name of your server and the share name *test* in the Windows UNC format `\\server\test`. This should open a window on the desktop showing the contents of the folder. If this does not work, there is likely a problem with name resolution, and you can try using the server's IP address instead of its computer name, like this:

\\192.168.1.12\test

If it works, congratulations! Try copying files to and from the server using the Windows drag-and-drop functionality. You might be pleasantly surprised how seamlessly everything works

2.5.3 Setting up Windows XP Computers

Although Windows XP is very similar to Windows 2000, it has a very different user interface, and there are a number of subtle differences. For example, getting to the Control Panel is different than in any previous version of Windows—one must click the Control Panel item from the Start menu (there is no Settings item in the Start menu in XP). By default, XP will display the Control Panel in Category View mode. If you see this, click the Switch to

Classic View item in the upper-left corner of the window. All of our directions are for using the Control Panel in Classic View mode.

You should perform the following steps as the Administrator or another user in the Administrators group.

● **Networking Components**

Go to the Control Panel and double-click the Network and Dial-up Connections icon. You should see at least one Local Area Connection icon. If there is more than one, identify the one that corresponds to the network adapter that is connected to your Samba network. Right-click the Local Area Connection icon and click the Properties button. (Or double-click the Local Area Connection icon and then click the Properties button in the dialog box that comes up.) You should now be looking at the Local Area Connection Properties dialog box, as shown in bellow



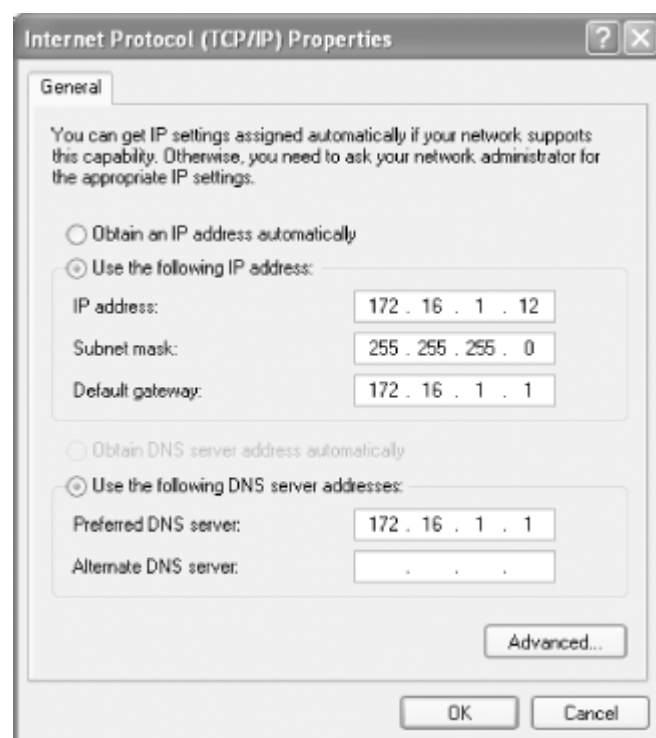
You should see at least the following two components:

- Client for Microsoft Networks
- Internet Protocol (TCP/IP)

If you do not see either Client for Microsoft Networks or Internet Protocol (TCP/IP) in your list, you will need to add them. For either, the method is to click the Install... button, click the type of component (Client or Protocol), and then click the Add... button. Next, click the component you want to add, and click the OK button. You should see the component added to the list with the others.

- **Configuring TCP/IP**

Now click Internet Protocol (TCP/IP) and then click Properties to open the Internet Protocol (TCP/IP) Properties dialog box, shown in bellow



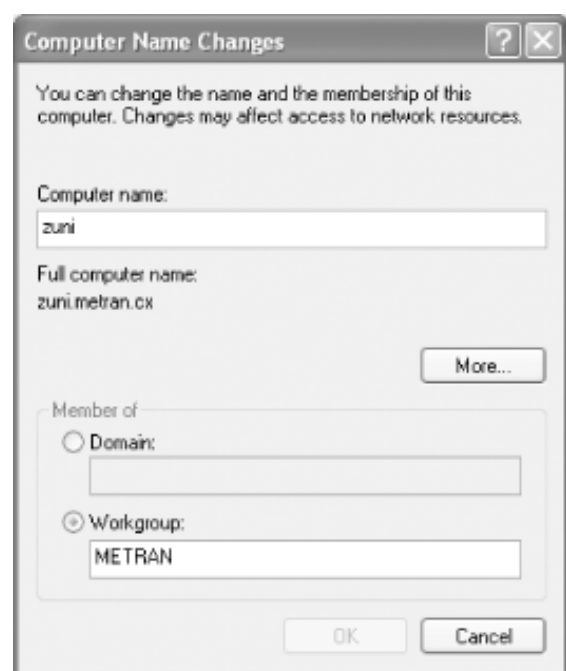
If you are using DHCP on your network to assign IP addresses dynamically, select the "Obtain IP address automatically" radio button. Otherwise, select the "Use the following address:" radio button, and fill in the computer's IP address and netmask in the spaces provided. You or your network manager should have selected an address for the client on the same subnet (LAN) as the Samba server. For example, if the server's address is 192.168.1.1 and its network mask is 255.255.255.0, you might use the address 192.168.1.12 (if it is available) along with the same netmask. You can also fill in the IP address of the default gateway.

● Computer and Workgroup Names

From the Control Panel, double-click the System icon to open the System Properties dialog box. Click the Computer Name tab, and your System Properties dialog box will look similar to:



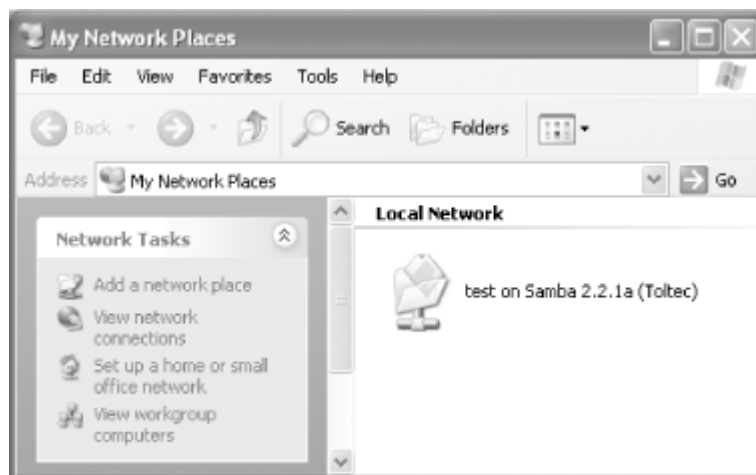
To give your system computer a name and a workgroup, click the Change... button, which will bring up the Computer Name Changes dialog box, as in below



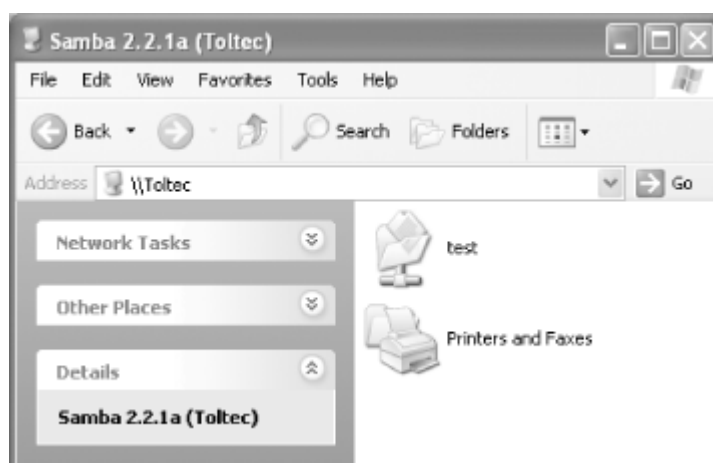
You need to identify your computer with a name and change the workgroup to the one you specified in the web page of your Samba server. Don't worry that Windows forces the workgroup to be all capital letters; it's smart enough to figure out what you mean when it connects to the network.

● **Connecting to the Samba Server**

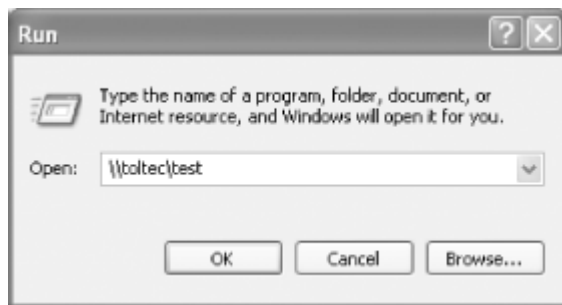
Assume your Samba server is running, and you have set up your Windows XP client to communicate with it. In the Start menu, select My Computer to open the My Computer window. Click My Network Places, in the Other Places box in the left part of the window. You should see a folder icon for the *test* directory, as shown in bellow



Now click View workgroup computers in the Network Tasks box at the left of the window. You should see your Samba server listed as a member of the workgroup. Double-click its icon, and you will see a window that looks like



If you don't see the server listed in the workgroup, don't panic. Select "Run" from the Start menu. A dialog box appears that allows you to type the name of your server and its share directory in Windows format. For example, you would enter `\\toltec\\test`, as shown in bellow, and use your server's hostname instead of "Toltec".



If it works, congratulations! Try copying files to and from the server by dragging their icons to and from the Samba server's *test* folder. You might be pleasantly surprised how seamlessly everything works.

2.6 FTP server

File Transfer Protocol (FTP) is a network protocol used to transfer data from one computer to another through a network, such as over the Internet.

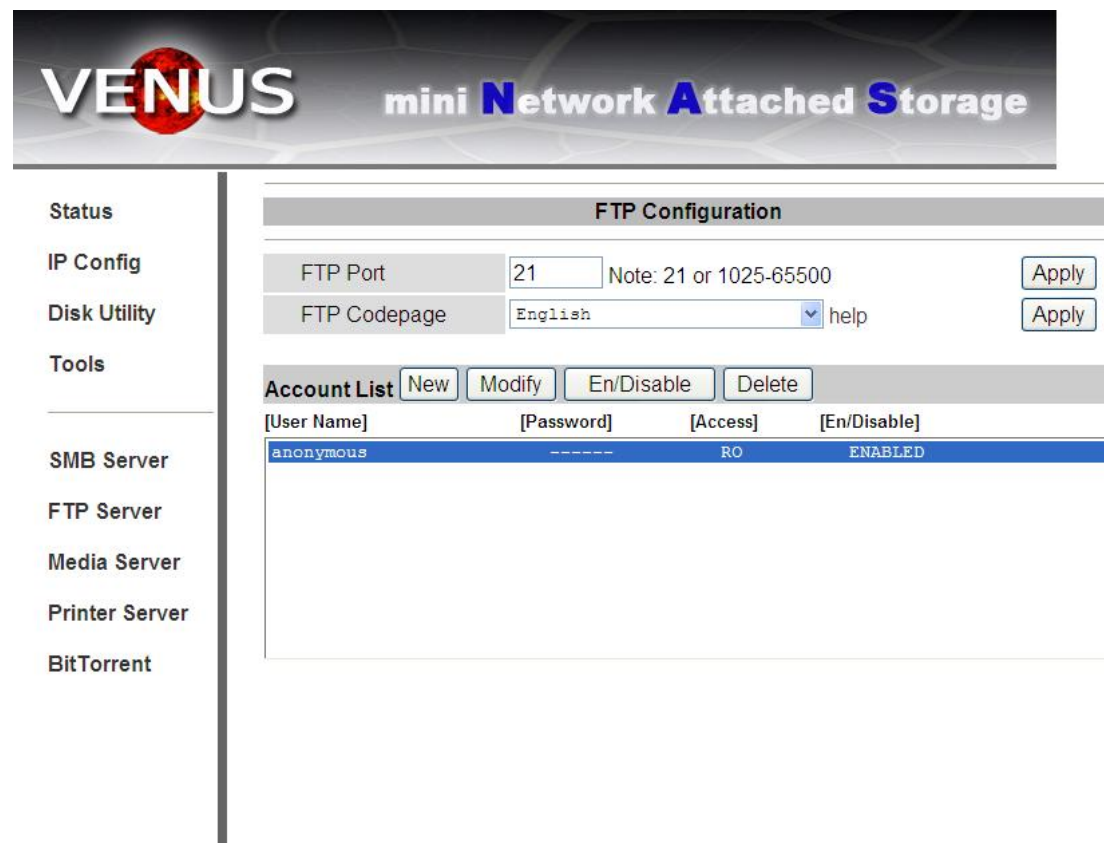
FTP is a file transfer protocol for exchanging files over any TCP/IP based network to manipulate files on another computer on that network regardless of which operating systems are involved (if the computers permit FTP access).

The objectives of FTP, as outlined by its RFC, are:

1. To promote sharing of files (computer programs and/or data).
2. To encourage indirect or implicit use of remote computers.
3. To shield a user from variations in file storage systems among different hosts.
4. To transfer data reliably, and efficiently

2.6.1 Configure FTP server

Connect to storage SMB page, the page as bellow:



The screenshot shows the mini-NAS web interface. The header features the 'VENUS' logo and the text 'mini Network Attached Storage'. The left sidebar contains navigation links: Status, IP Config, Disk Utility, Tools, SMB Server, FTP Server, Media Server, Printer Server, and BitTorrent. The main content area is titled 'FTP Configuration'. It includes two input fields: 'FTP Port' with a value of 21 and a note 'Note: 21 or 1025-65500', and 'FTP Codepage' with a dropdown menu set to 'English' and a 'help' link. Both fields have 'Apply' buttons. Below these is an 'Account List' section with buttons for 'New', 'Modify', 'En/Disable', and 'Delete'. A table lists the accounts:

| [User Name] | [Password] | [Access] | [En/Disable] |
|-------------|------------|----------|--------------|
| anonymous | ----- | RO | ENABLED |

- FTP port: configure port number, port range is 1025 to 65500 and default port is 21. If you behind firewall ,remember to open port number mapping FTP port
- FTP code page: configure FTP server code page

Code page as bellow:

Central Europe (CP1250)

Croat, Czech, Hungarian, Polish, Romanian, Slovak, Slovene and Sorbian.

Cyrillic (CP1251)

Bulgarian, Belorussian, Macedonian, Moldavian, Russian, Serbian and Ukrainian.

Latin I (CP1252)

Albanian, Danish, Dutch, Faroese, Finnish, French, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish and Swedish.

Baltic (CP1257)

Estonian, Latvian, Lithuanian.

- NEW: create FTP share account and password ,default account is "guest"
- Modify:

The screenshot shows the 'Modify FTP Account' page in the mini-NAS web interface. The sidebar on the left contains links to various system settings. The main content area features a header with the 'VENUS' logo and the text 'mini Network Attached Storage'. Below this, the 'Modify FTP Account' section includes input fields for the account name (set to 'anonymous'), password (with a 12-byte limit), and access permissions (radio buttons for 'Read only' and 'Read/Write'). At the bottom, there are two lists: 'Folder List' and 'Sharing List', each showing 'PUBLIC' and 'BT' folders. Navigation buttons like 'Create', 'Rename', 'Delete', and 'Back' are also present.

This page can modify as below

Password: password of FTP account

Access control: read only / read and write access control of FTP account

Folder sharing: **Folder List** is all of exist folder on storage; **Sharing List** is share folder of FTP account. If you want to share some folder, select this folder from Folder List and add to Sharing List.

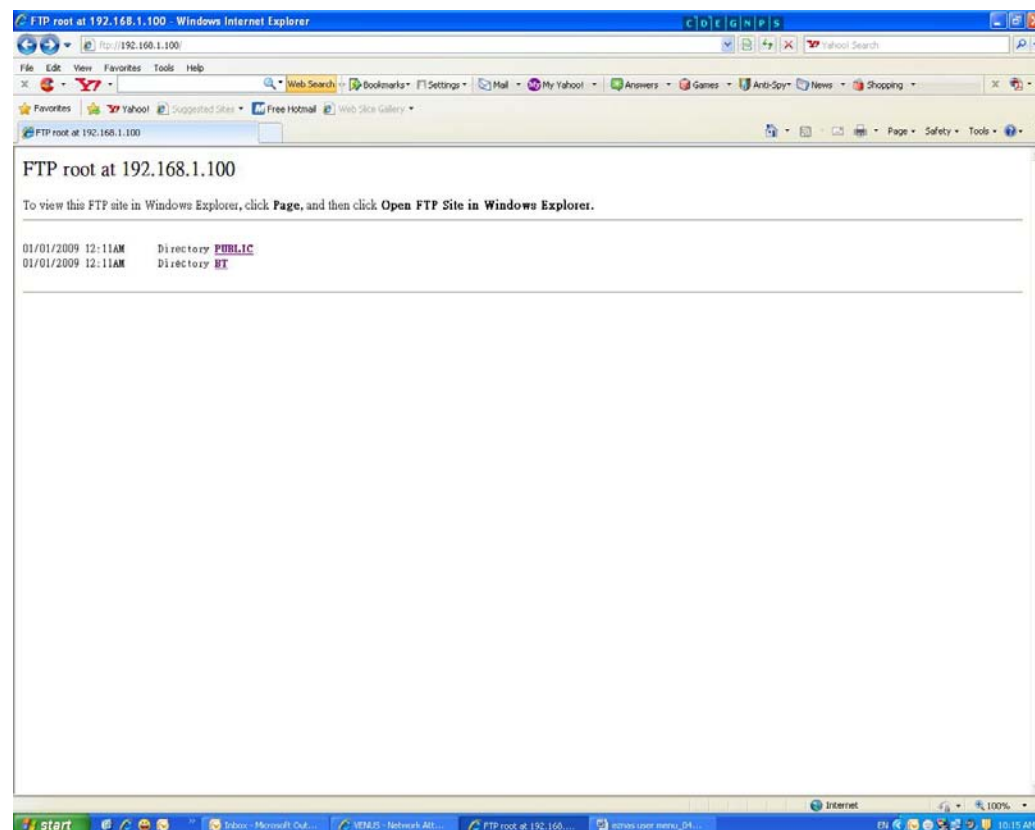
Folder manage: create / rename /delete folder

- Enable/ Disable :this button can enable/disable FTP account
- Delete: delete FTP account

2.6.2 Using FTP within Microsoft Internet Explorer 7

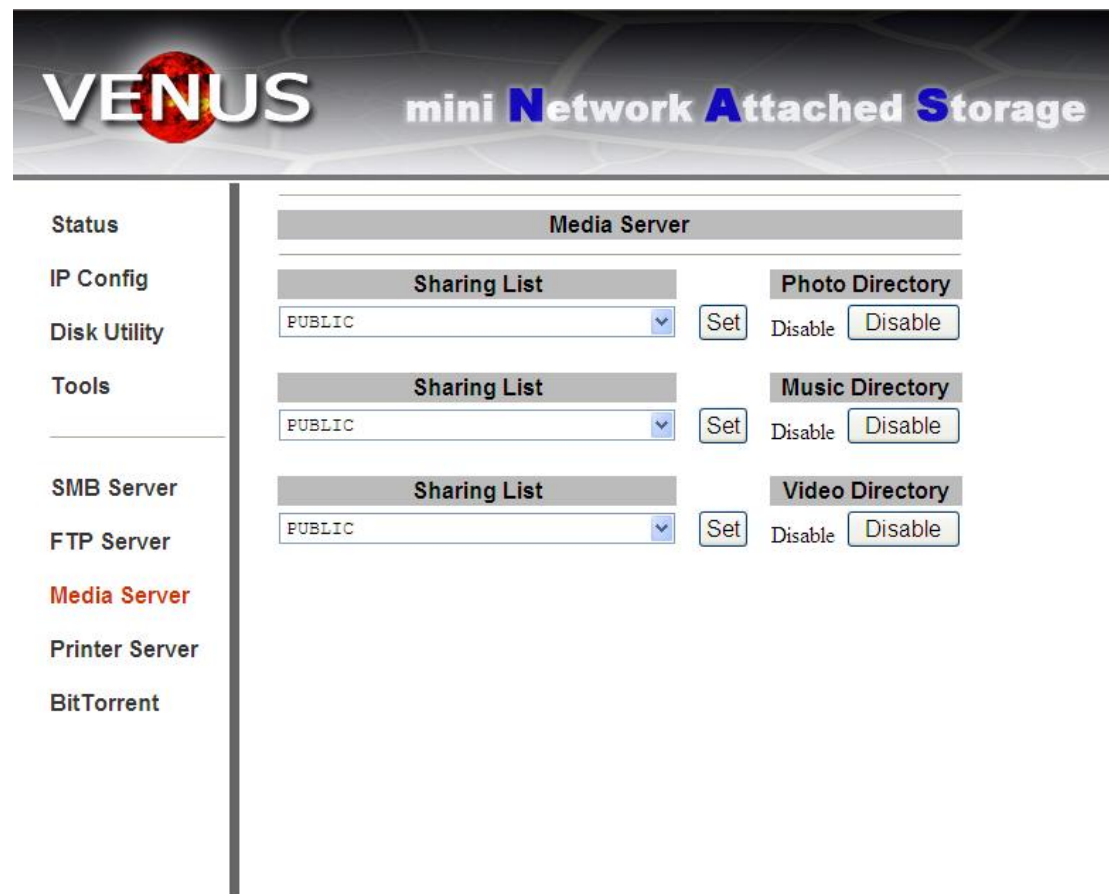
1. Open Internet Explorer 7
2. In the address bar, type the following command:

ftp:// IP address ex: ftp://192.168.xxx.xxx



3. IE 7 will display a list of files and folders from the FTP domain
4. To quickly save a file locally, right-click the file and select "*Save Target As...*"
5. To manage the remote and locals files more completely, click the 'Page' menu button on the right-hand side of the IE 7 browser window and select the option, "Open FTP Site in Windows Explorer"
6. You can now drag-n-drop the files from remote FTP server to local file system easily

2.7 Media Server



- 1. Select Media Server sharing folder
- 2. Double click set button
- 3. Make sure media server (storage) is same subnet with media player (Xbox 360 PS3 and iTunes)
- 4. Browse content from iTunes (music only), Xbox 360 and PS3 (music, photo video)

Share Media from Storage (Media server) with Xbox 360 (Media player)

To access media files—including audio, video and pictures—from storage, you need to connect an Ethernet cable from the Ethernet port on the back of your Xbox 360 console to your Storage.