Dual Bay NAS server
User Manual

With the purchase of this unit you get a storage NAS server for pictures, music, video and other files that need safe keeping.

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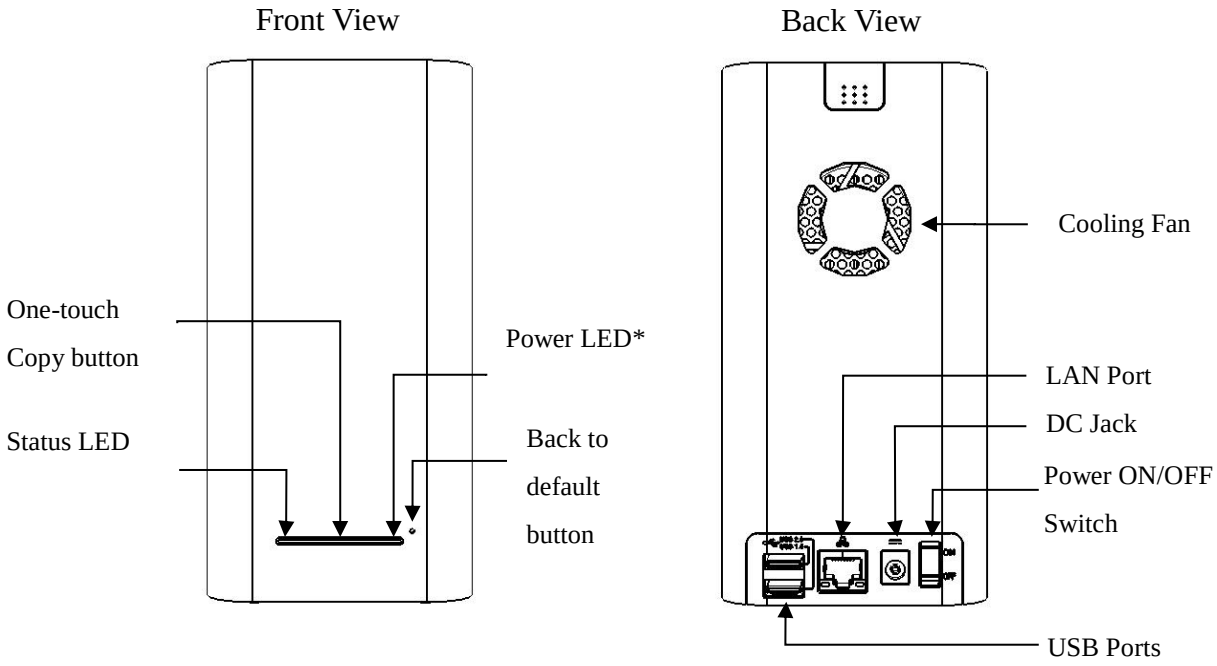
1. Hardware Overview



1.1 Power

The unit uses an external power adapter (12V DC, Maximum 4 Amps, 100-240V AC, 50-60Hz)

*the power LED is only a LED not a button.

1.2 Ports

LAN Port	One Gigabit RJ45 Ethernet port. This connects to your router or switch via Ethernet cable.
USB Ports	There are two ports for USB connection to the NAS server. Used for connecting USB devices such as external hard drives and printers to the NAS server.

1.3 Buttons

Item	Description	
Power ON/OFF switch	Press this switch to turn on or off the NAS server on the backside….	
One-Touch Copy button	**USB device (Flash or External hard disk drive) to NAS server hard disk**	Copy data from the connected USB device into the "public" folder of NAS server hard disk (it does not matter which USB port is used).
***Back to default button**	**Press for 3 seconds**	Reset the NAS server to factory default settings. The Default IP will be 192.168.16.1. Please note: all settings will be deleted

***Please note:**

1. The "Back to default" button is hidden behind a hole on the front panel of the NAS server. To press this button a hand tool with a pin of diameter < 1.5mm is needed, this tool is not supplied.

1.4 LEDs

LED	Color	LED Status	System status
Power ON/OFF LEDS	**Blue**	**Constant light**	Power ON - System ready
		Flashing	Hard Disk Drive Reading/Writing
		Flashing, 2 times/second	System initialization not ready
		Flashing, 1 time/2 seconds	Hard Disk Drive in suspend mode
Status LED	**Orange**	**Constant light**	RAID error RAID rebuilding
		Quick flash, pause, etc.	System is booting up Firmware is under upgrade
		2 quick flashes, pause, etc.	2nd Hard disk not yet formatted.
		Long flash, pause, etc.	Hard disk is being formatted
		4 sec. flash, pause, etc.	Raid is under configuration
		9 Quick flashes, 1 long flash etc.	Hard disk capacity remaining is less than 5%
LAN LED (These LED's are located on rear side of the NAS server)		**ON**	LAN connected
		Off	LAN disconnected
		Flashing	Data access

***Please Note:** 1. The 1st Hard Drive is defined as the NAS server drive as the NAS server system is installed on this drive. The 2nd Hard Drive is data storage only, as no NAS server system is installed on this drive.

2. Installation

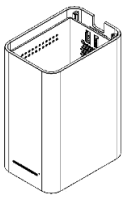
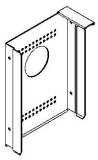
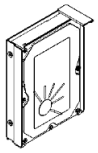
Requirements

The following items are required when using the NAS server.

- TCP/IP Protocol must be installed in your PC or Laptop.
- NAS server is connected to a switch or hub connected to the network.

HW Installation

- Part list.

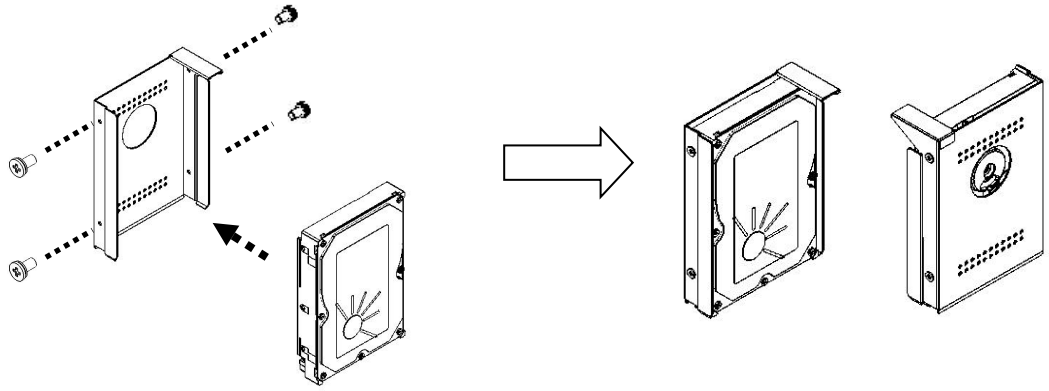
Item	Part Illustration	Part Description	Quantity	Remark
①		Top Cover	1	
②		Housing Assembly	1	
③		Hard Disk Holder	2	
④		Screw 6*32XH7	8	
⑤		SATA Hard Disk Drive	1 or 2 Max. 2 TB pr.drive	Not included
⑥		HDD Holder Assembly *This is an illustration of an HDD mounted in HDD Holder, this is the combined product of items 3,4 and 5	2	Hard drives are to be mounted into the HDD holder

- Assembly steps of the NAS server.

Hard drive holder assembly

PLEASE NOTE THAT IF ONLY 1 HARD DRIVE IS USED, PLACE IT INTO THE HOLDER AT THE RIGHT SIDE WHEN LOOKING AT THE FRONT OF THE NAS SERVER, OTHERWISE SETTINGS CANNOT BE STORED

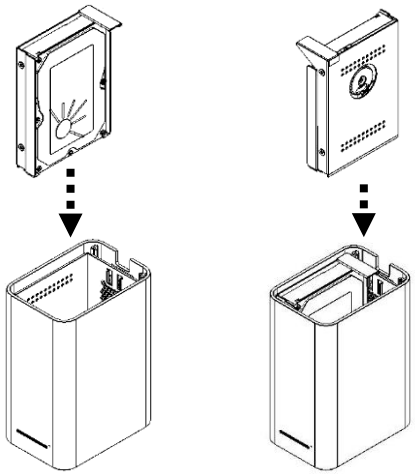
1. Use ③(1 piece), ④(4 pieces), ⑤(1 pieces), and a screwdriver (not included) mount the SATA HDD onto the Hard disk holder using the four screws ④



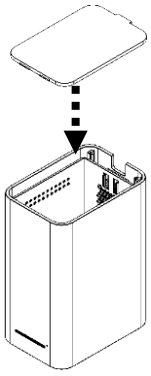
2. If two hard drives are to be used, repeat Step 1 to install the second SATA HDD into the other HDD Holder Assembly⑥, as shown above.
3. Put the Housing Assembly ② vertically on the desk, and then install ⑥ (1 piece) into ② as per the illustration. If two hard drives are to be used, install the other ⑥ (1 piece) into ②.

Please Note:

Due to the weight of the assembled HDD Holder, The mechanical design was made to protect the PCB Assembly within the Housing from unwanted damaged caused by installing as shown below.



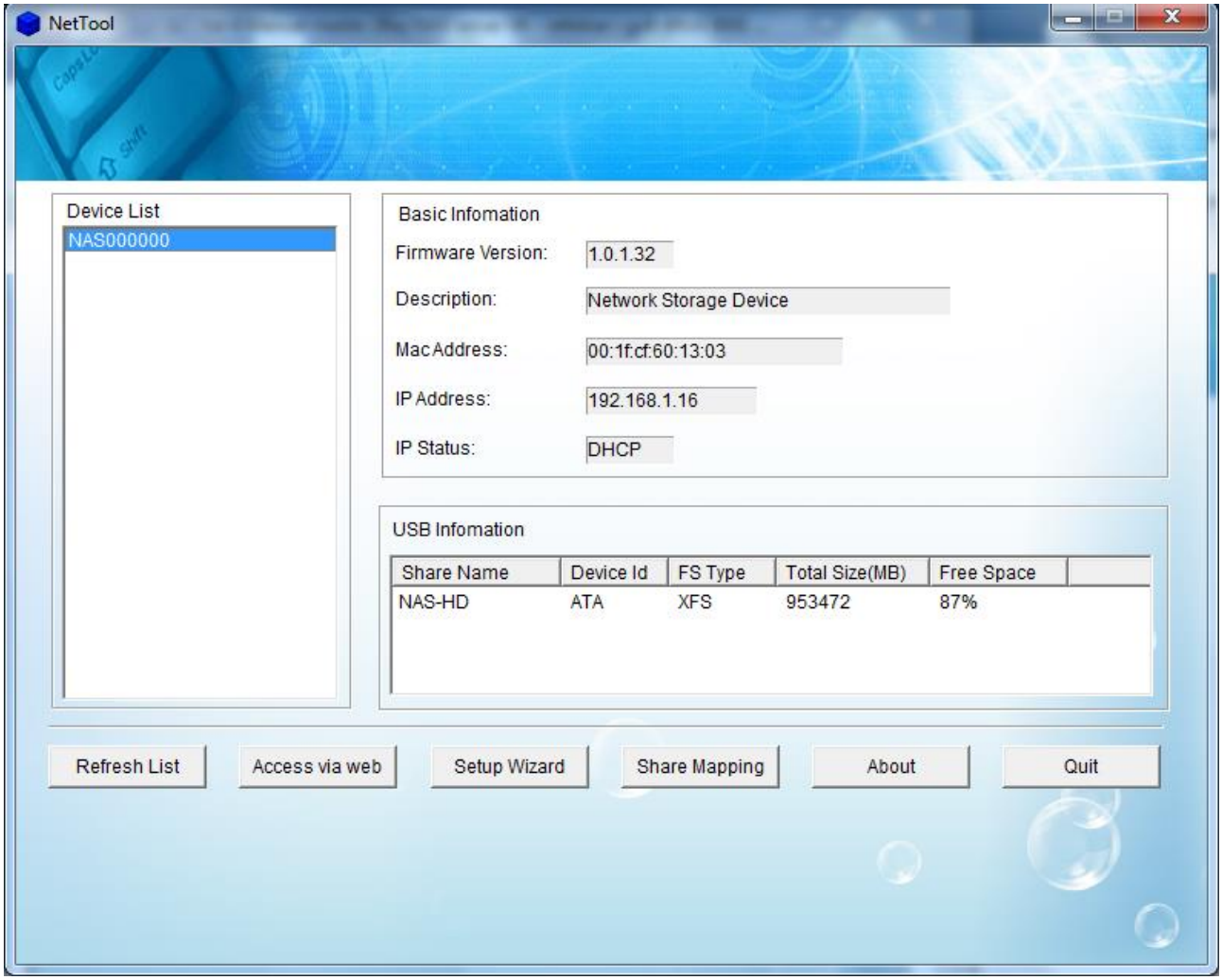
4. Install the Cover ① (1 piece) and whole assembly is complete.



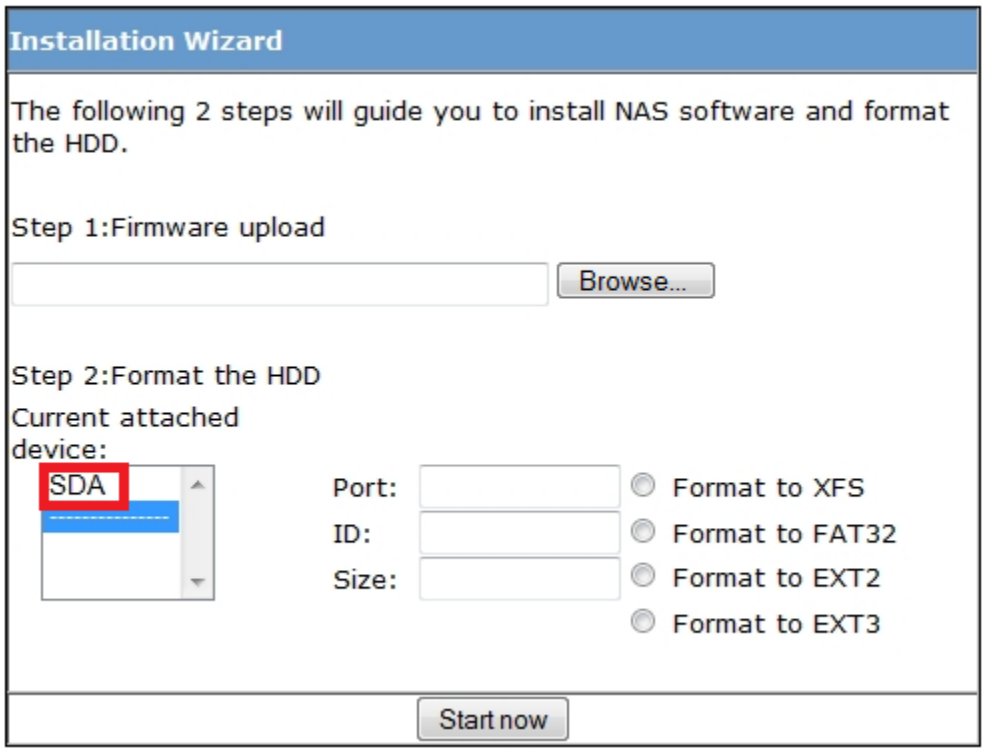
- After the Hard Disk Drives are installed as per step 1 to 4, connect the network cable to LAN port of the NAS server. A typical network setup consists of computers and the NAS server connected to a router.
- Connect the power to the NAS server, then press the Power ON/OFF button at the back of the NAS server to turn on the NAS server. Please note that the system boot up will take a few minutes.
- Insert the CD-ROM which came with the NAS server product and run "NetTool.exe" from the folder "NetTool" to discover to this NAS server as shown below.

Please note: It is a good idea to copy the "NetTool.exe" to the desktop of the computer for easy access to the NAS server. To copy the "NetTool.exe", select it by clicking on it with the left mouse button once, right click once and a mini menu will be shown. Select "copy" from the menu, to insert the copied file "NetTool.exe" on your desktop, minimizes all windows and right click on the desktop, this will bring up the mini menu again. Select "paste" to copy the file from the CD to your desktop.

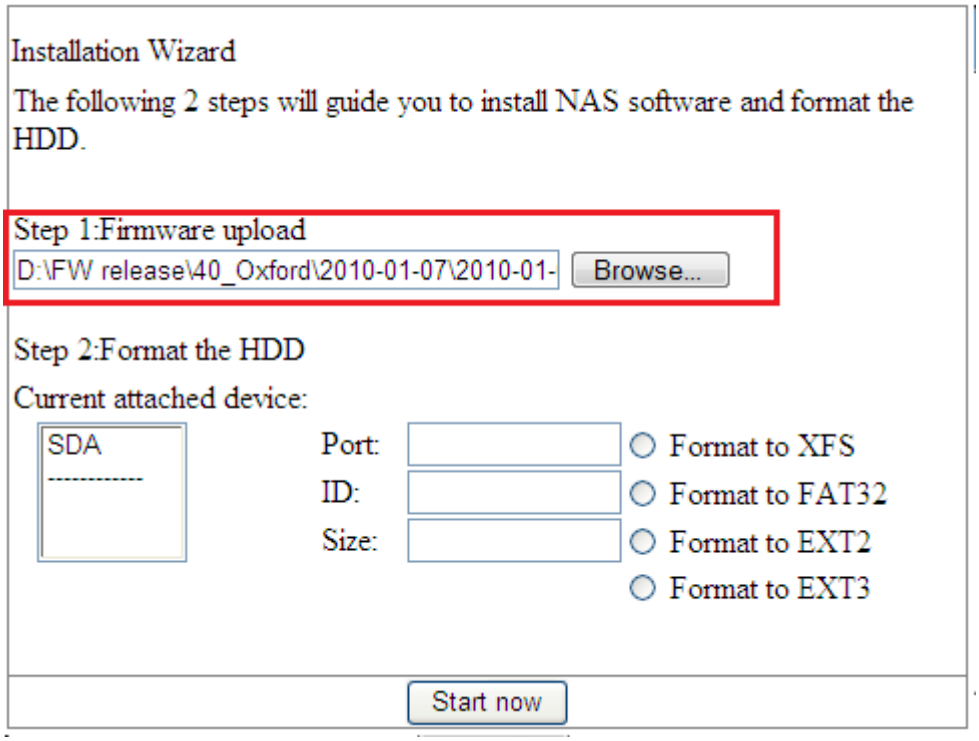
The “NetTool.exe” file is now located and can be started from the desktop.



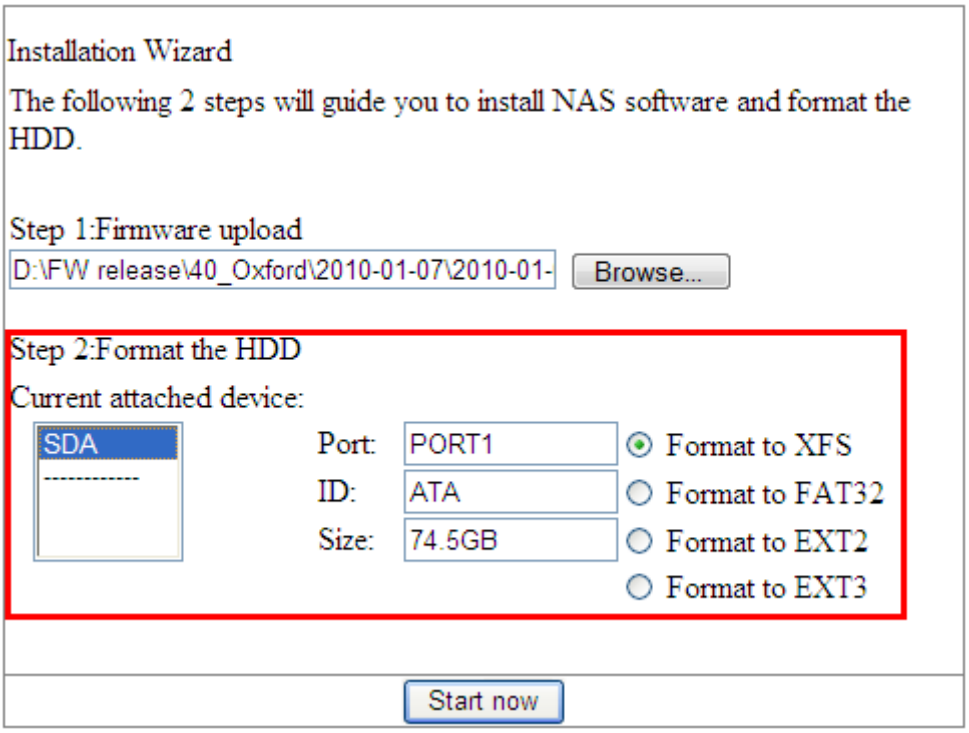
- Please check if the HDD is detected on the list of “USB Information”. After this click on the “Access via web” button and the below window will be shown.



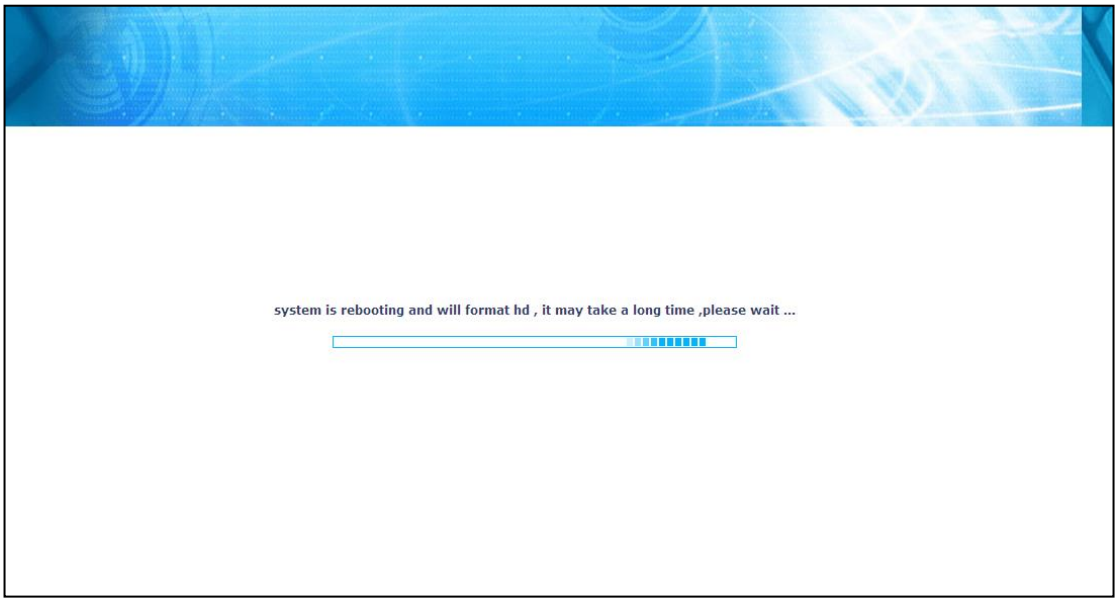
- To install the NAS server features, click the "Browse" button and select to install NAS server features by selecting the image file "new_firmware.bin" from the folder FW release that is located on the CD-ROM that came with the NAS server.



- Select the HDD and the file system which is going to be formatted.

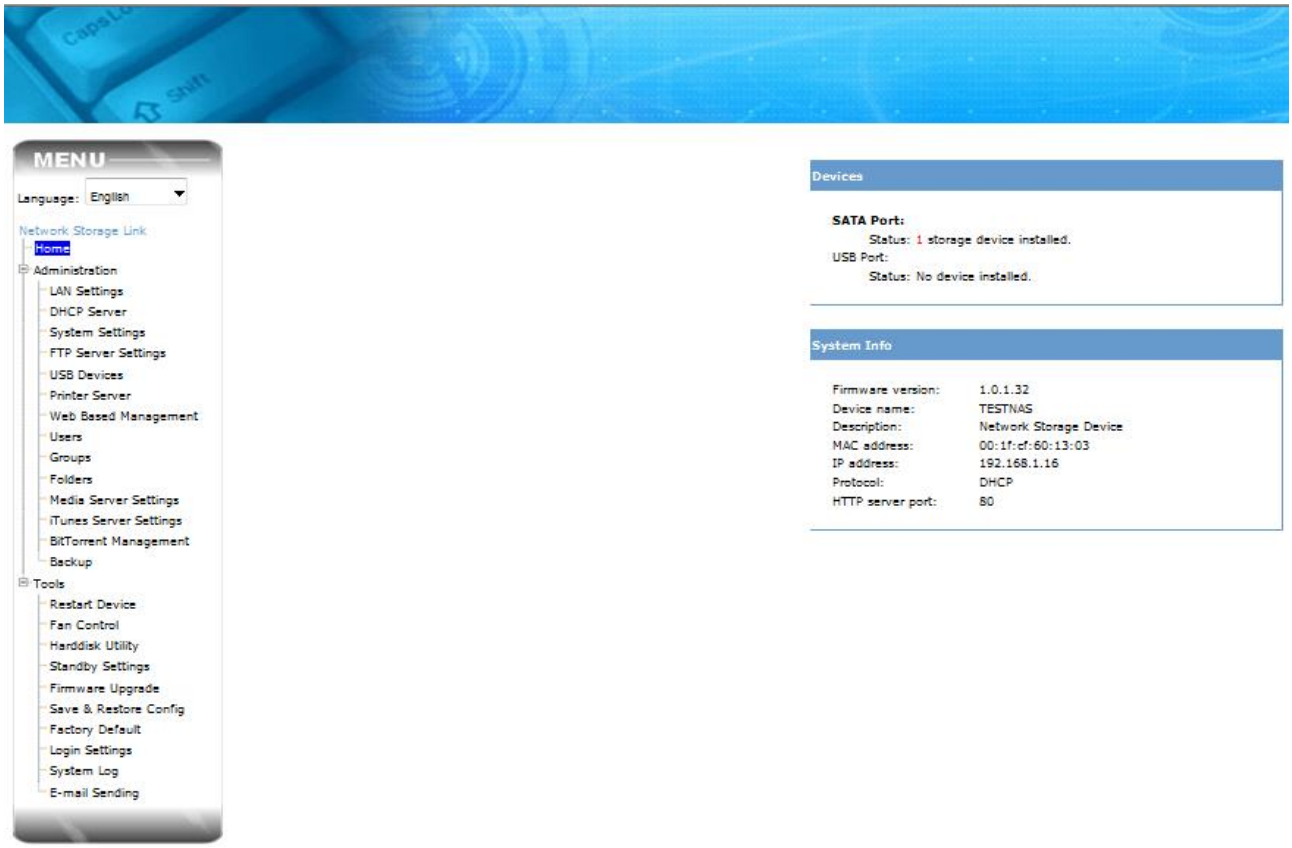


- Click “Start now” to install and format the HDD, please note that it may be necessary to confirm the format and installation by clicking OK in a popup window.



- Run the Windows utility “NetTool” to discover to the NAS server again.

- Click on the button “access via web” and enter user name and password to enter the web GUI. The default values are admin and admin.



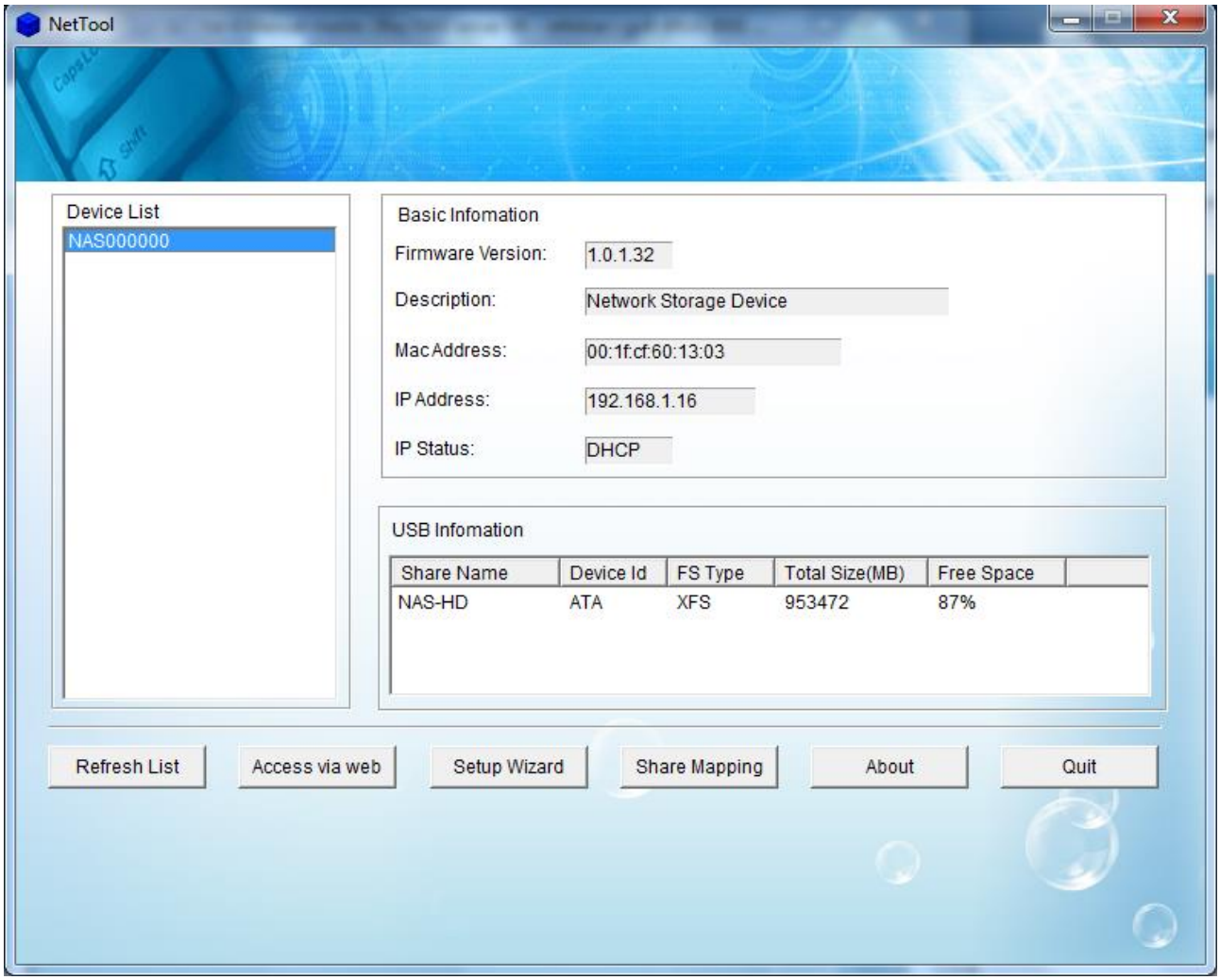
Notes:

- When the Blue LED is constant blue the boot up completed.
- Press the Power ON/OFF switch to the “OFF” position to turn off the NAS server.

3. Windows Tool

3.1 Quick Setup Wizard

This tool gives the possibility to search for the device on the network and show some information about the NAS server, it also gives the possibility to access the NAS server web page and to change the settings of the device such as description, time zone, date, time, IP etc.
The Quick Setup Wizard is able to access the NAS server even if it is in another IP or subnet range (default IP of the NAS server is 192.168.16.1). The Setup wizard also gives the possibility of changing the standard IP address to either DHCP (automatic IP) or to a specific IP address in the network.



3.1.1 Refresh List

Refresh List updates the device list and will show the device in the same subnet. It will also show

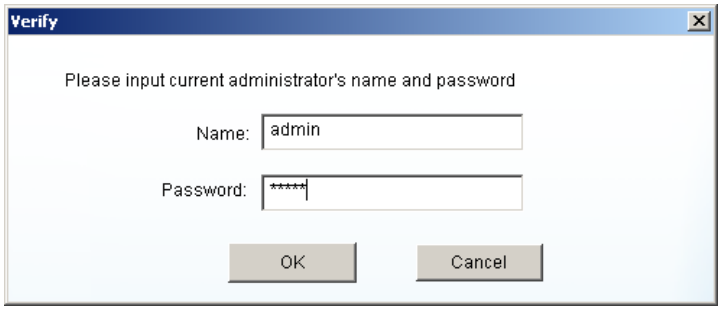
the IP of the unit even if the subnet is different.

3.1.2 Access via Web

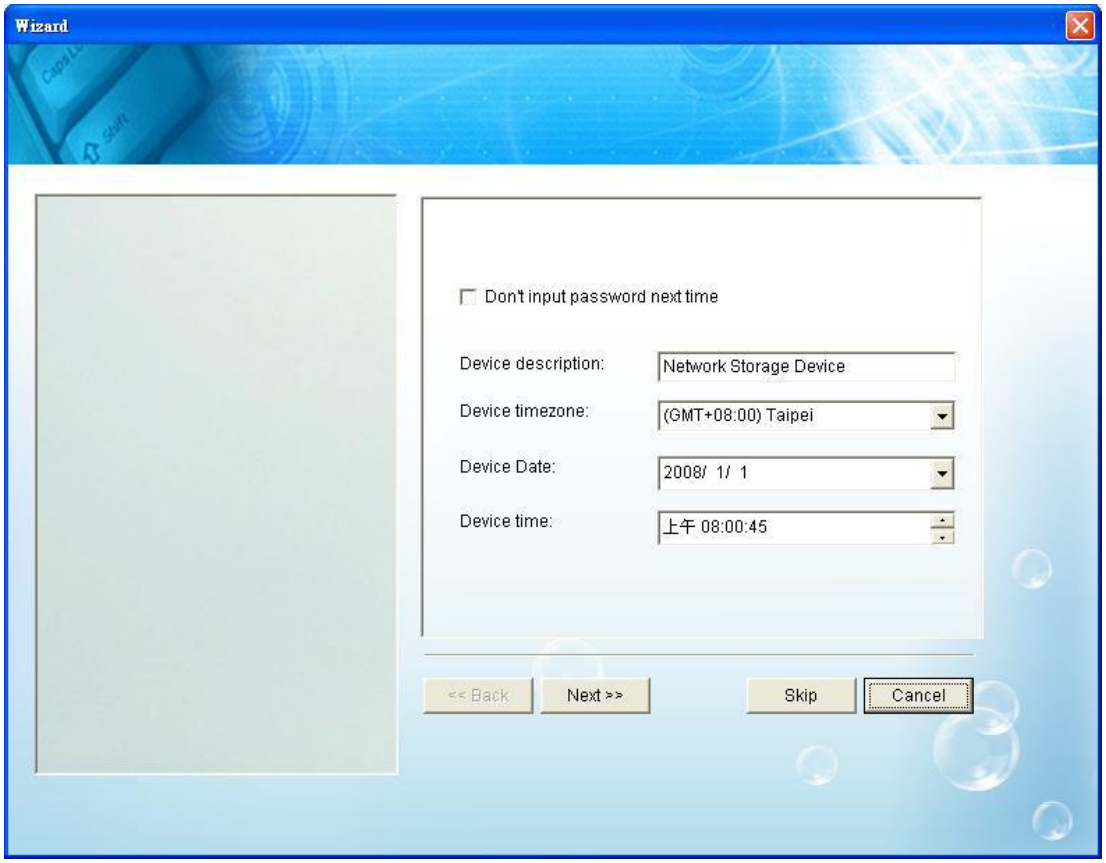
This function will link to the webpage of the chosen NAS server.

3.1.3 Setup wizard

To access the setup wizard the admin password needs to be entered. Default name is: admin, default password is: admin

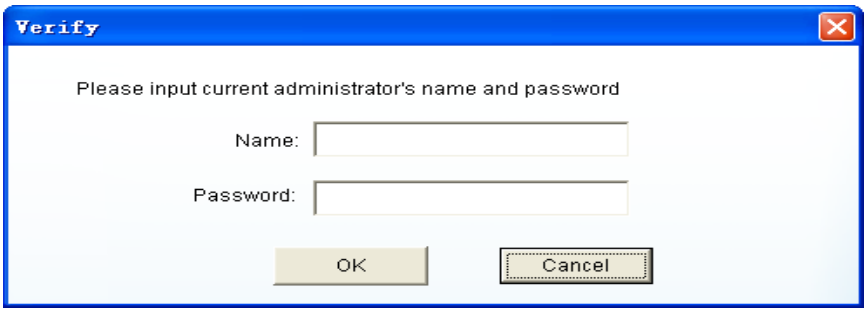


Step 1



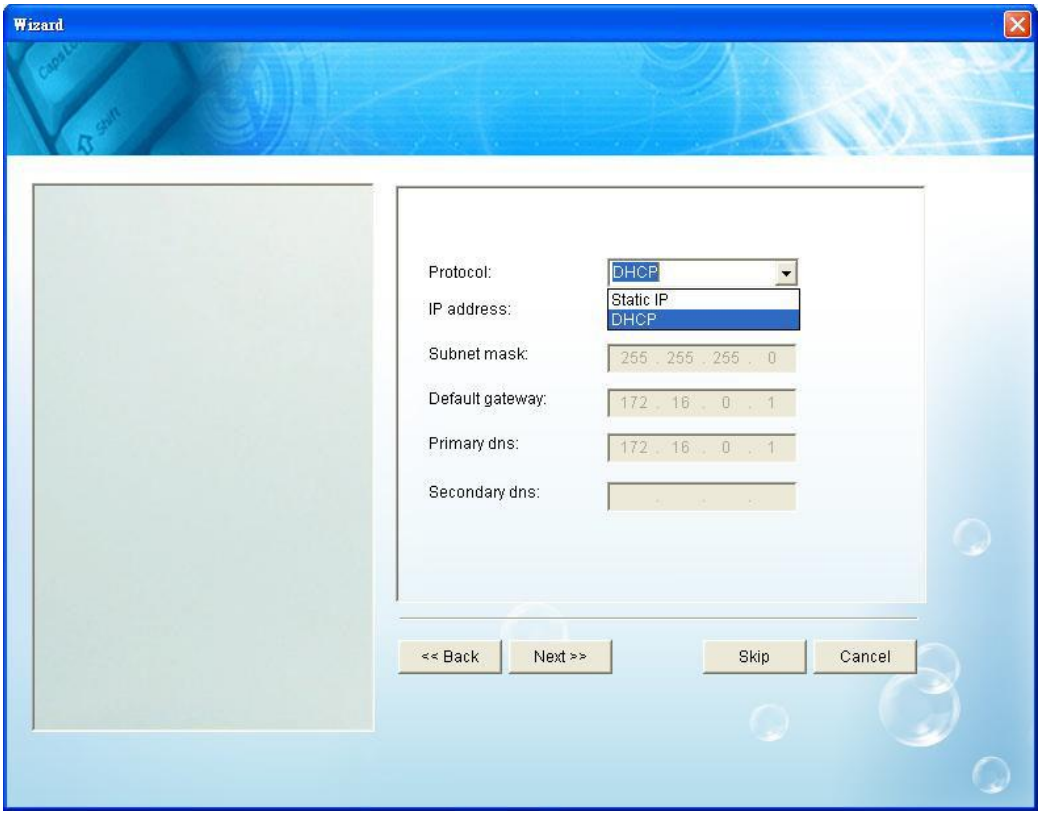
Select the “Don’t input password next time” if you do not want to enter the username & password next time when you want to enter the “Setup wizard”.

If this option is not selected, it will ask for username and password next time as below.



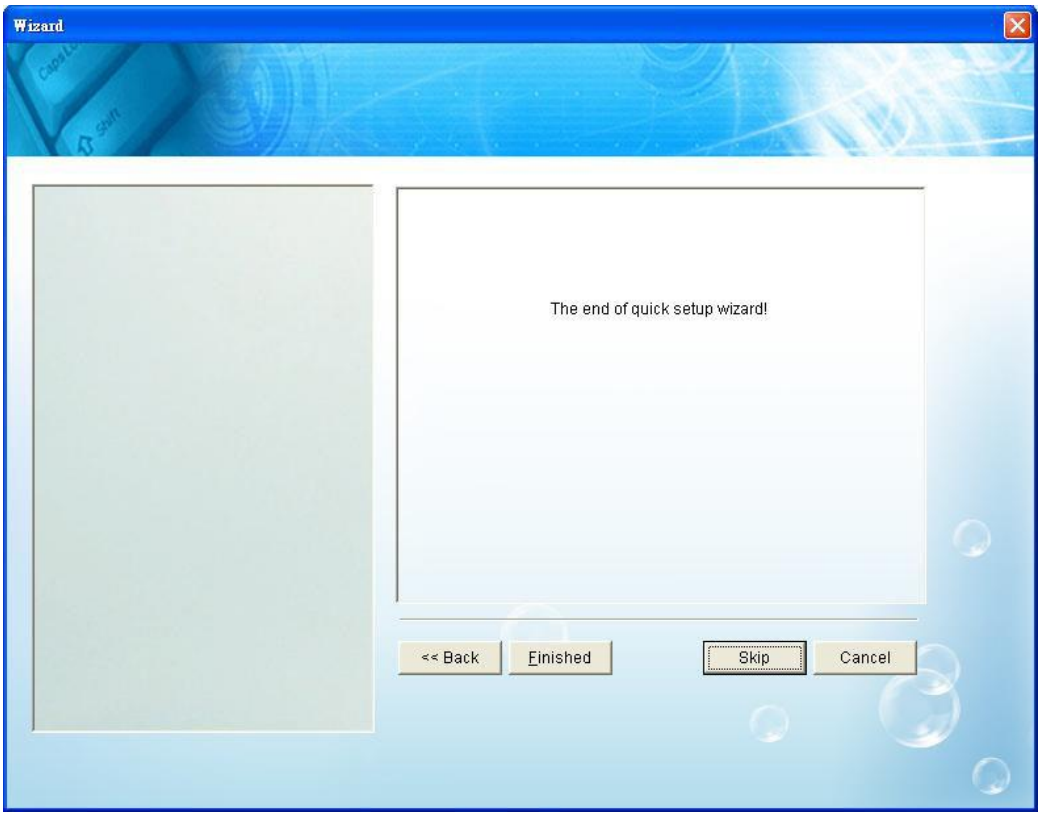
It is also possible to change the description, time zone, date and time of the device from here. After the settings are set correctly, click “Next” to save the settings and go on to step 2, or if you want to leave the setting as it was, click “Skip”

Step 2



Step 2 the IP, subnet, gateway and DNS of the device can be altered. It is recommended to use DHCP as this will automatically get these options from the network. If a specific (Static IP) is to be used, please get the information from the ISP or network administrator. When the settings are complete, click “Next” to save and go to step 3 or if you want to leave the setting as it was, click “Skip”.

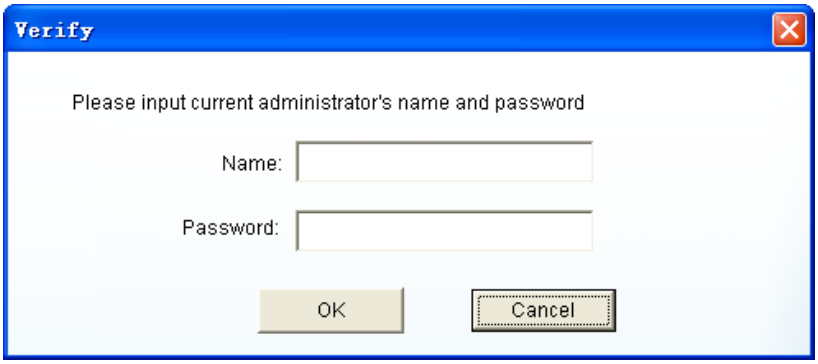
Step 3



Click “Finished” to complete the setup wizard and go back to the Main menu. The NAS server will disappear shortly from the NetTool to use the settings specified in the setup wizard. When done, the NAS server will be shown again with the new settings including a new IP address that conforms to your network standards.

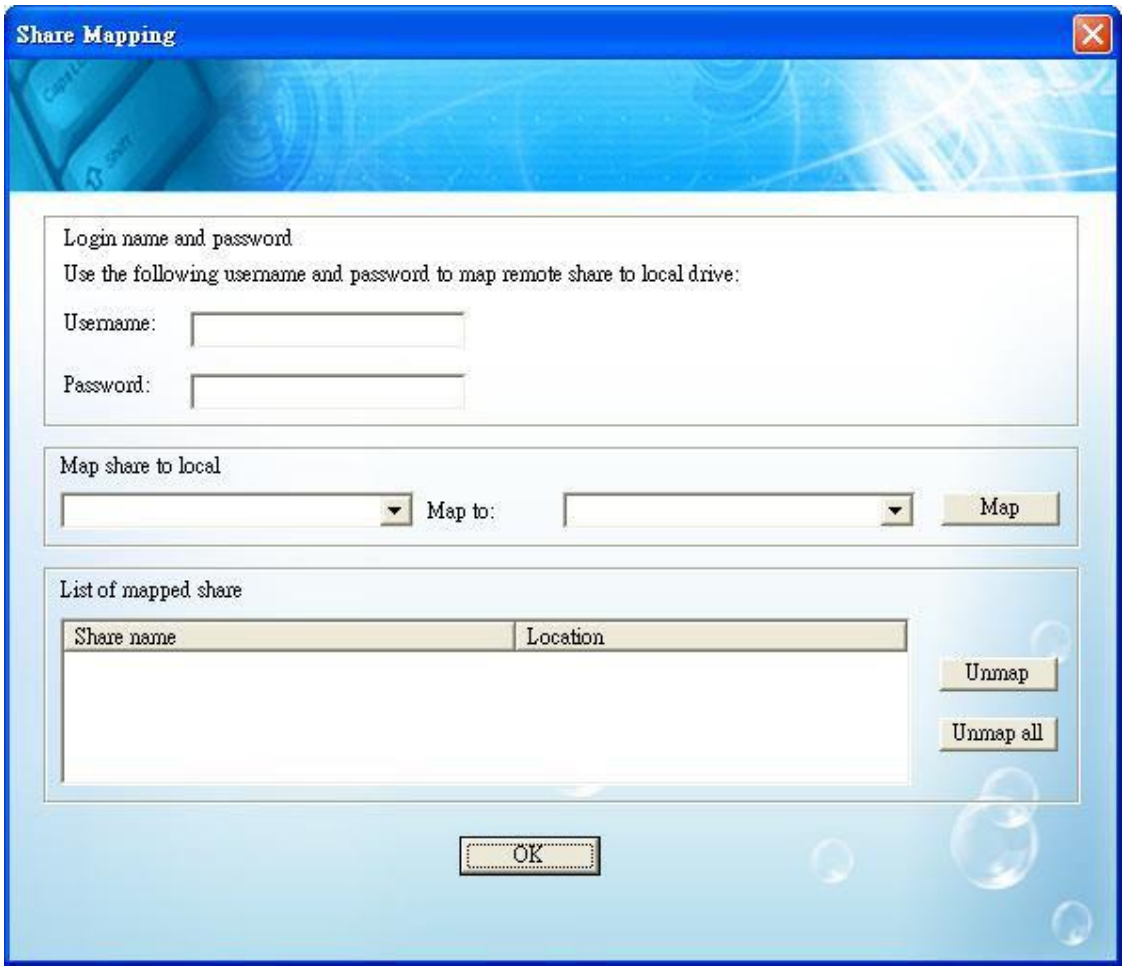
3.1.4 Share mapping

Step 1



Input current administrator’s name and password and click OK. Please note that the default name is: **admin** and default password is: **admin**.

Step 2



Login name and password: Only needed if the folder you wish to share requires username and password, e.g. if you have created a folder through the web interface and set a specific user for this folder, it is necessary to enter the user name and password to obtain access to the folder.

Map share to local: Select the folder that is to be mapped from the NAS server to the local computer in the first drop down box (the folder admin is not to be used) public and any folder created in the web tool will be shown in this drop down box. If all folders are not shown, please exit share mapping and click the refresh button on the NetTool page to update the NAS server settings.

Map to: Select the drive letter that the folder on the NAS server is to be mapped to in the last drop down box. The new drive will be shown in (My) Computer when the share is made and the folder from the NAS server can be accessed through (My) Computer.

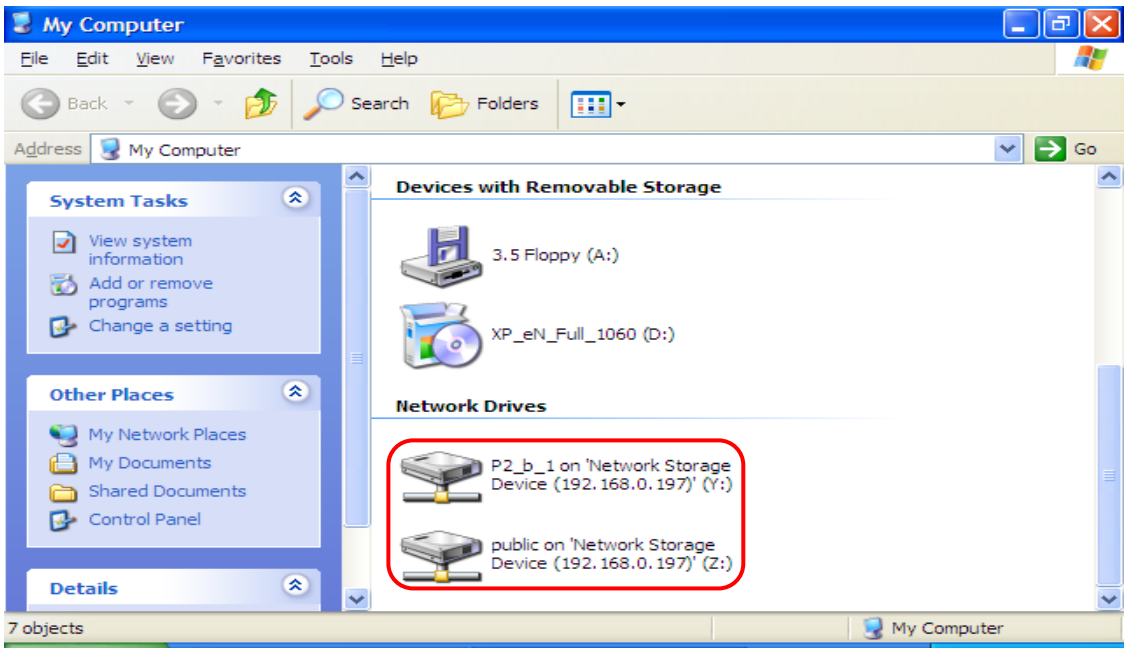
The button "Map": Will create the drive mapping, it is important to click this button.

List of mapped share: Shows the folders currently mapped from the NAS server to the local PC.

Unmap: Will remove the selected drive mapping

Unmap all: Will remove all drive mappings

Step 3

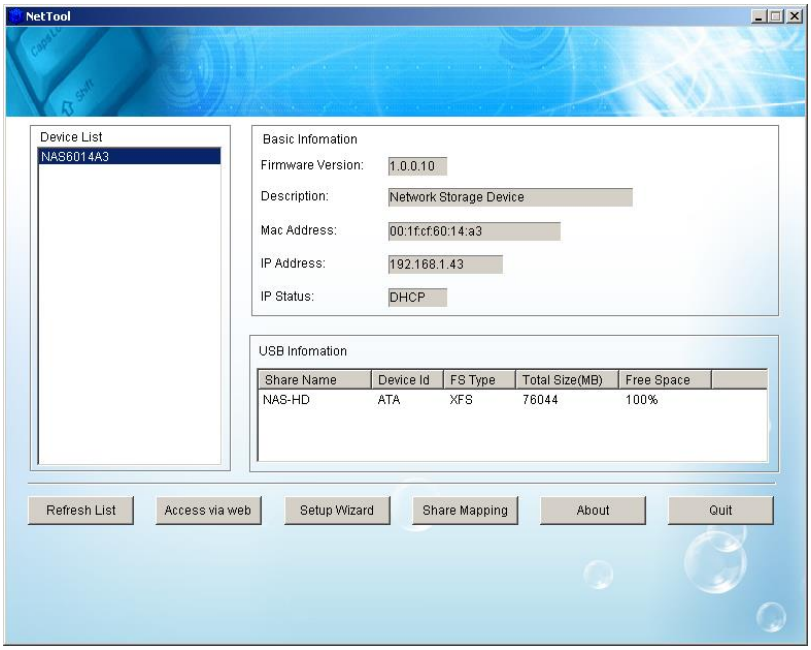


In (My) Computer it is now possible to access the shared folders from the NAS server directly, the drives will be listed as shown above.

Please note: The way the drive mapping is shown may vary depending on the computers operating system.

Please note: On some computers the share mapping may disappear from (My) Computer, if it does, please use the below drive mapping method instead.

Open the NetTool.exe and click on the NAS server in the device list



Write down the IP address of your NAS Server in the above case 192.168.1.43

Windows XP: Click on Start and Run, this will give you a small window called run

Windows Vista / Windows 7: Click on the start bubble and click the search area at the bottom

of the start menu XXXXXXX Needs photo.

Type in the IP address like this **\\xxx.xxx.x.xx** ← remember to use your IP address

This will open a new window that shows all the folders that are on the NAS server.

Right click the folder you wish to map from the NAS server to (My) Computer and select "map network drive" this will open a window where it is possible to select drive letter in "Drive".

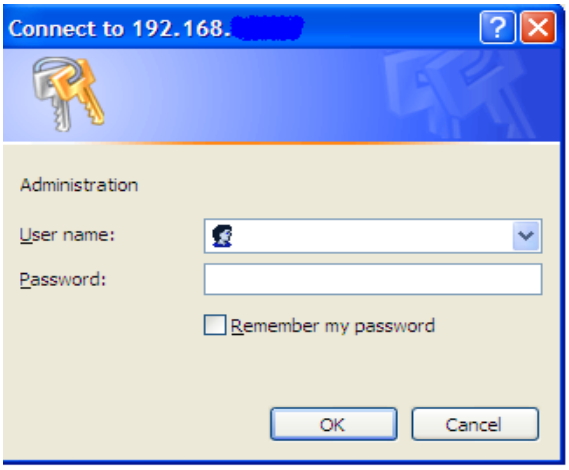
When done, press apply and the new share will be added to (My) Computer. If a username and password is required for the selected folder, a popup window will ask for this, there is a checkbox that enables the computer to store the password so that it does not need to be entered again on that computer.

4. Web

Input the NAS server IP in the browser to enter the NAS server web configuration page, this can also be done by starting the NetTool and clicking on "Access via web".

Please note: To access the NAS servers web configuration page it is necessary that the PC and NAS server are in the same IP and subnet range, please configure this using the "Setup Wizard" in the NetTool

4.1 Web login page



Logging on the NAS server web configuration page requires a username and password. The default username is "**admin**" and password "**admin**"

4.2 Home

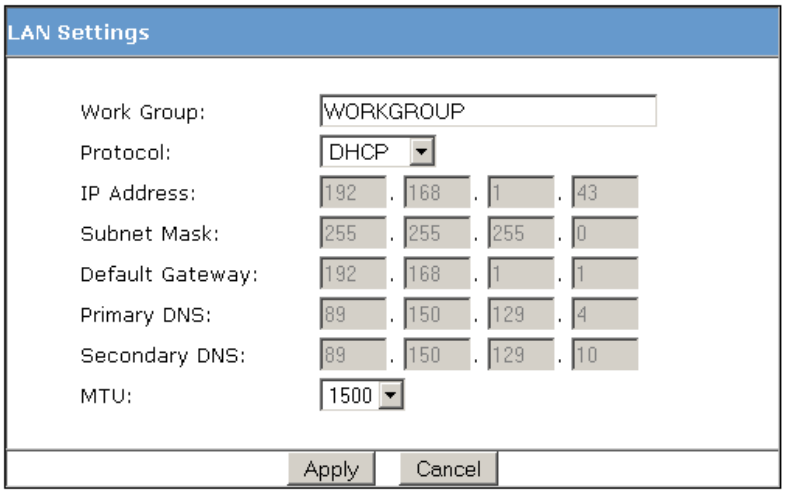
The basic information of the NAS server will be shown here.

4.2 Administration

4.2.1 LAN Settings

Please note: It is highly recommended using a static IP so that the NAS server will always be available from the assigned IP

This section contains all LAN settings used to configure the NAS server on the network. Depending on how the network is set up, changes to this page may or may not be necessary. It is possible to choose **DHCP or Static IP** from "**Protocol**"



4.2.1.1 Work Group

It is possible to change the name of the workgroup the NAS server belongs to. Enter the name of your home network work group (standard work group name for windows is workgroup).

4.2.1.2 DHCP

Selecting this option enables the NAS server to request an IP and auto-configure itself to the network if there is a DHCP Server present.

NOTE: If DHCP Client is enabled, but there is no DHCP server, the NAS server will fall back to the default IP address of **192.168.16.1**

4.2.1.3 Static IP

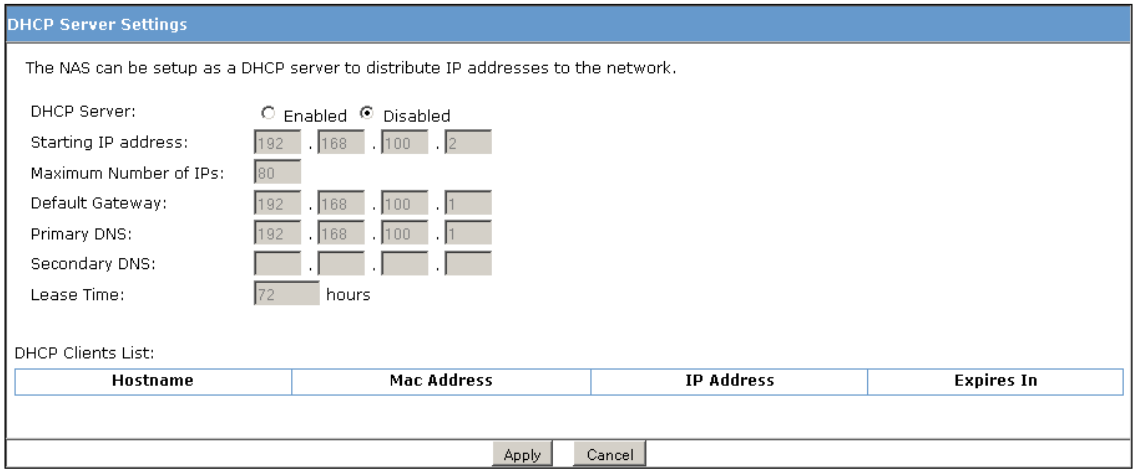
Click this option if no DHCP Server present on the network or to manually enter network settings in the fields provided below this option.

IP Address	Enter the static IP address
Subnet Mask	Enter the Subnet Mask address
Default Gateway	Enter the Gateway IP address
DNS1 and DNS2 (both optional)	If available, enter those IP addresses here

If you need assistance in manually entering the above information, contact your ISP (Internet service provider) or network administrator for additional help configuring the network settings.

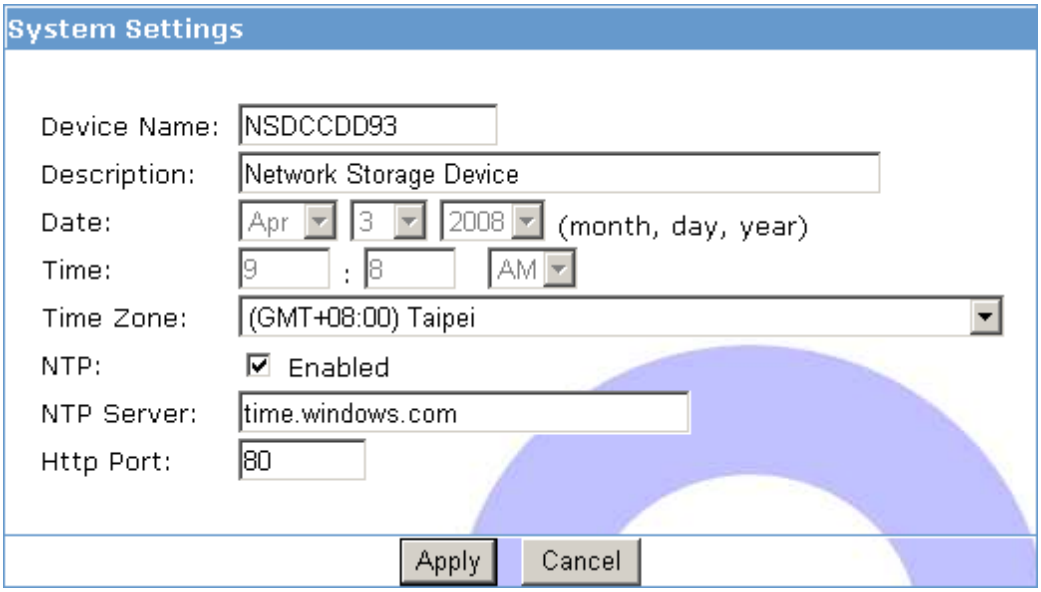
4.2.2 DHCP Server

The DHCP server function enables the NAS server to act as DHCP server for the network



4.2.3 System Settings

The basic settings of NAS server can be set at here. Including “Device Name”, “Description”, “Date”, “Time Zone”, “Http Port” and the NTP can be enabled or disabled here.

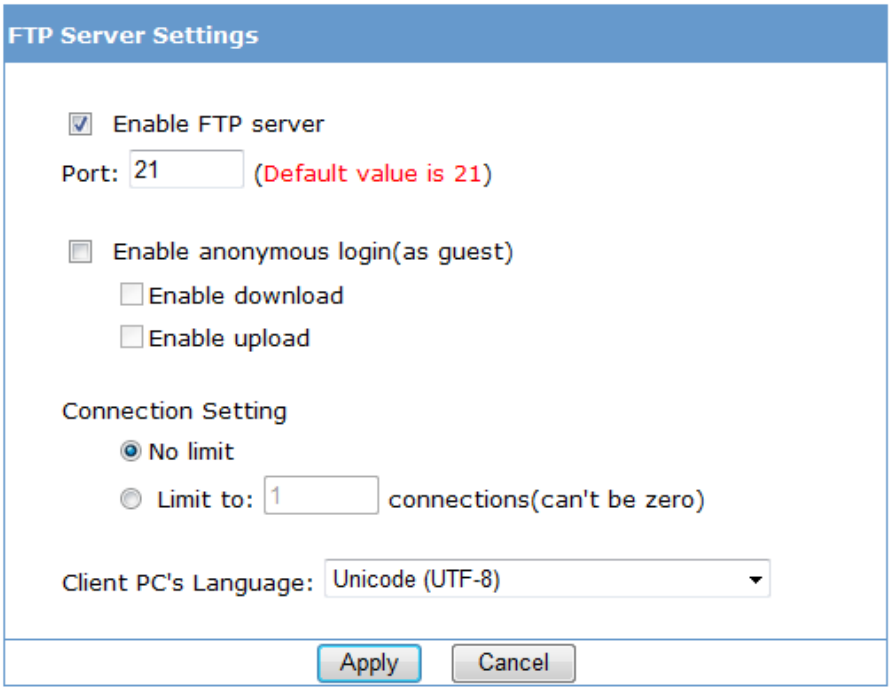


Device Name	Enter a valid name for the NAS server, includes: ’0-9’, ’a-z’, ’A-Z’, ’-‘, ’_’
Description	Enter a valid description of the NAS server, includes: ’0-9’, ’a-z’, ’A-Z’, ’-‘, ’_’, ‘ ‘
Date	Select the current month ,day and year
Time	Enter the current time, and Select PM or AM
Time Zone	Select the appropriate time zone
NTP	Choose **Enabled** to activate Network Time Protocol for automatic adjustment of

	the time and date
NTP Server	Enter the correct NTP server
Http Port	Enter the valid name, from 80 to 65535

When the NTP option is enabled, you will need to enter a valid NTP server to make it work correctly. The NAS server will get the time from the NTP server. (The selection for the date and time will close after NTP is enabled) standard NTP server is “pool.ntp.org” or “time.windows.com”

4.2.4 FTP Server Settings



Enable ftp server	Enable or disable the FTP server part of the NAS server
Enable anonymous login(as guest)	Enable or disable download and upload using anonymous login
Connection Setting	Choose limit connections to limit the amount of client PCs that can login at the same time or select no limit to disable the limit
Client PC’s Language	Select the client PC language, normally Union Code (UTF-8) is used.

The FTP server will be accessible only when enabled.

Please note: The admin username and password is, Username: admin, Password: admin

Using the FTP server from an outside network:

The FTP function of the NAS server requires several things to be setup before the FTP server is accessible from an

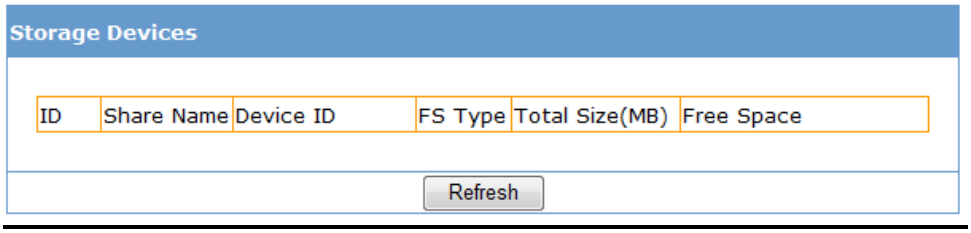
outside network.

The first thing is to make a connection from the internet to the NAS servers FTP service, this service can be called NAT (Network Address Translation), SUA (Single User Account) or Port forwarding, this is done in the router or modem supplied by your ISP, please see the manual for the router or modem to set up or contact the Internet Service Provider, hereafter ISP, for instructions on how to do this.

The second thing that needs to be set up is a fixed external IP address (Static IP), to do this, please contact your ISP. Please note that some ISP's may charge for a fixed external IP address

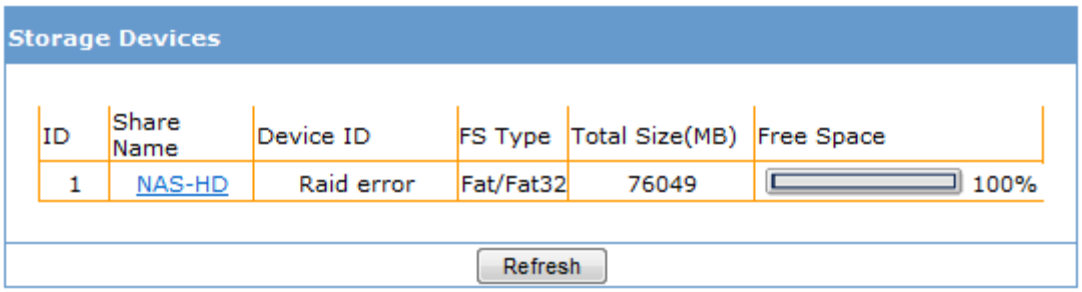
4.2.5 USB Devices

Attached USB hard disks and flash disks will be shown here.



RAID

When you have configured RAID-1 configuration and you experience a single disk failure, you will be able to see status message as seen below. Here you can see that **Raid error** is stated.



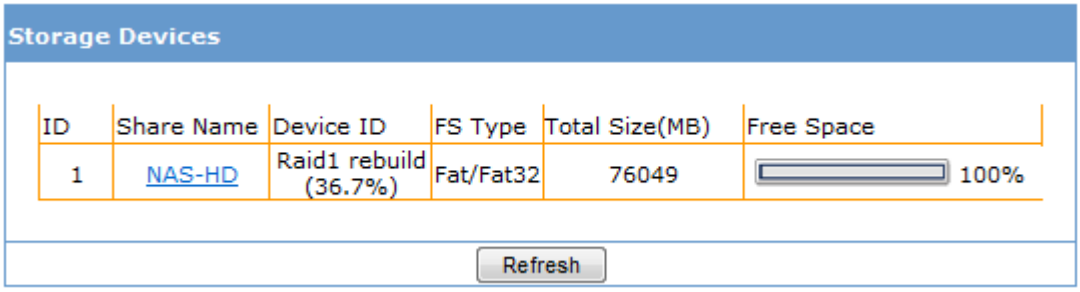
When you have replaced the faulty hard drive with a new one the NAS server will rebuild the RAID-1 configuration by mirroring everything on the healthy hard drive to the new hard drive and therby restoring the RAID-1. This progress starts up as soon as you have placed the new hard drive in to the NAS server, and turned on the server. Note that you should not insert new hard drive in to the NAS server while the server is turned on.

To see the progress of the rebuild, you must logon to the NAS server again and go in to the USB Devices and click on the **Refresh** button as seen below.

Note that the rebuild process can take long time to finish, as it depends on the size of the hard drive. It is very important not to turn off the NAS server during the rebuild process. Example the rebuild of an 80GB hard drive will take approximately 1 hour.

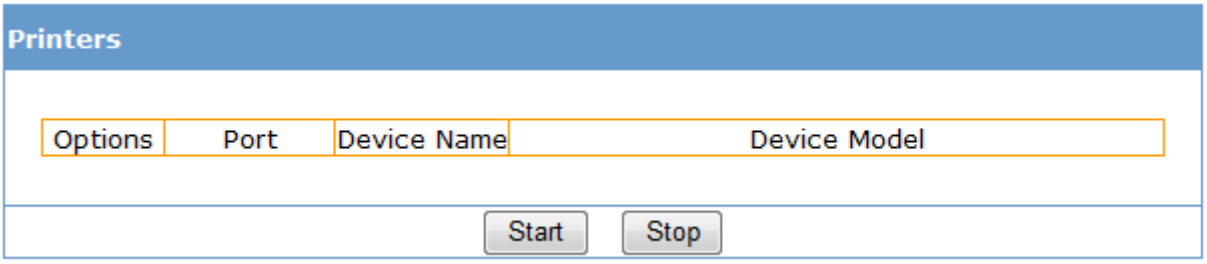
Using the NAS during the rebuild process will extend the rebuild time.

Please note: To identify which disk has an error, please turn off the NAS server and disconnect one hard drive, now start the NAS server again. If you can access your data, you have removed the defective disk. If not, the defective disk is the one still in the NAS server.



4.2.6 Printer Server

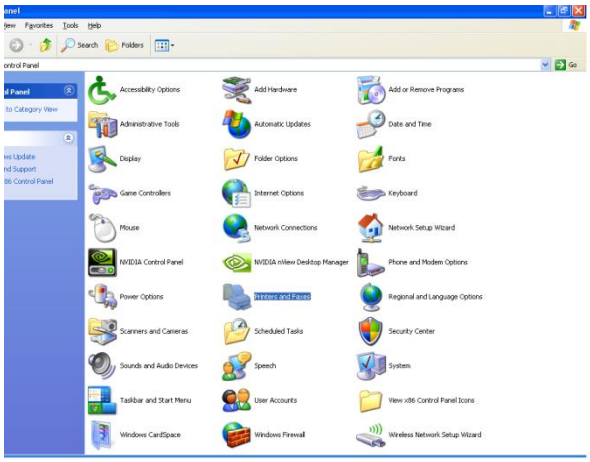
Please note: The NAS server only accept USB Printers; **multi-function printers are not supported.**



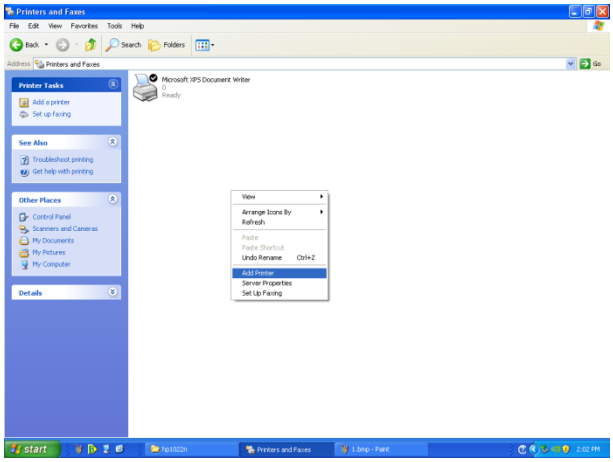
Please follow the steps below to install USB printer.

Windows XP

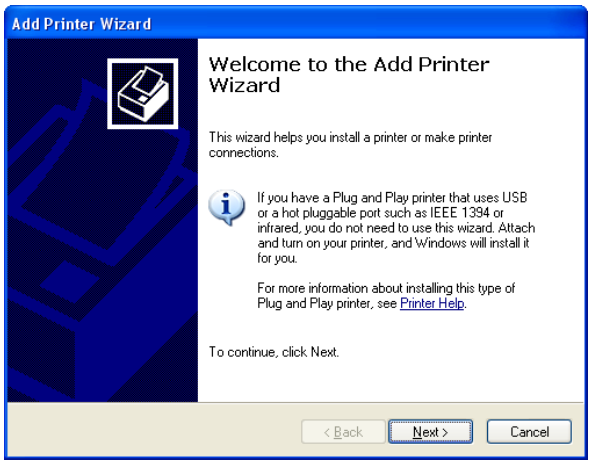
Go to the Control Panel



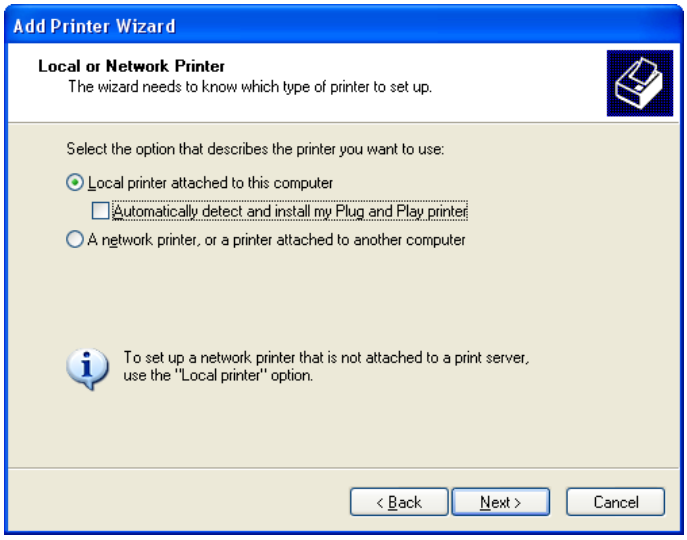
Go to printers and Faxes



Click add a printer either by clicking on this in printer tools or right clicking in the printers and faxes window and selecting Add Printer



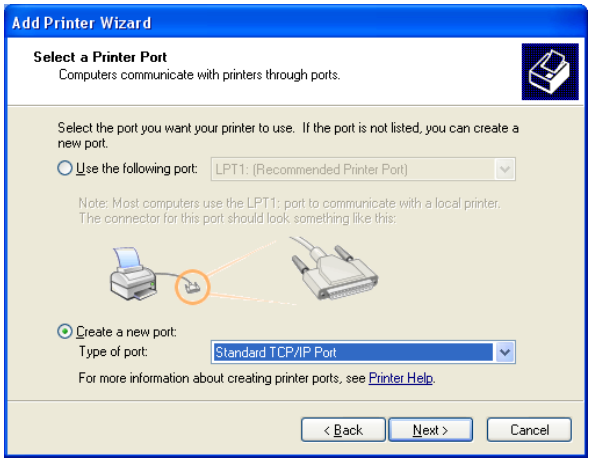
Click next to start the printer installation wizard



Click “Local printer attached to this computer”

Remember to remove the check mark in “Automatically detect and install my Plug and Play printer”

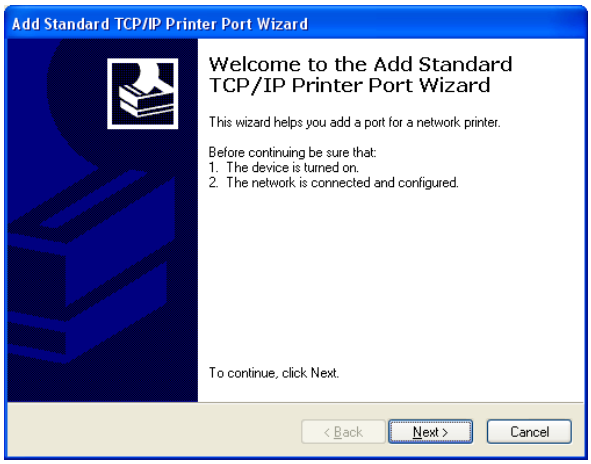
Click Next



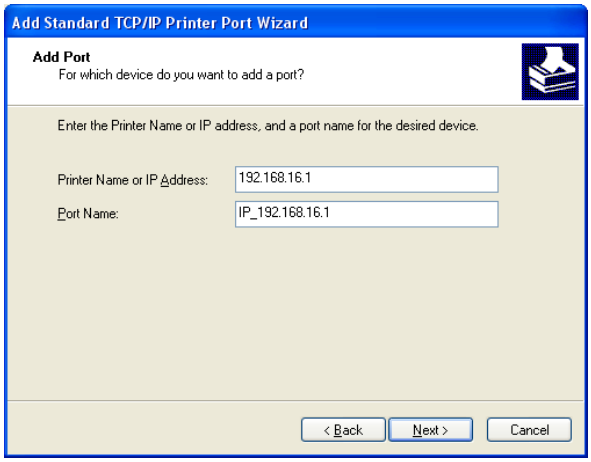
Click “Create a new port”

Type of port, select “Standard TCP/IP port”

Click Next

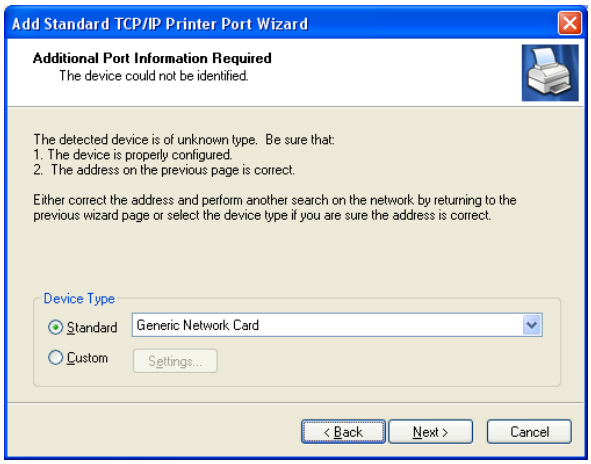


Click Next



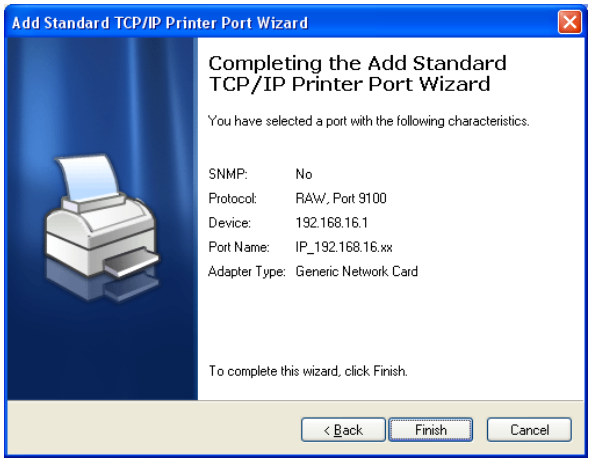
“Printer Name or IP Address” enter the IP address of the NAS that was found using the “NetTool”

Click Next

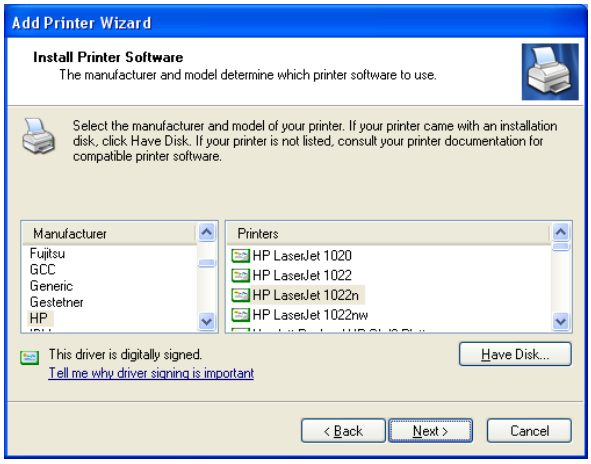


Device Type, select Standard and select “Generic Network Card” from the drop down box

Click Next



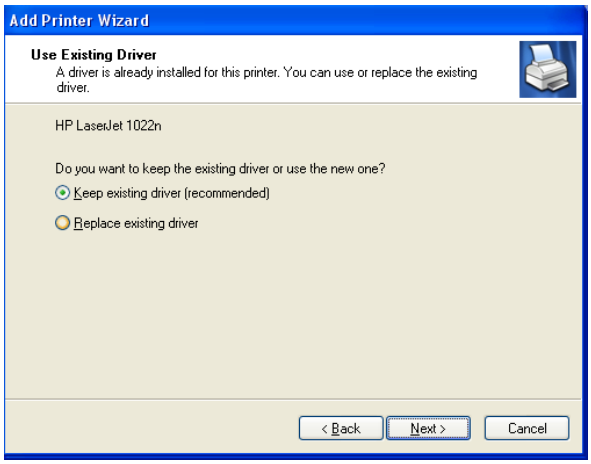
Click Finish



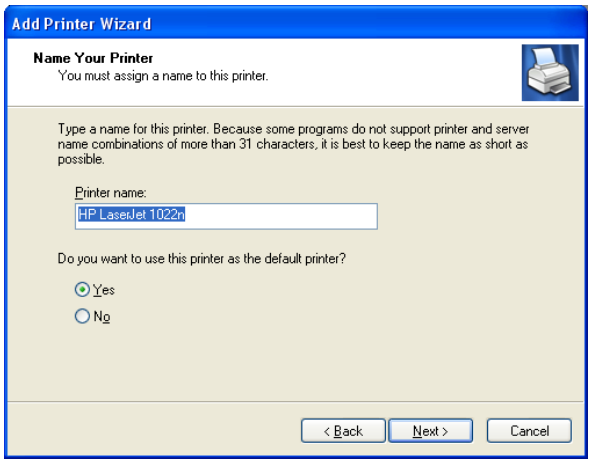
Search for the manufacturer of the printer in the left window and select the printer in the right window.

If the driver is not listed in the drivers already in windows, please download the printer driver from the printer manufacturers website and install it either by pressing “Have Disk” or using the built-in setup feature in the printer driver.

Click Next



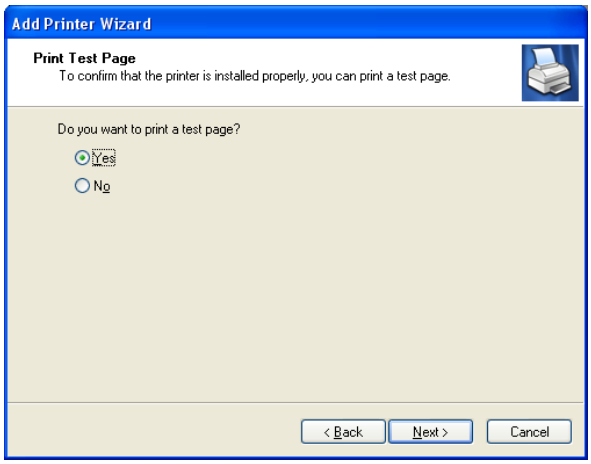
If the driver is already installed on the computer the above screen will be shown, simply select "Keep existing driver (recommended) and click Next



Give the printer a name; it can be an advantage to type NAS in front of the printer name to indicate that the printer is connected to the NAS.

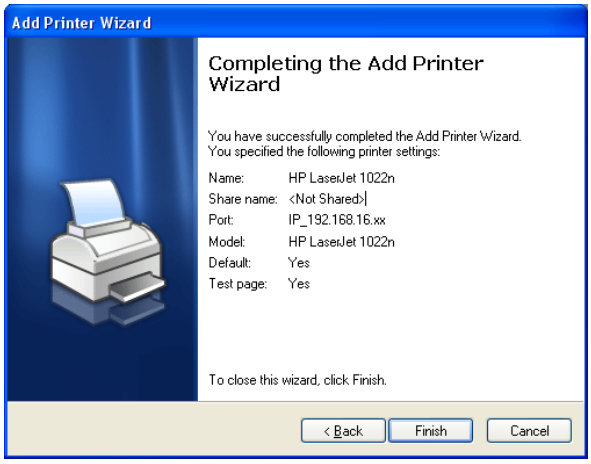
Also select whether or not to use the printer as default printer.

Click next

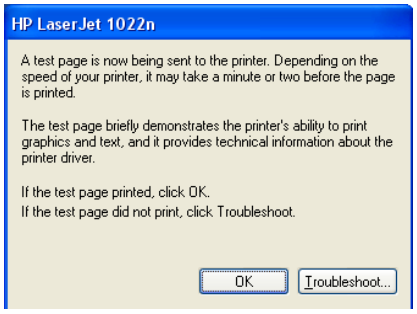


Select whether or not to print a test page

Click Next



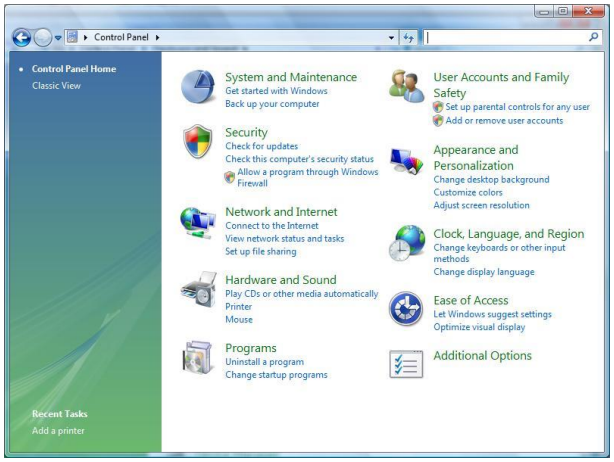
Click finish to end the printer installation



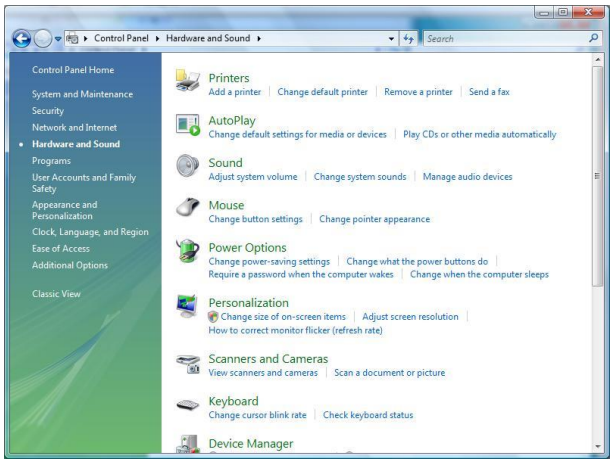
If a test page was printed, the above picture will be shown. Press the OK button when the printer has printed the test page

Windows Vista

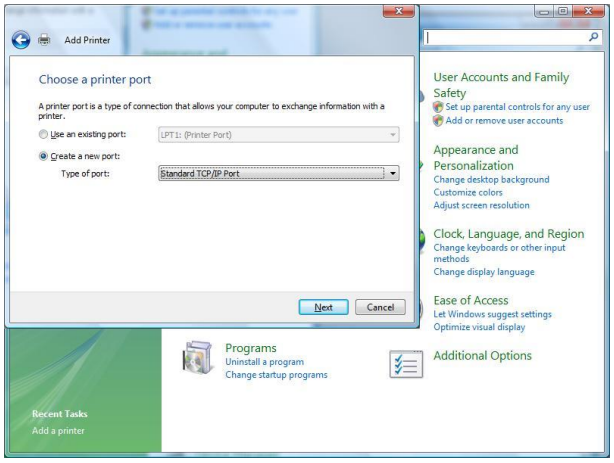
Go to the Control Panel



Go to Hardware and Sound



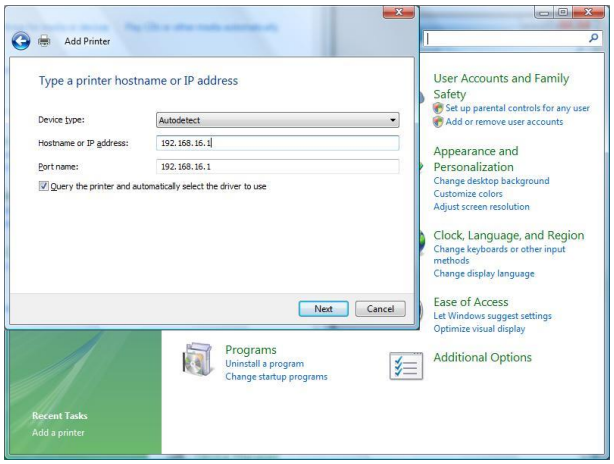
Click add a printer



Click “Create a new port”

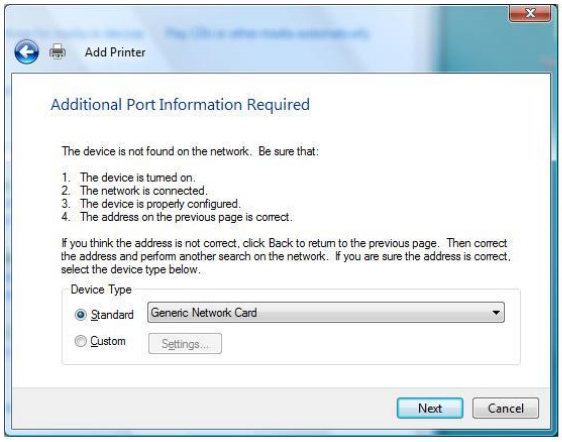
“Type of port” select “Standard TCP/IP Port”

Click Next



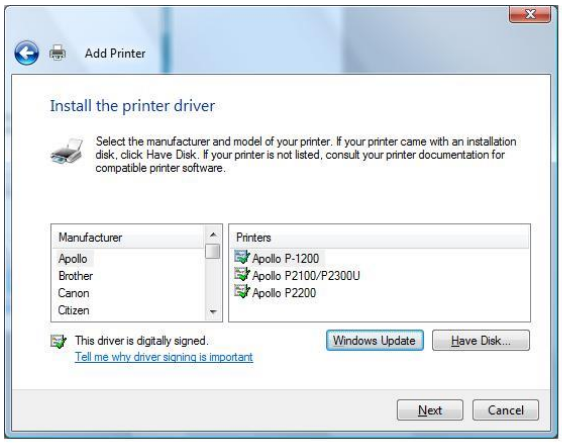
“Hostname or IP address”, type in the IP of the NAS server found in the “NetTool”

Click Next



Device Type, select “Standard” and select “Generic Network Card” from the drop down menu

Click Next

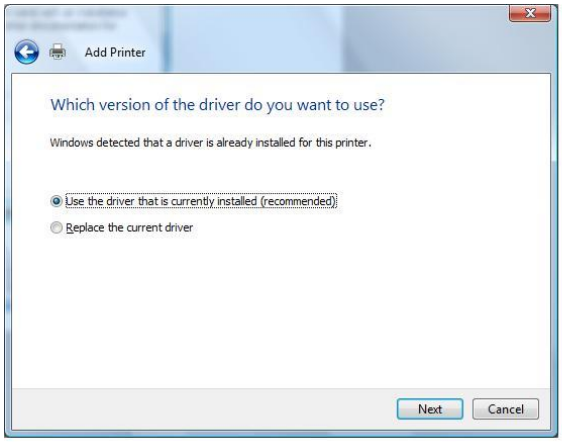


In the left hand window select the manufacturer of the printer

In the right hand window select the printer

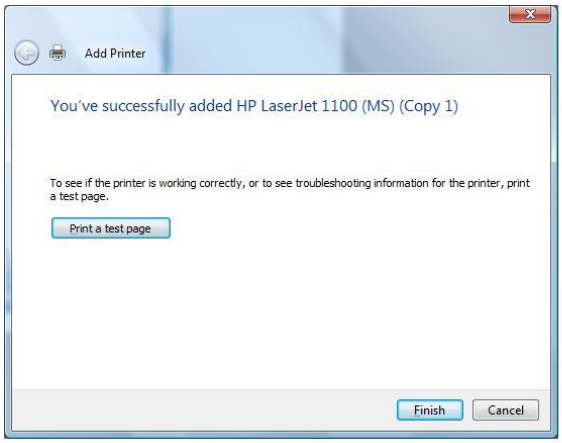
If the printer is not listed here, download the driver for the printer from the printer manufacturers website and install it by either using the Setup software in the windows driver or by clicking on “Have Disk”

Click Next



If the printer driver is already in the system, the above screen will appear, please use the driver that is currently installed (recommended)

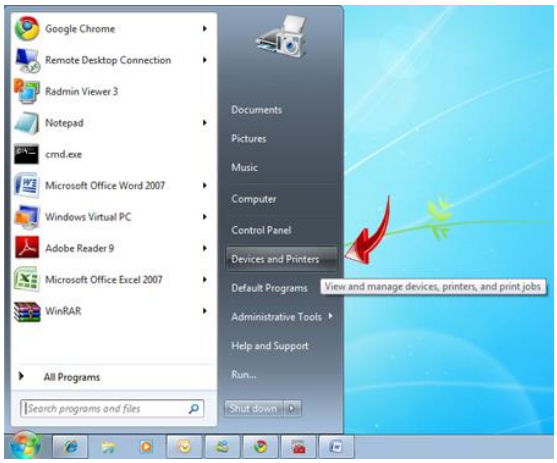
Click Next



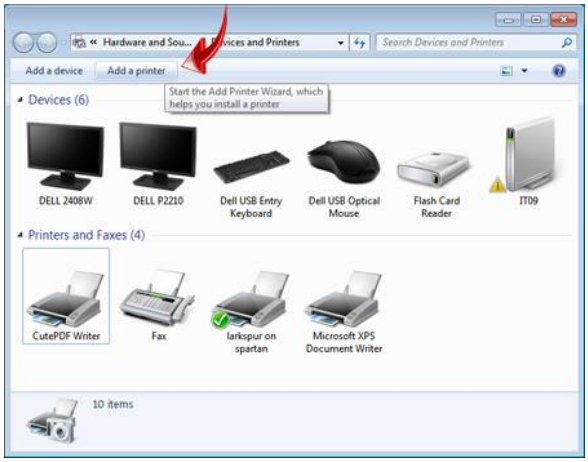
Here it is possible to print a test page by pressing "Print a test page"

Click Finish to finish the printer installation

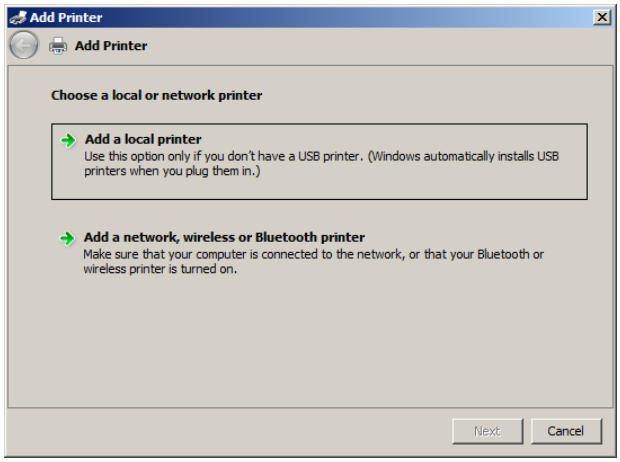
Windows 7



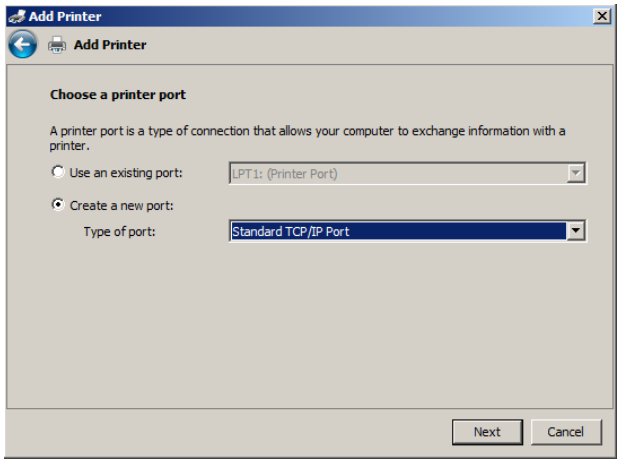
Go to "Devices and Printers"



Click “Add a printer”



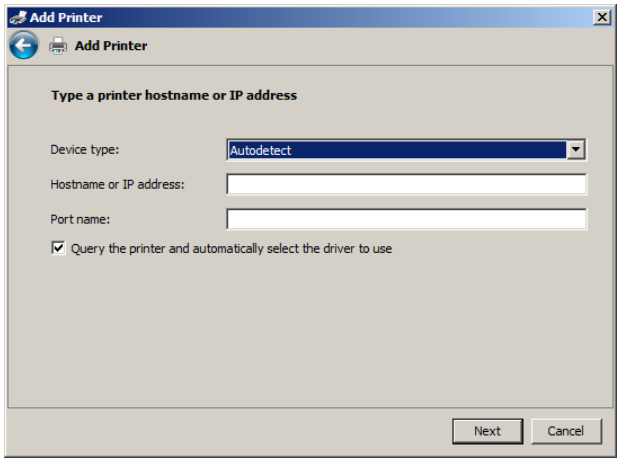
Click “Add a local printer”



Click ”Create a new port”

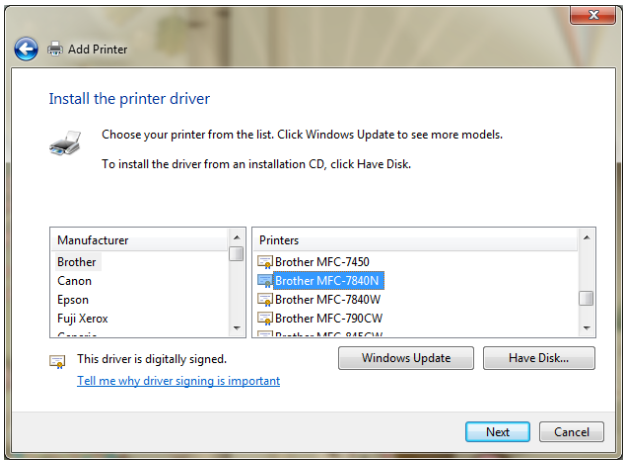
In type of port select “Standard TCP/IP port”

Click Next



“Hostname or IP address”, type in the IP address of the NAS server found in the “NetTool”

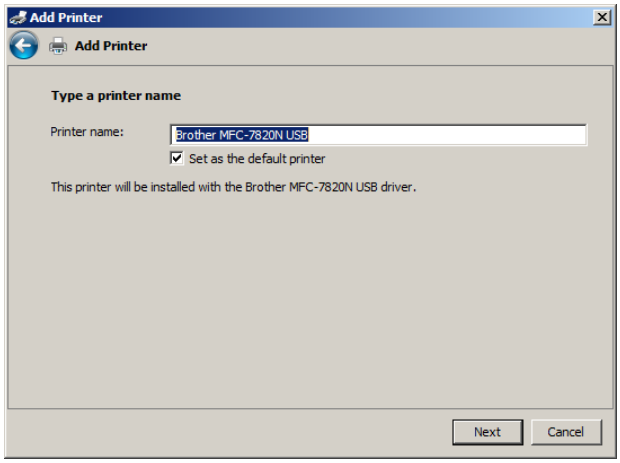
Click next



In the left hand window select the manufacturer of the printer
In the right hand windows select the printer

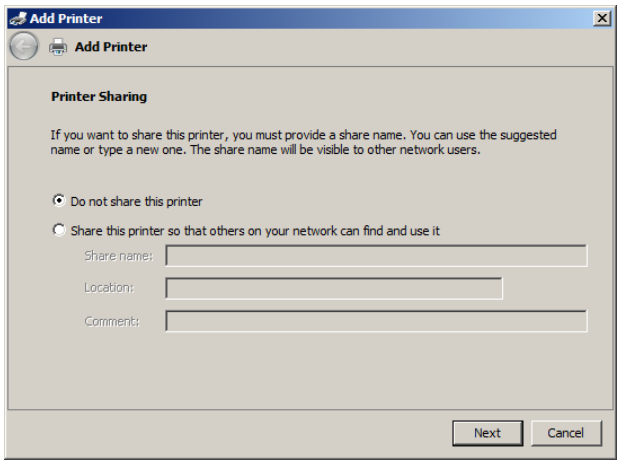
If the printer is not listed here, download the driver for the printer from the printer manufacturers website and install it by either using the Setup software in the windows driver or by clicking on "Have Disk"

Click next



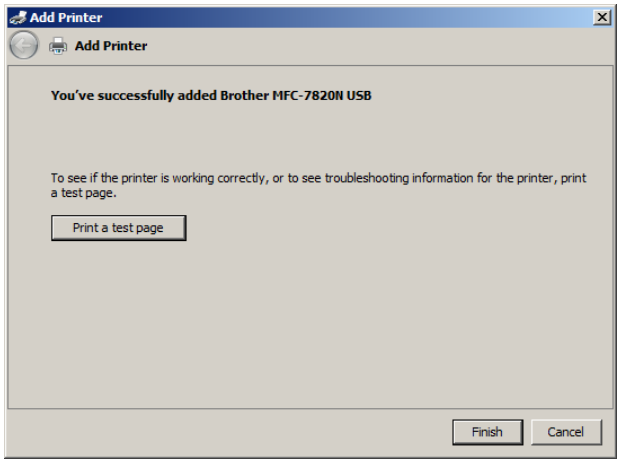
Give the printer a name; it can be an advantage to type NAS in front of the printer name to indicate that the printer is connected to the NAS.

Select whether or not to set the printer as default printer
Click next



Select ”Do not share this printer”

Click next

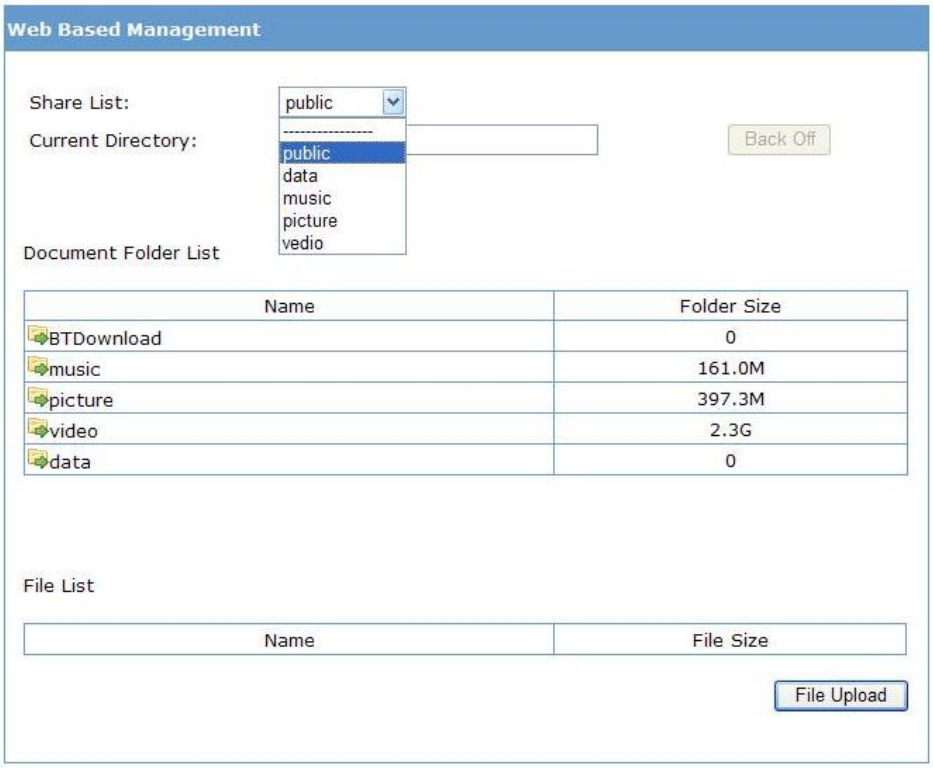


Here you can select whether to print a test page

Click finish to finish the printer installation

4.2.7 Web Based Management

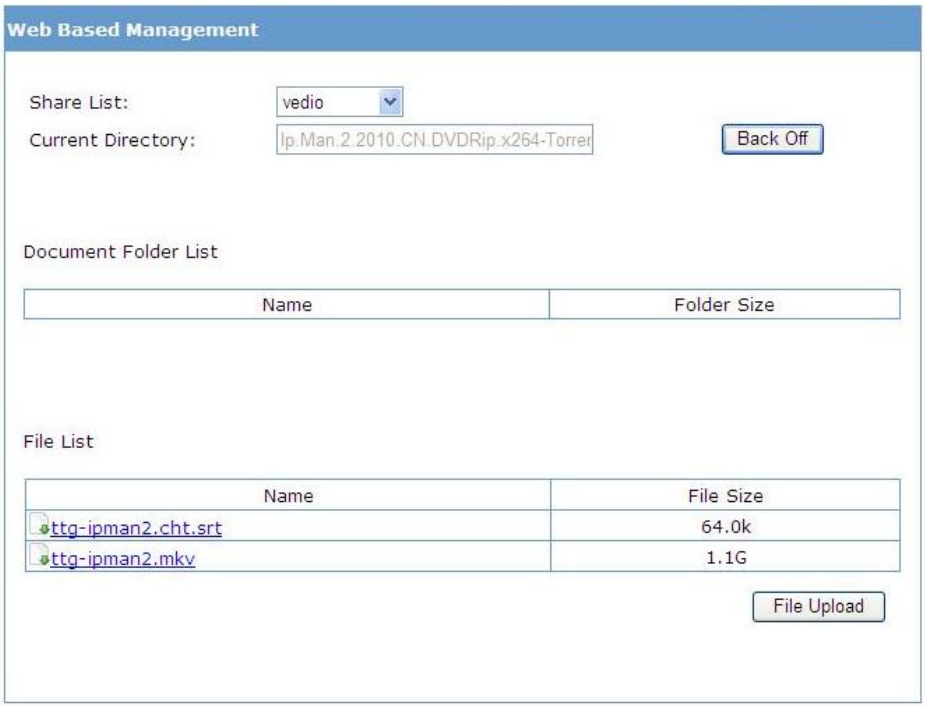
In share list, click the name of the root folder that is to be used, e.g. public. Clicking the icon next to a folder name (shown in the Document folder list) will activate this folder.



Back Off: Click this button to go back to the previous folder.

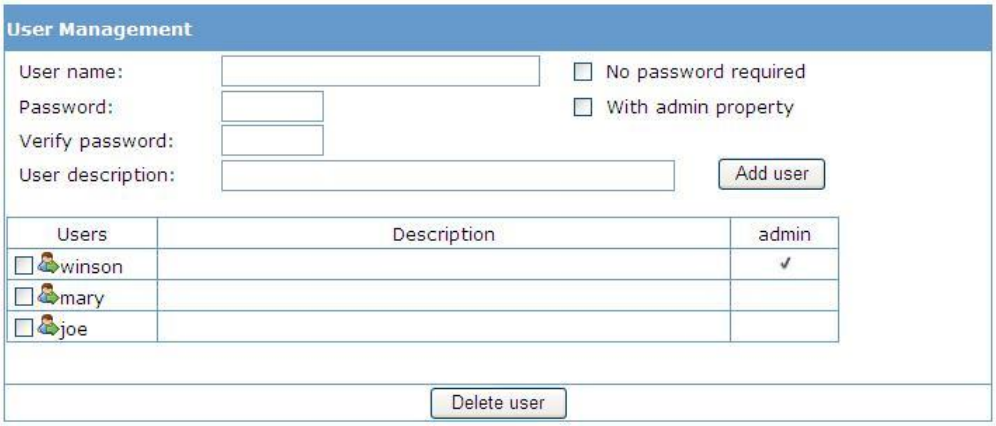
File Upload: Gives the possibility to upload files to the selected folder.

A file from the "File List" can be opened or downloaded from this page, left click on it to open the file or right click and select download as… to download the file.

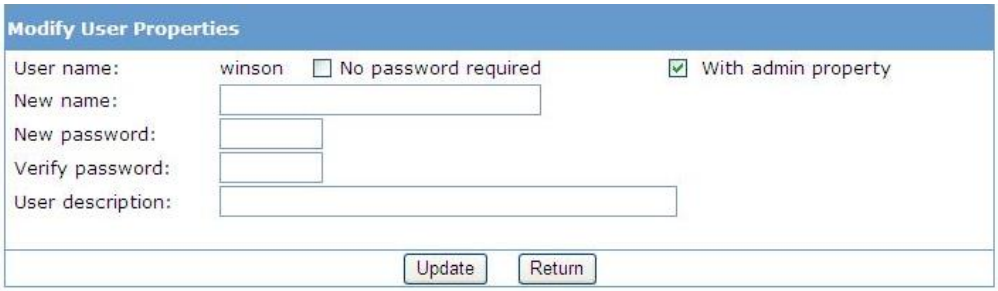


4.2.8 Users

Here it is possible to create and delete users. It is also possible to alter the users username and password.



Clicking on the icon to the left of the user name will bring up the "modify user properties" page.

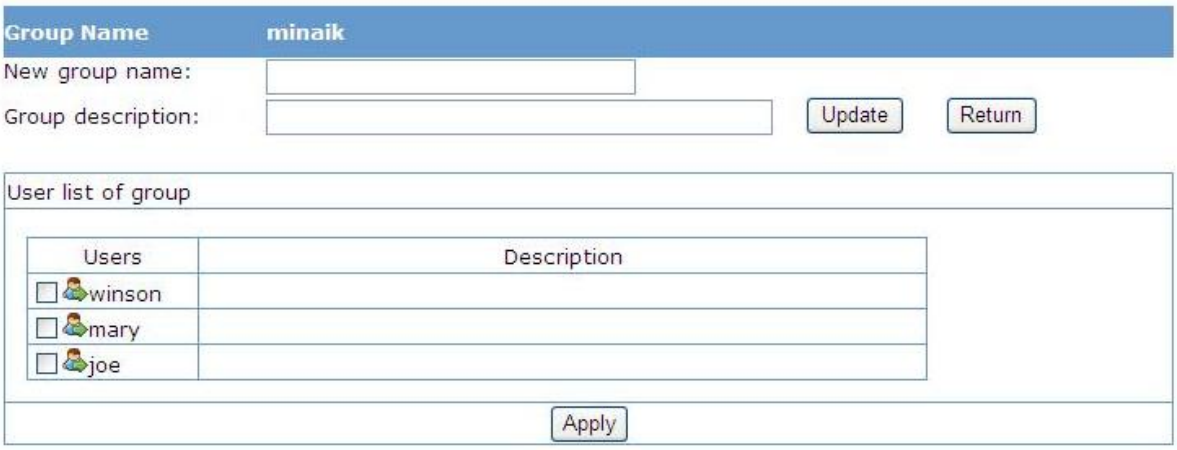


4.2.9 Groups

A group is used to give several users the same rights, e.g. if 5 users are to get access to 10 different folders, these 5 users have to be added 10 times each but with the use of groups these 5 users are located inside the same group so selecting the group to access the folder will automatically give access to the users inside

Here it is possible to create or delete groups.

Click on the icon to the left of the user name will bring up the list of users in the NAS server and will allow them to be added to the group.



4.2.10 Folders

Here it is possible to create or delete folders.

When a folder is added, clicking the icon to the left of the name will bring up the folder administration page.

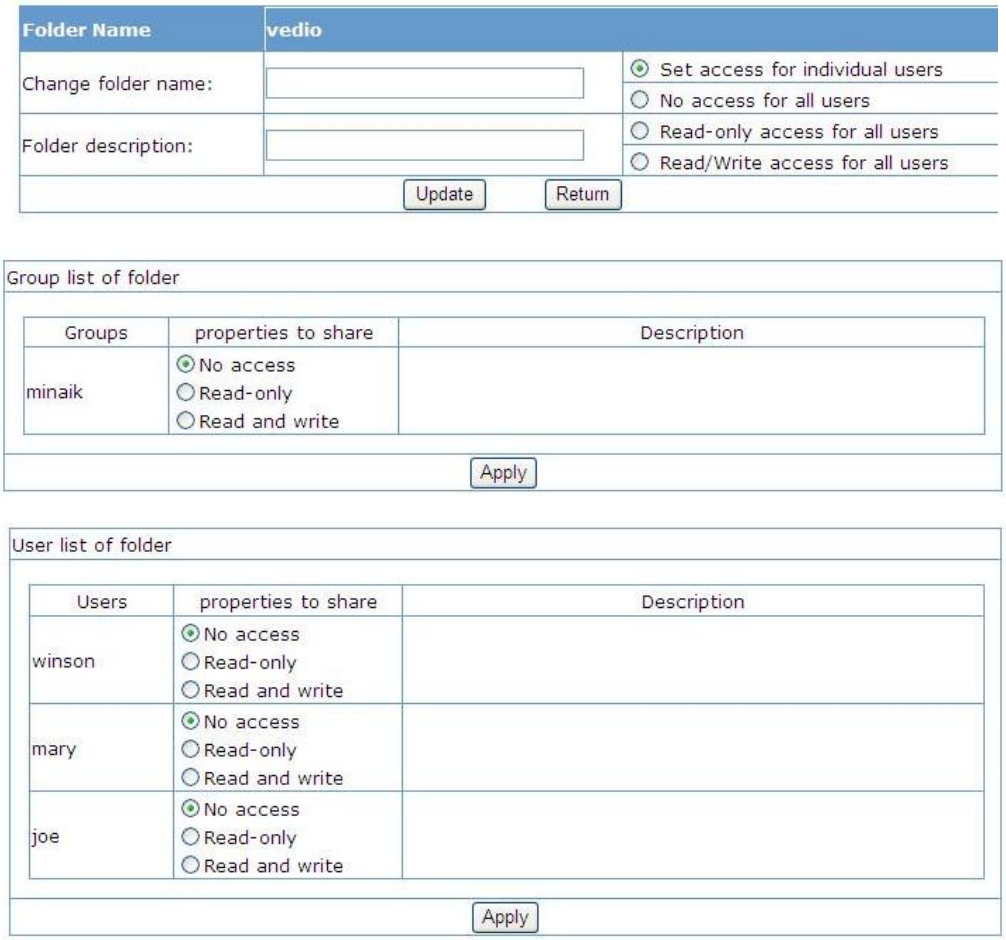
The folder administration page is used to grant access to groups or users so that they can access the folder on the NAS server.

It is possible to give a group or user no access, Read-only access or Read and write access

If no users are selected the admin username and password of the NAS server is used to unlock the folder with read and write capabilities.

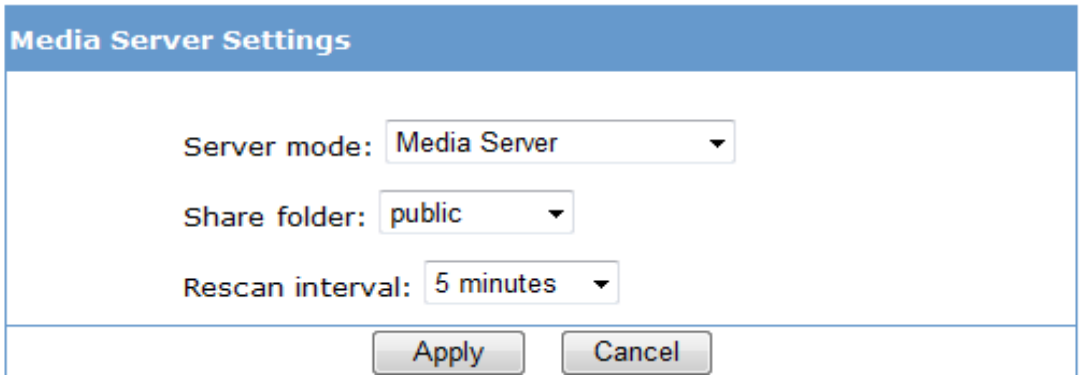
Default username: **admin**

Default password: **admin**



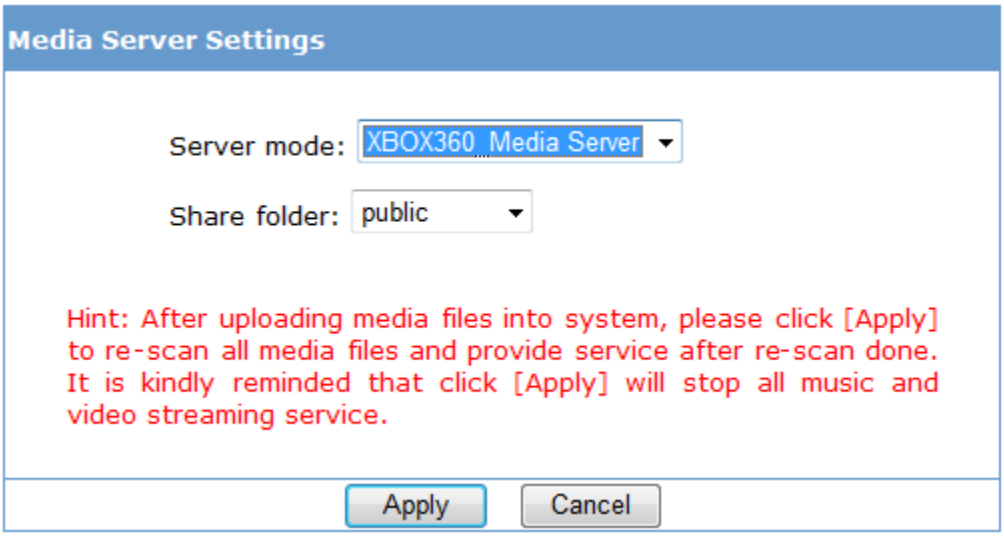
4.2.11 Media Server settings

UPnP Media server mode



Activate the UPnP AV Server by selecting “Media Server”.
Select a folder to use for the Media server in “Share folder” and select the time between rescans of the shared media files in “Rescan interval”

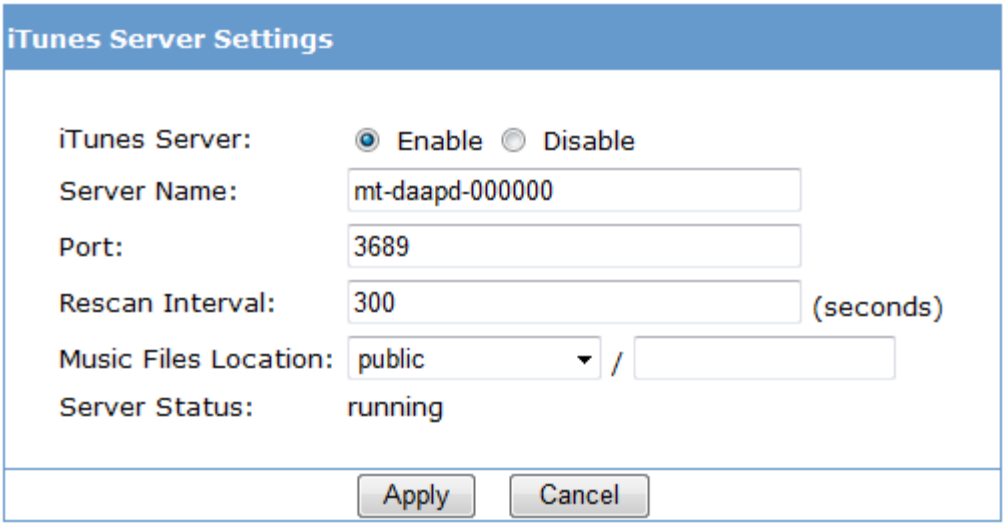
Xbox360 mode



Activate the Xbox360 mode by selecting “XBOX360 Media Server” in Server mode.
Select a folder for the Xbox360 mode to use in “Share folder”
Please Note: In this mode it is necessary to do a manual rescan when new files are added to the share folder, this is done by pressing the apply button.

4.2.12 iTunes Server Settings

This function enables or disables the iTunes server part of the NAS server. To use the iTunes server it is necessary to install an iTunes client on the client computer.

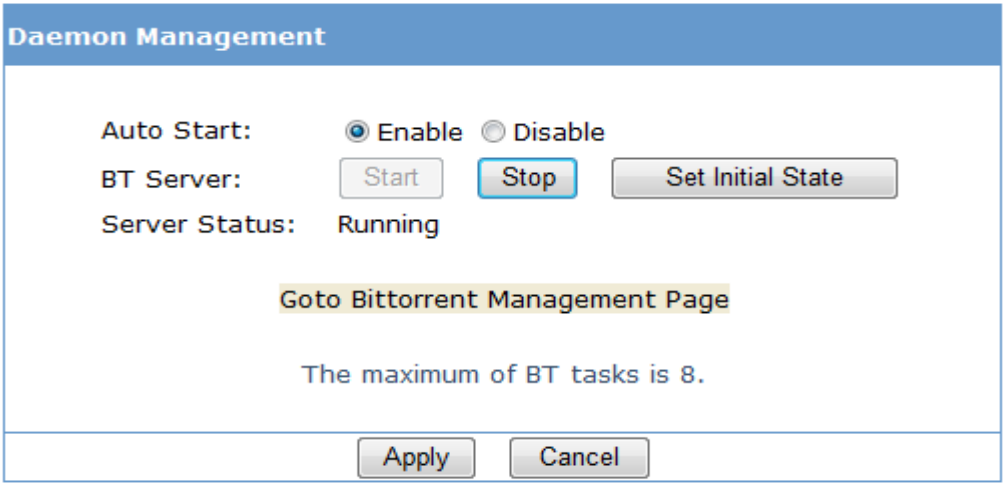


iTunes Server	Choose Enable or Disable the iTunes server part of the NAS server.
Server Name	Enter valid name for the server, includes: ’0-9’, ’a-z’, ’A-Z’, ’-‘, ’_’, ‘ ‘; If iTunes, The sever name will be listed in the shares in iTunes.
Port	Enter a valid number.

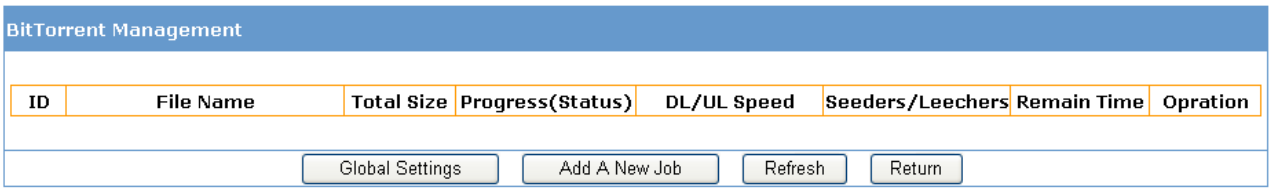
Rescan Interval	Enter a valid number; selects when to rescan the NAS server for new audio files.
Music Files Location	Choose the location of the music files.
Server Status	Click “Apply” to apply the settings to the iTunes part of the server. The server status will indicate if the iTunes server is Running or stopped.

4.2.13 Bit Torrent

A NAS server hard disk is required to use this function.



Auto Start	Select Enable to start the BitTorrent part of the NAS when the NAS server starts. Disable will disable this function.
BT Server	Click “Start” to start the BT server; click “Stop” to stop the BT server; click “Set Initial State” to restore the BT server to its initial state
Server Status	Show the status about the BT server running or stopped.
Goto Bittorrent Management Page	If the BT server is not running, the button is grey. If enabled, you can click here to go to the BitTorrent Management page.



Global settings

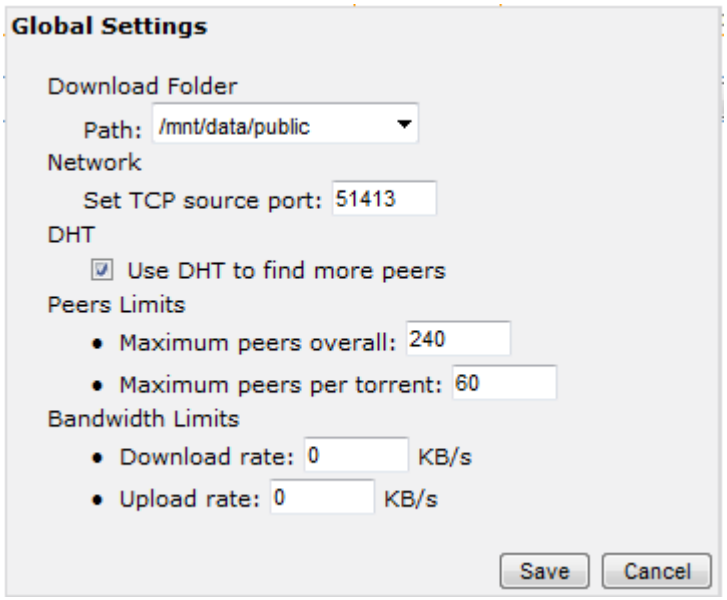
Download folder: Here it is possible to choose which folder to store the torrent files in.

Network: Here it is possible to set the TCP source port

DHT: Select whether to use DHT to find more peers

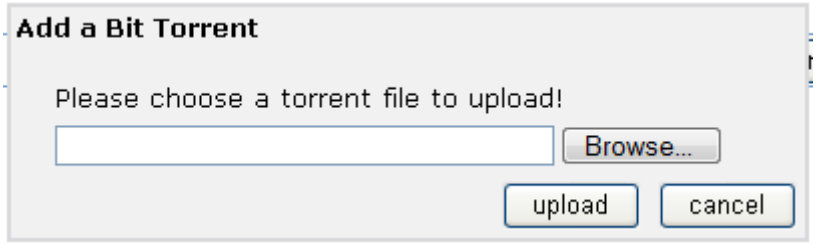
Peers limit: Set the maximum overall peers and the maximum peers pr. Torrent

Bandwidth limits: Set the upload and download max rates

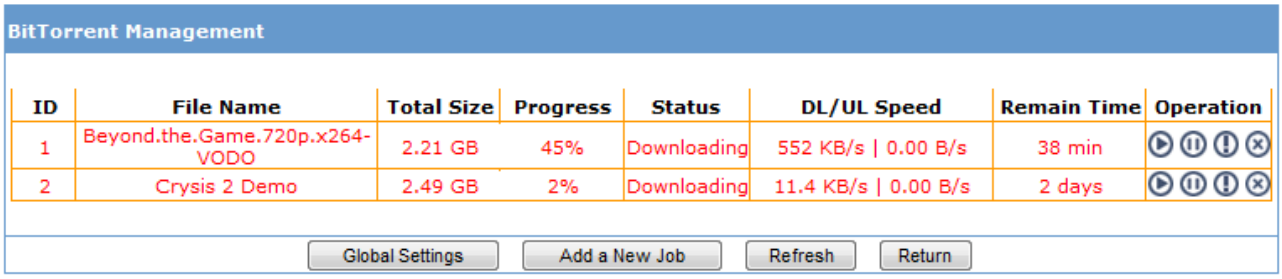


Add a new job

Download a Bit Torrent seed (*.torrent) you want from the internet. And use this function to add the job.



After finished uploading the right .torrent file, click on "Upload" to add the download.



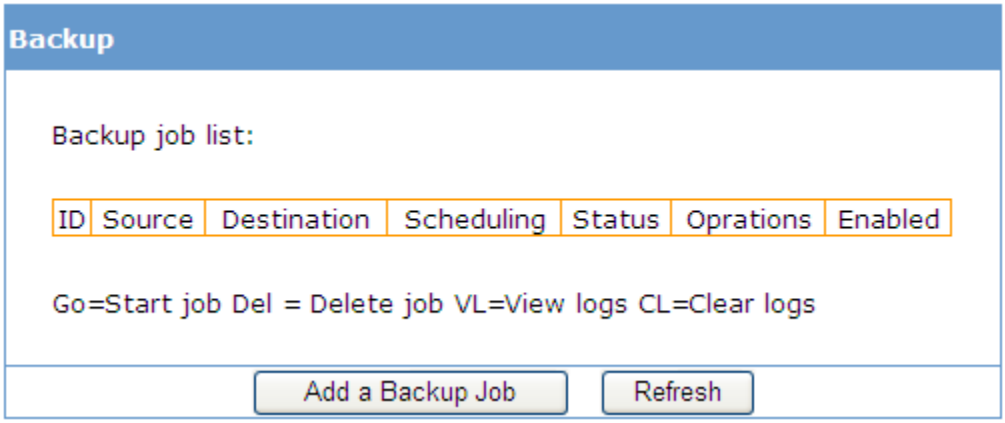
There are four operations we can do:

Detail	Show the detail information of the job.
Start	If you want to running the job clicks this button.
Stop	If you want to stop the job click this button.
Delete	Stop and delete the job then you can add other jobs

Please note: It is possible to add up to 8 jobs. Only 2 jobs can run at the same time.

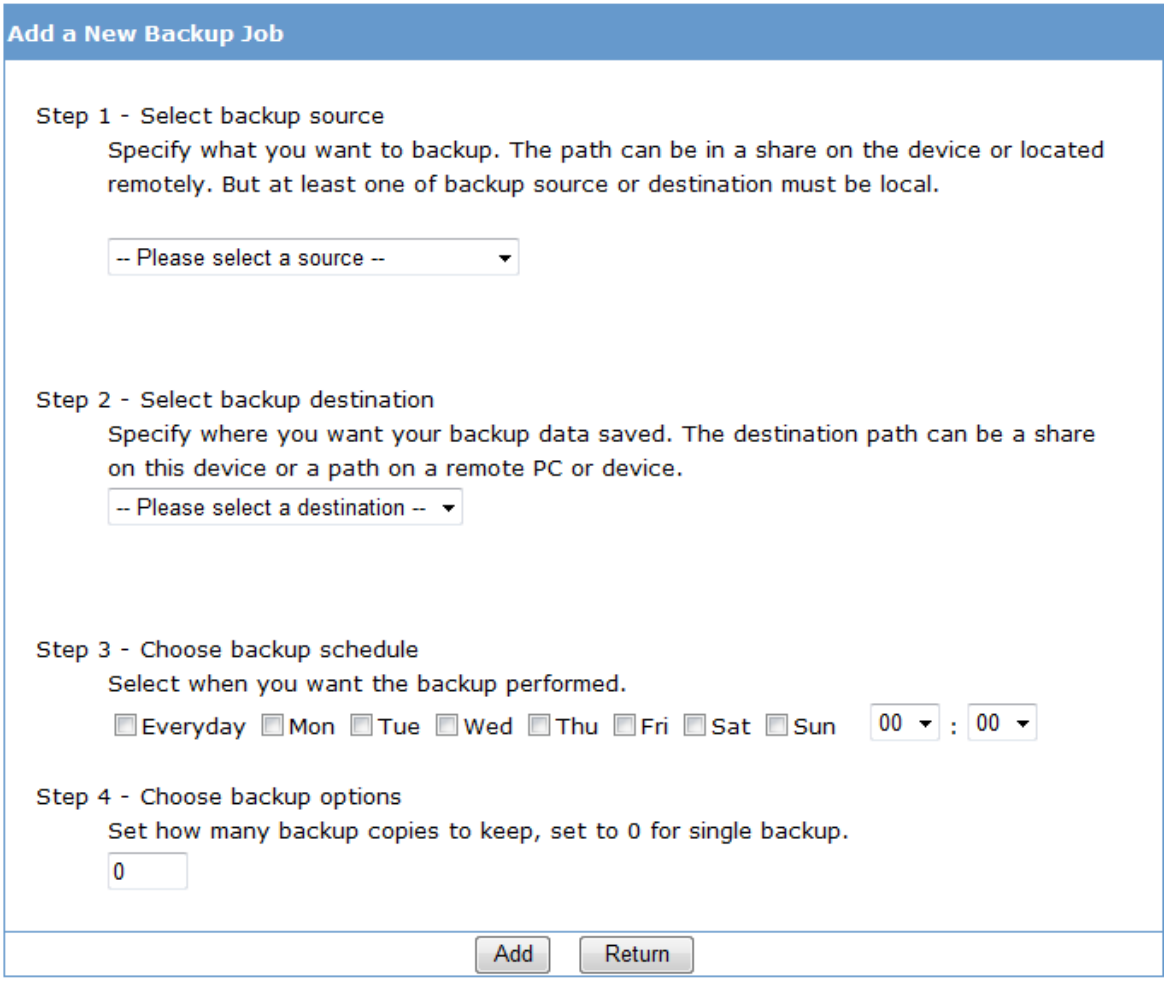
4.2.14 Backup

This is the backup function of the NAS server.



Add a Backup Job

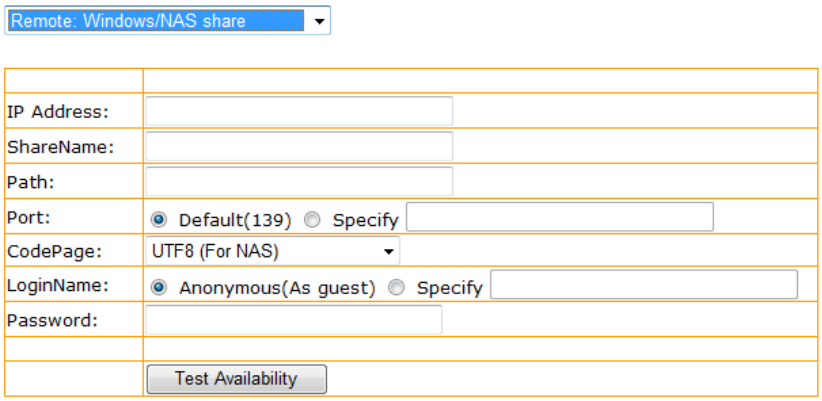
This page enables a backup to be set up in 4 steps easy steps.



Select backup source	Here it is possible to select the what is to be backed up, it can be either local or remote files and folders. Please note that either source or destination must be a local folder on the NAS server
Select backup destination	Here it is possible to select the destination of the backup, it can be either local or remote files and folders. Please note that either source or destination must be a local folder on the NAS server
Choose backup schedule	Select the time the backup is to be performed, choices are Monday to Friday or everyday and a time for the backup to start
Choose backup options	Here it is possible to select how many backups to keep for this backup. If for instance it should be possible to go back 5 days, enter 5. Enter 0 if the backup is a single backup. Please note that backups can take up large amounts of space so consider carefully how many backups to keep

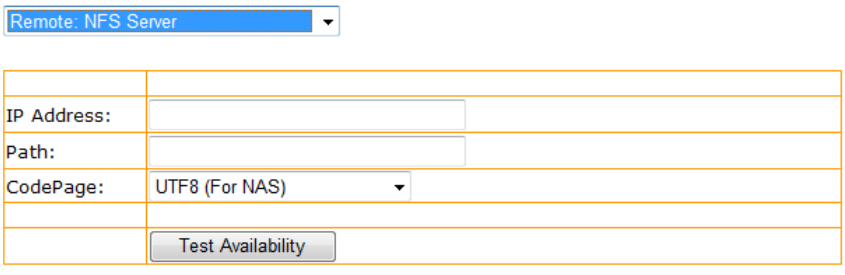
When selecting backup source or backup destination, there are many different choices. These are:

Remote: Windows/NAS share



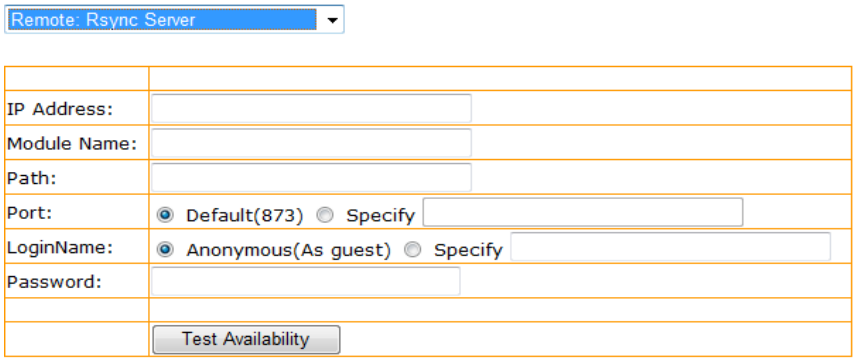
Input the file information which you want to backup, then click “Test Availability” button to test availability result. If the result is OK, it shows your input information is right.

Remote: NFS Server



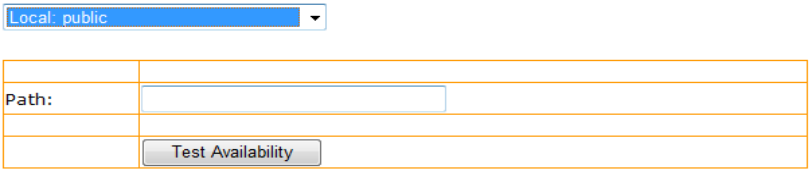
NFS (Network File System) allows a system to share directories and files with others over a network. By using NFS, users and programs can access files on remote systems almost as if they were local files.

Remote: Rsync Server



Rsync uses the Rsync algorithm which provides a very fast method for bringing remote files into sync. It does this by sending just the differences in the files across the link, without requiring that both sets of files are present at one of the ends of the link beforehand. At first glance this may seem impossible because the calculation of different between two files normally requires local access to both files.

Local: public



Input the folder to backup in Path unless the backup is to backup the entire public folder.

Local: admin (All NAS server hard disk data)

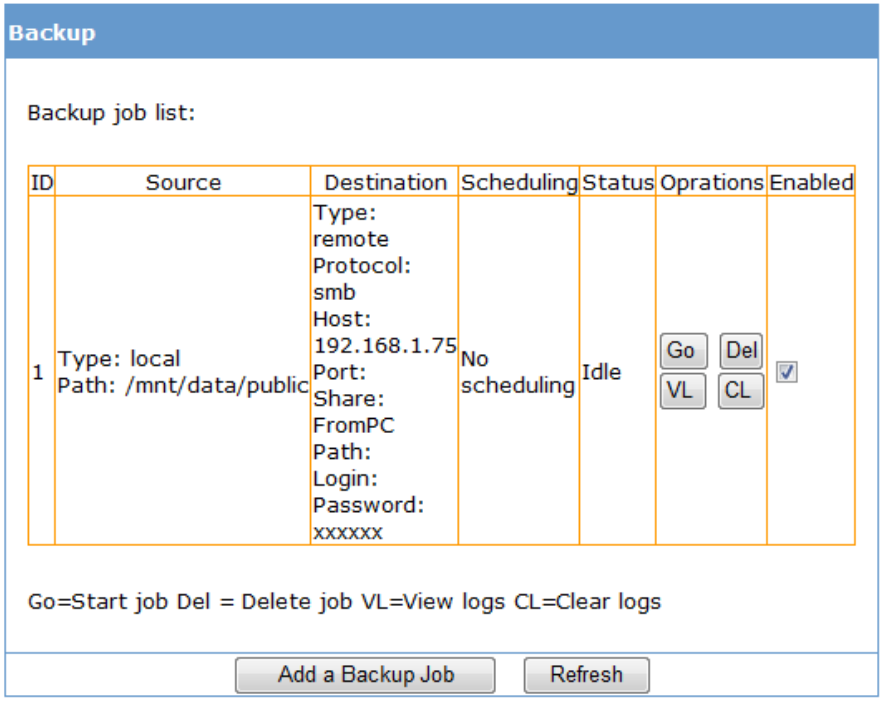
This section does not input any information to test, and the file is in the admin folder.

Local: The other hard drive share

The function of this section is the same as the “Local: public”, it just uses another folder than public.

When the job has been set up correctly, please click add to add it to the backup list.

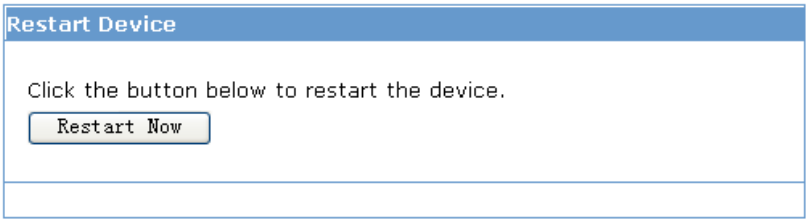
If desired, the job can be run manually, click “Go” to run the process.



4.2.15 Tools

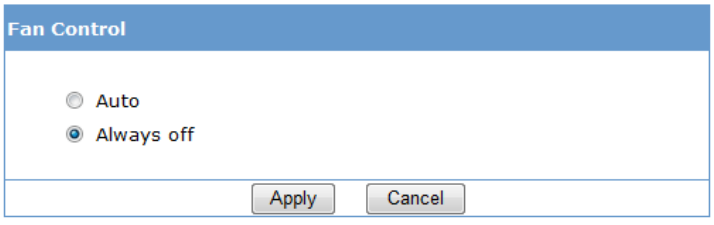
4.2.15.1 Restart

Restart the NAS immediately.

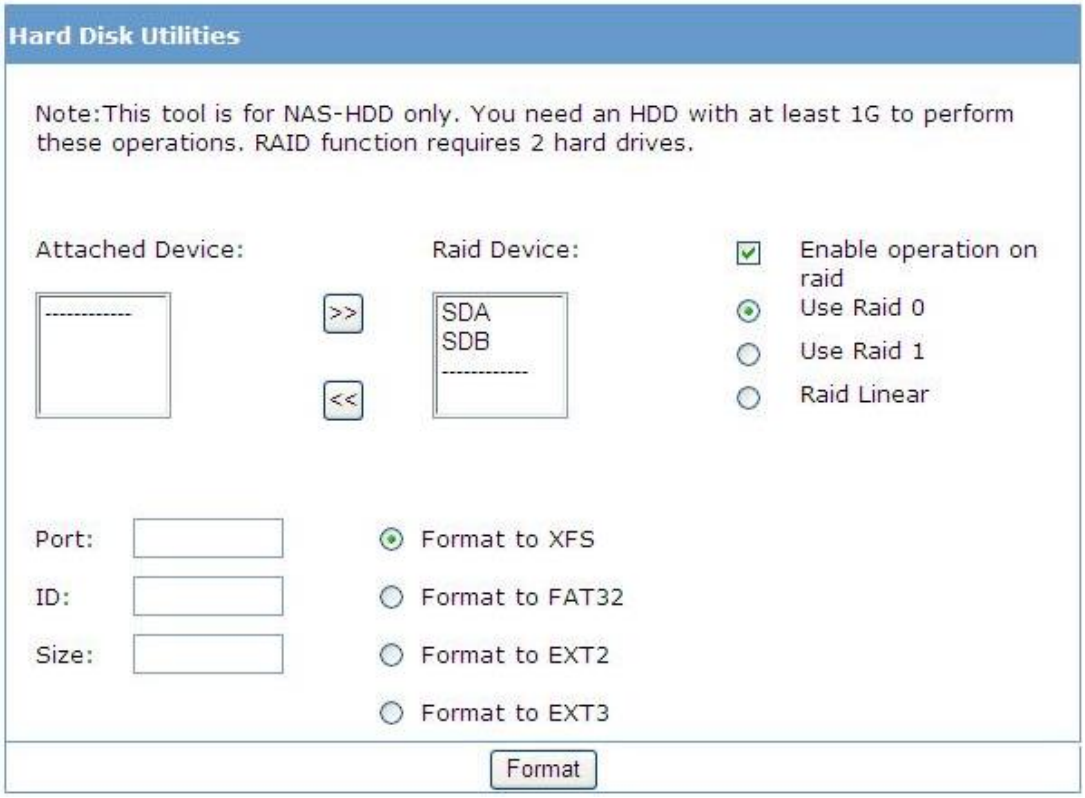


4.2.15.2 Fan control

Here it is possible to select whether the internal fan runs on Automatic on/off function or is always off



4.2.15.3 Hard disk utility



Two functions can be found in this option.

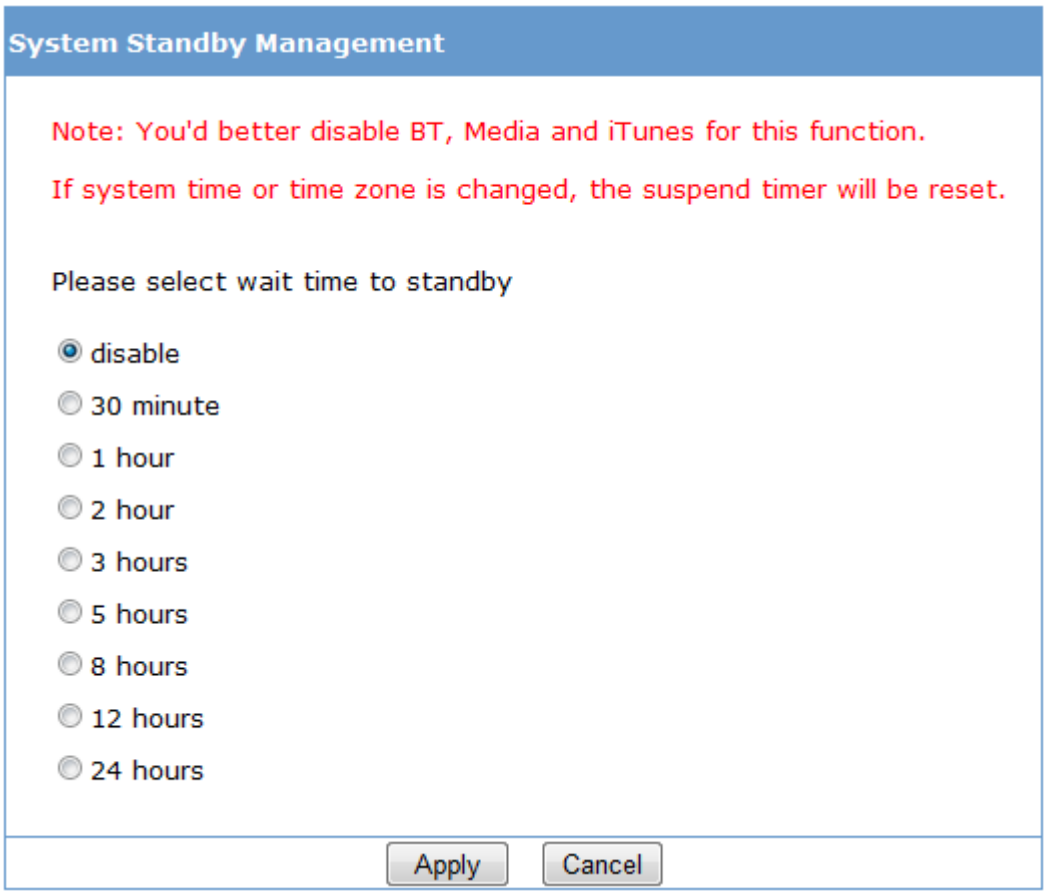
1. **Format:** Format a hard disk for use with the NAS server (User management **ONLY** works on a hard disk installed inside the NAS server).
    - Hard drive capacity must be at least 10GB.
2. **Raid:** Please select the hard drive and then set which one of the Raid mode to use, then go back to step 1 and continue.

For information about RAID, please see appendix 1

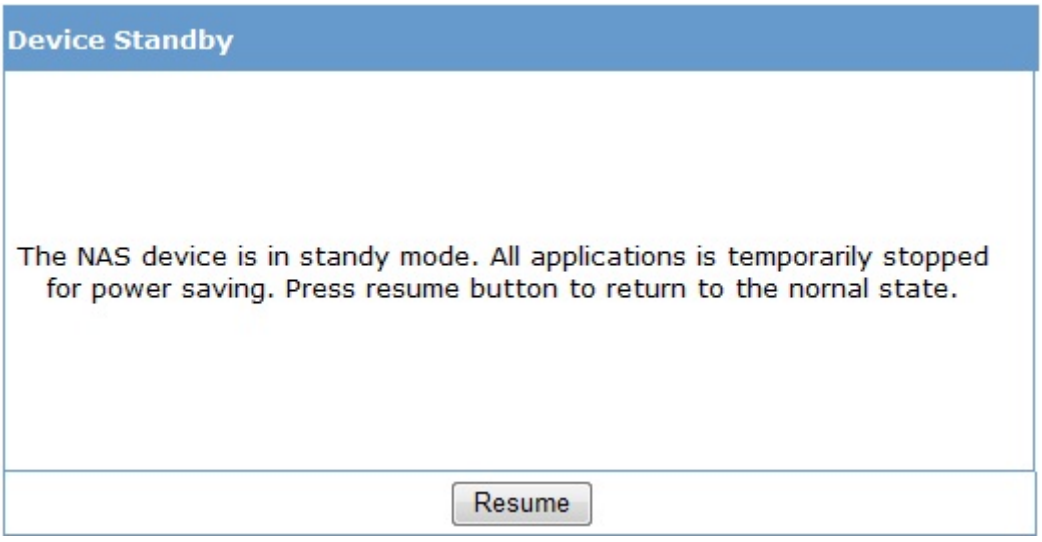
4.2.15.4 Hard disk Suspend

The hard disk standby mode is used to minimize the power consumption of the NAS server and wear and tear on the hard drives.
The hard disk standby mode turns off the hard drives after a preset time.

PLEASE NOTE: No matter what the NAS server is doing, it will turn off after the preset time. So make sure that the standby time is set high enough.



When the NAS server goes into standby mode, it can be awakened through a browser window by entering the IP of the NAS into the address bar. Now the below picture will be shown.

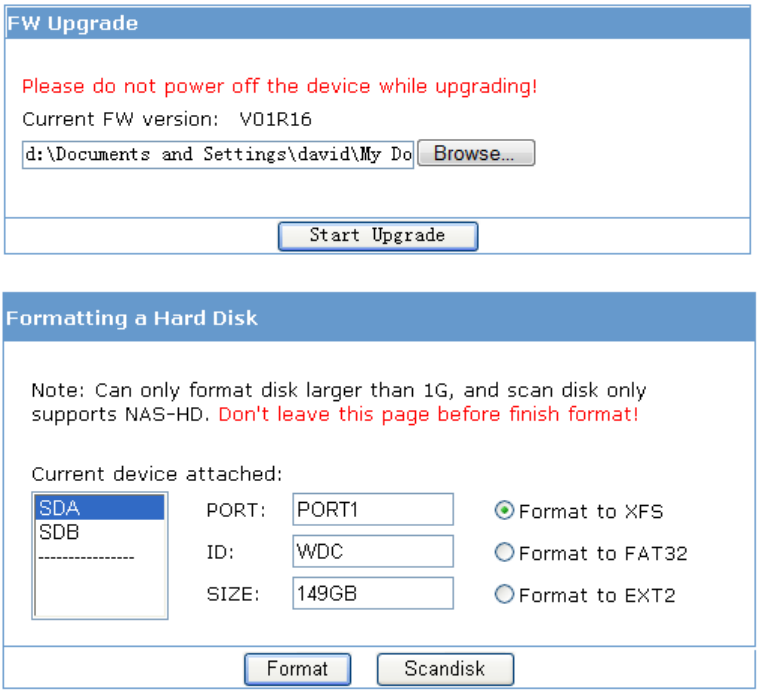


Press the resume button to start up the NAS server from the standby mode. The below screen will be shown

After a few minutes the NAS server will be ready for use again.

4.2.15.5 Firmware Upgrade

If a new firmware is released for the NAS server it is possible to update the NAS server in this menu. An update will take about 2 to 3 minutes to complete.



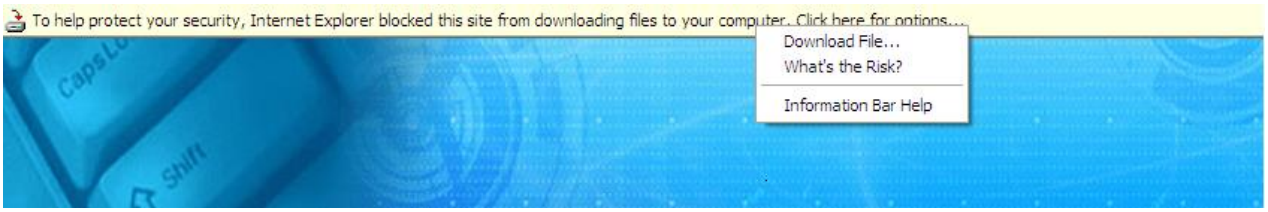
Two functions can be found in this menu.

1. **Format:** Format a hard disk into a NAS hard disk (User management **ONLY** works on a NAS server hard disk). And the size of hard disk minimum requirement is 10GB.
2. **Scandisk:** Can be used to check and repair damaged files on the NAS server hard disk.

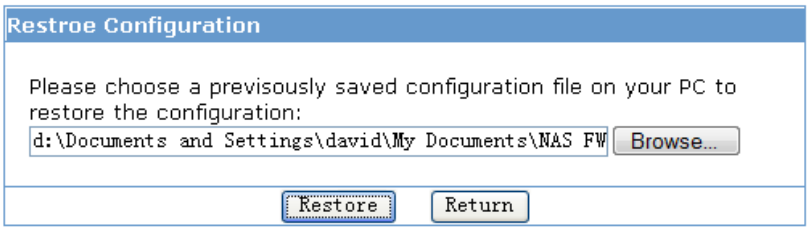
4.2.15.6 Save & Restore Config

This menu gives the possibility to backup or restore the NAS server settings to or from an external device.

Save: The configuration file will be downloaded **(**Internet Explorer users will need to click on the protection bar on top and click choose “Download File”)

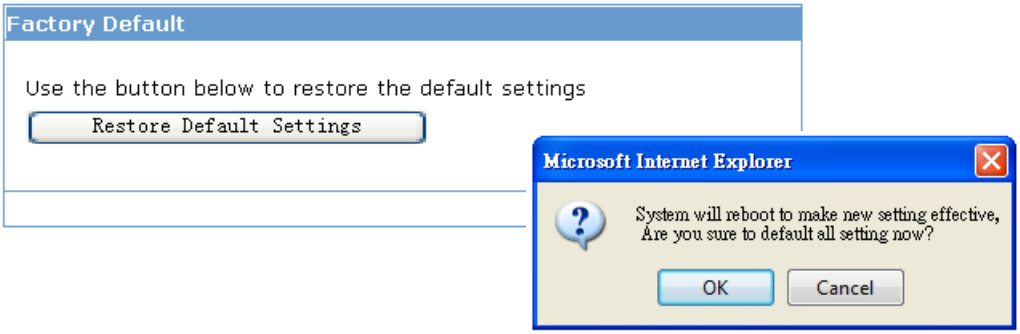


Restore: This function gives the option of restoring the NAS server configuration from a previously saved configuration.



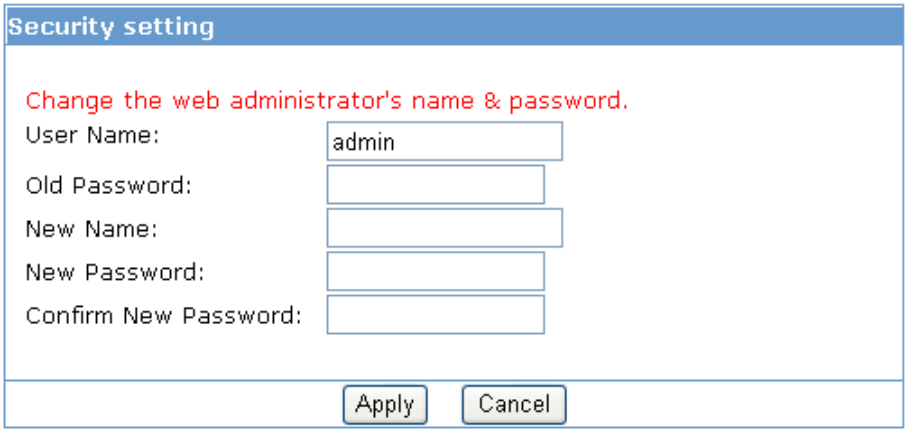
4.2.15.7 Factory Default

Only use this function if you wish to restore the factory settings. Please note that all settings in the NAS server is deleted and the original factory configuration is restored.



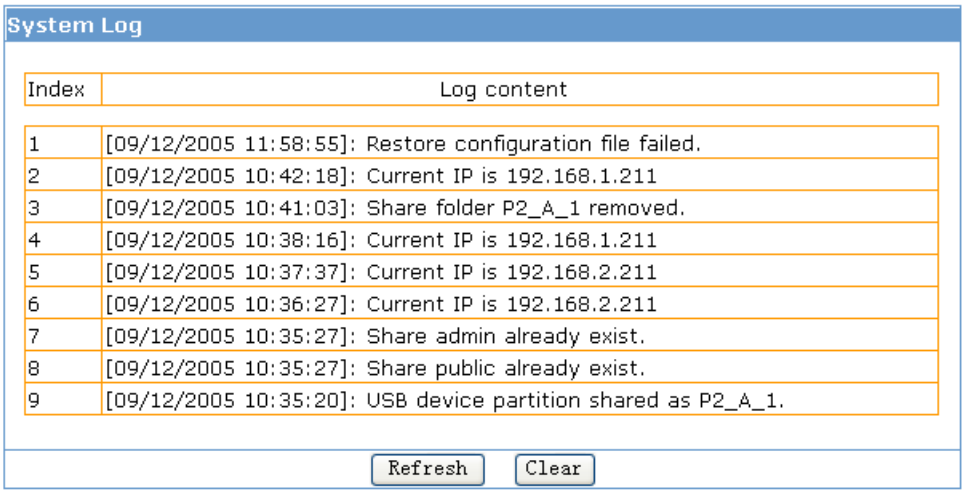
4.2.15.8 Login Settings

The username and password of the NAS server can be changed here.



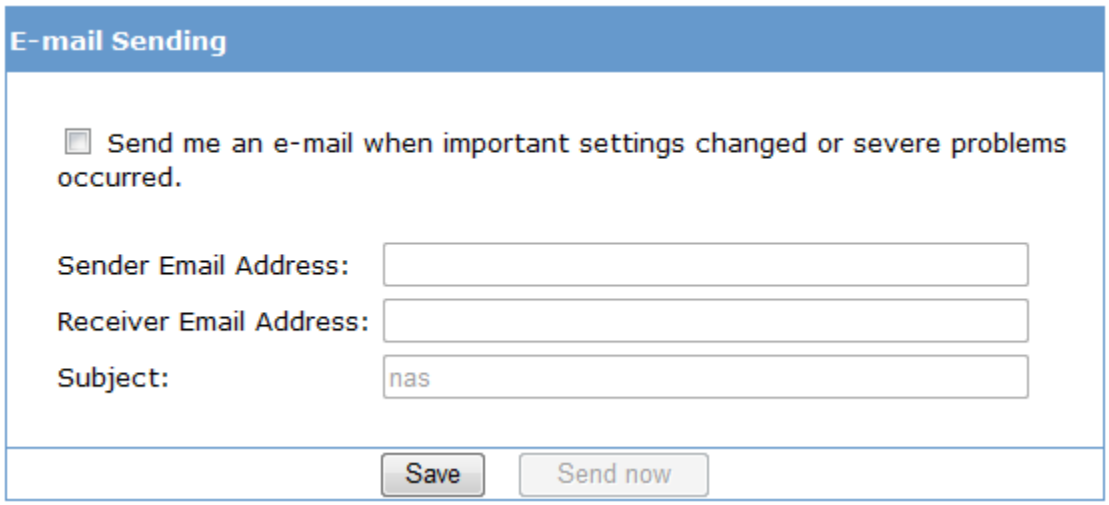
4.2.15.9 System Log

An activity log from the NAS server can be viewed here.



4.2.15.10 E-mail sending

This page allows the server to send an E-mail if important changes are made to the NAS server.



Send me an email when important settings changed or severe problems occurred: Enables the

sending of emails when changes are made or problems occur within the NAS server.
Sender email Address: Enter the email address that will be sending the mail
Receiver email Address: Enter the email address of the recipient of the mail
Subject: Enter the subject of the email.
Please note: It is recommended to use a Gmail account for sending mails from the NAS server.

FAQ

Question	Answer
The web menu has a different background	Appearances vary with firmware versions. Please use the latest firmware available for the NAS server.
Can I connect the NAS server directly to my computer	No the NAS server must be connected to a network
How do I access the NAS	Please use the NetTool located on the CD that came with the product
In UPNP I cannot access my ISO files	UPNP does not support ISO files.
Shortcuts in media boxes	If the mediabox supports shortcuts in network, it is a very good idea to add shortcuts to the NAS server. The way of adding shortcuts is described in the user manual of the mediabox

Power consumption:
Turned Off power on rear switch: 0.2 watt

Typical On with one active hard drive and Fan Off: 8 watt*[1]
Typical On with one active hard drive and Fan On: 8.5 watt*[1]
Typical On with one hard drive in standby mode: <4 watt

Typical On with two active hard drives and Fan Off: 13 watt*[1]
Typical On with two active hard drives and Fan On: 13.5 watt*[1]
Typical On with two hard drives in standby mode: <5 watt

*[1] Power consumption will vary depending on the type of the hard drive.
The hard drives used for the test are Hitachi Deskstar 1TB 7200 Rpm

Appendix 1

What is RAID?

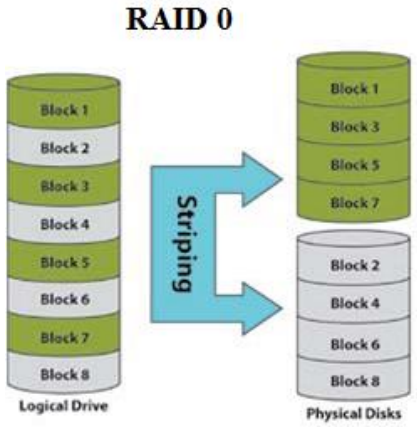
RAID, short for Redundant Array of Independent Disks, is a combination of two or more disks with the aim of providing fault tolerance and improving performance. There are several different levels of RAID, with each providing a different method of sharing or distributing data amongst the drives. The NAS server supports RAID levels 0, Linear and 1.

Advanced definition of raid 0 and Raid Linear

RAID 0 provides *data striping*, which spreads out blocks of data over both drives, but does not provide data redundancy.

Although performance is improved, the lack of fault tolerance means that if one drive fails, all data in the array will be lost.

RAID Linear is much like RAID 0 except that data is Stored randomly across the disks, not stiped



Simple definition of raid of raid 0 and Raid Linear

RAID 0 and RAID Linear puts disks together to create a Larger storage capacity.

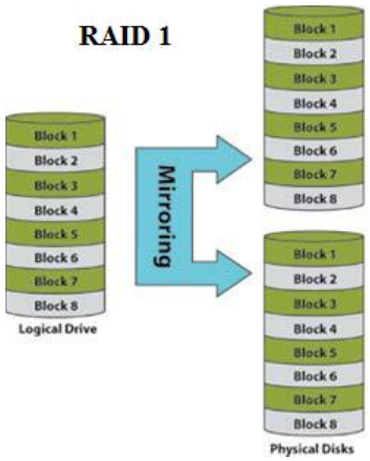
RAID 0 and RAID Linear is faster than using one disk as parts of the data is stored on both disks. This option is not as secure as **RAID 1** as if one disk fails all data is lost.

Advanced definition of Raid 1

RAID 1 provides *mirroring* over both disks, with the same read/write speed of a single disk.

A **RAID 1** array can only be as large as it's smallest member disk.

Because the data is stored on both disks, **RAID 1** provides fault tolerance and protection, in addition to performance advantages



Simple definition of Raid 1

RAID 1 makes an identical copy of the data from disk 1 to
disk 2 so the same data is stored on both disks, this makes
this option more secure as if one disk fails, the other one is still operational. The failed disk can be changed to a new disk.

RAID 1 can be enabled on the new disk and the **RAID 1** *mirror*
copy is redone and the data is secure again.