

Network Storage Server

User's Manual

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Introduction

Congratulations on purchasing this network storage server (NAS, Network Attached Storage). This storage server lets you easily share your files in your network. Simply plug in the hard disk drive, connect the LAN port to your network, and do some basic settings, and you're ready to share files. The storage server provides a total solution for the Small and Medium-sized Business (SMB) and the Small Office/Home Office (SOHO) markets, giving you an instant way to share and manage your files through network.

Features

- Supports two internal SATA hard disk drives
- Provides two USB ports for connecting USB mass storage devices
- Allows you to share your files via FTP or Network Neighborhood
- Allows you to share your multimedia content to DLNA compliant media adapters, like Xbox 360, Sony PS3...
- Allows you to share your music to iTunes
- Provides Internet download engine which supports download through FTP, Web and BitTorrent.
- High file transfer throughput (> 100Mbps)
- Equipped with one gigabit LAN port (10/100/1000M)
- Supports static IP and dynamic IP
- Easy to use both Windows-based and Web-based GUI for configuration and management

Minimum Requirements

- One SATA hard disk drive
- Network Interface Card (NIC) for each Personal Computer (PC)
- Computer with a Web-Browser (Internet Explorer 6.0 or higher, Netscape Navigator 7.2 or higher, Firefox 2.0.0.3 or higher)

Package Contents

- One Network Storage Server
- One Quick Installation Guide
- One User Manual CD
- One Power Adapter

- Accessories

Understand your Storage Server

Back Panel

The diagram below shows the storage server's back panel.



1) Local Area Network (LAN)

You should connect the LAN port of this storage server to your hub/switch, or one LAN port of your router etc.

2) USB2

The USB2 port allows you to share your files stored in the USB mass storage device plugged in.

Note: Please plug the external power of your USB mass storage devices before you connect them to the storage server.

Note: If you have USB mass storage device (like USB external HDD), please plug it to this storage server's USB 2 port, and plug the USB flash disk you wish to share to the USB 1 port.

3) Power Switch

When the storage server is not working, switch the Power switch to "1" will switch on the power and make the storage server start. When the storage server has been shut down, switch the Power switch to "0" will switch off the power.

Note: Please do not directly switch off the power when the storage server is running. This will make some data not correctly saved in the storage server and may make the storage server not work properly. Before switch off the power, please press Release button for more than 5 seconds to shut down the storage server first.

Note: If you did not switch off the power after your previous shut down (just press Release button for more than 5 seconds) and you want to start the storage server now, you should switch off the power first and then switch on the power, and the storage server will start again.

Note: After you shut down the storage server and before switch off the power, the storage server is still providing power to the hard disk drives and the hard disk drives are still running. You have to switch off the power after you shut down the storage server to make the whole system completely stopped.

Front Panel



1) Release button

The Release button has three functions: (1) unplug the external USB mass storage, (2) shut down the storage server, and (3) reset the configuration of the storage server to factory default settings.

- **Unplug the external USB mass storage:** When you press and hold Release button for 2 seconds, the storage server will beep for 0.5 second to hint that your command is detected. At this time, you should release the Release button immediately if you want to unplug the external USB mass storage device plugged in USB1 port. The storage server will take several seconds to unplug the USB mass storage. When the LED of the USB1 port goes off, you can safely detach the USB mass storage device from this storage server.
- **Shut down the storage server:** You should press and hold Release button for more than 5 seconds to start shutting down the storage server. Please ignore the beep sound. The Power LED will keep flashing during the shutting down process. When the Power LED goes off, the storage server is completely shut down. You can now switch off the power by switch the Power switch to "0".
- **Restore factory default settings:** If you want to reset the configuration of the storage server to factory default settings, you should press and hold BOTH the Release button and the Copy button at the same time for more than 5 seconds,

the storage server will beep for 2 seconds to hint that your command is accepted. The Power LED will keep flashing during the restore process. After the restore is complete, the storage server will restart itself automatically.

2) Copy button

The Copy button has two functions: (1) copy the content of one external USB mass storage device to another attached storage device, and (2) reset the configuration of the storage server to factory default settings.

- **Copy USB mass storage device:** When you press and hold the Copy button for 2 seconds, the storage server will beep for 0.5 second to hint that your command is detected. At this time, you should release the Copy button immediately if you want to copy the content of one external USB mass storage device to another attached storage device. During the process of copy, the LED of corresponding USB port will flash slowly. When the LED of corresponding USB port stops flashing and is lit steady, the copy job is finished. If any error occurs during the process of copy, the LED of corresponding USB port will flash very fast. The default source storage is USB1, you can change the source storage by USB Copy settings in Web user interface of storage server.
- **Restore factory default settings:** Please refer to the description of Release button.

Note: Before you trigger the USB Copy function by pressing the Copy button, make sure that the destination folder has enough free space to store all data of the source USB mass storage device.

Note: USB Copy function does not support length of file name longer than 255 bytes. If the source USB mass storage device contains any file with file name longer than 255 bytes, the copy job will fail.

3) USB1

The USB1 port allows you to share your files stored in the USB mass storage device plugged in.

Note: Please plug the external power of your USB mass storage devices before you connect them to the storage server.

Note: If you have USB mass storage device (like USB external HDD), please plug it to this storage server's USB 2 port, and plug the USB flash disk you wish to share to the USB 1 port.

4) LED

On the storage server's front panel there are LEDs, which show the status of this storage server. Below is the list of each LED and its description.



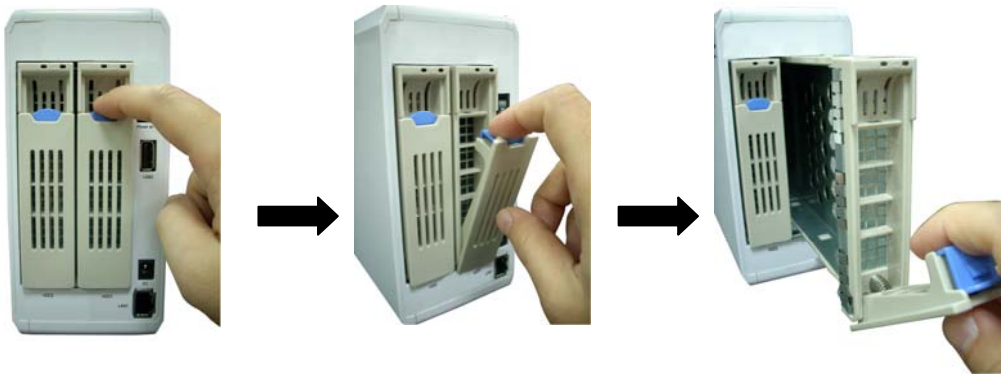
LED	Light Status	Description
Power	ON	Storage server is powered on
	Off	Storage server is shut down
	Slow Flashing	Storage server is starting; or the storage server is shutting down; or the storage server is restoring its settings to factory default values.
LAN	ON	LAN port is connected
	Off	LAN port is unconnected
	Flashing	Data is transferring through the network
Status	ON	The storage server is working well
	Off	The storage server is not ready to provide service. Please go to the Web GUI to configure the storage server.
	Slow Flashing	The storage server has some problem. Please go to the Web GUI to check the status of the system to find out the problem.
USB1	ON	USB storage device is connected to USB1 port
	Off	USB storage device is not connected to USB1 port or is not detected due to hard disk failure or the system is doing partition/format on this hard disk drive.
	Slow	The used space of the USB mass storage is over 95%

	Flashing	or the USB Copy tool is copying from the USB mass storage device plugged to USB1 port.
	Fast Flashing	The USB mass storage is full or the USB Copy tool is copying from the USB mass storage device plugged to USB1 port, but this job faces some error and is stopped (In this situation, the LED will keep flashing about 30 seconds and go off).
USB2	ON	USB storage device is connected to USB2 port
	Off	USB storage device is not connected to USB2 port or is not detected due to hard disk failure or the system is doing partition/format on this hard disk drive.
	Slow Flashing	The used space of the USB mass storage is over 95% or the USB Copy tool is copying from the USB mass storage device plugged to USB2 port.
	Fast Flashing	The USB mass storage is full or the USB Copy tool is copying from the USB mass storage device plugged to USB2 port, but this job faces some error and is stopped (In this situation, the LED will keep flashing about 30 seconds and go off).
HDD1	ON	Internal SATA hard disk drive is installed
	Off	Internal SATA hard disk drive is not installed or is not detected due to hard disk failure or the system is doing partition/format on this hard disk drive.
	Slow Flashing	The used space of the internal SATA hard disk drive is over 95% or the two internal SATA hard disk drives are synchronizing in RAID 1 mode.
	Fast Flashing	This internal SATA hard disk drive is full or this internal SATA hard disk drive has some problem in RAID mode (For example the hard disk fails or is not installed or the RAID function fails to use this hard disk).
HDD2	ON	Internal SATA hard disk drive is installed
	Off	Internal SATA hard disk drive is not installed or is not detected due to hard disk failure or the system is doing partition/format on this hard disk drive.
	Slow Flashing	The used space of the internal SATA hard disk drive is over 95% or the two internal SATA hard disk drives are synchronizing in RAID 1 mode.
	Fast Flashing	This internal SATA hard disk drive is full or this internal SATA hard disk drive has some problem in RAID mode (For example the hard disk fails or is not installed or the RAID function fails to use this hard disk).

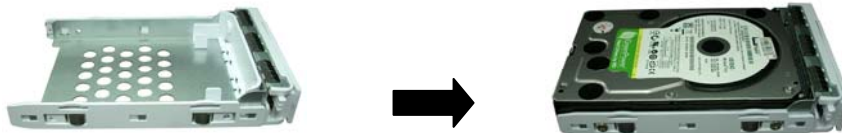
Getting started

This is a step-by-step instruction on how to start using the storage server.

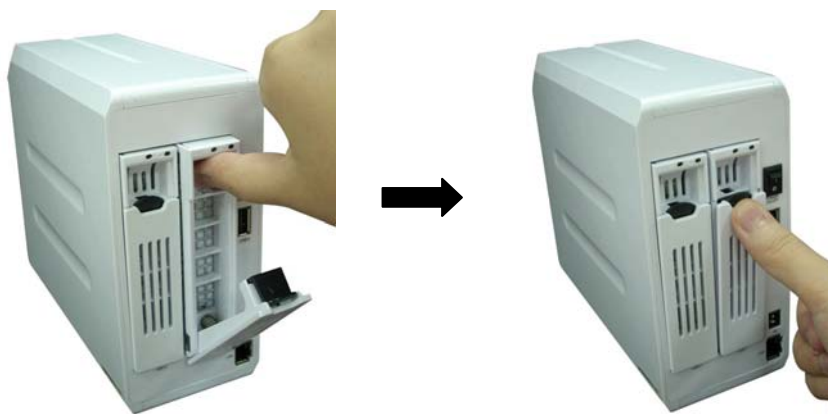
- 1) Pull out the disk drawer from the case of storage server as shown in the setup diagram below.



- 2) Fix your SATA hard disk driver in the drawer by screws as shown in the setup diagram below.



- 3) Push the disk drawer with hard disk driver installed back into the case of storage server as shown in the setup diagram below.



Note: Please make sure the disk drawer is safely installed.
For example, please DO NOT install hard disk by the way showed in the following pictures.



4) Plug the power adaptor to the storage server and connect the storage server to your network as shown in the setup diagram below.

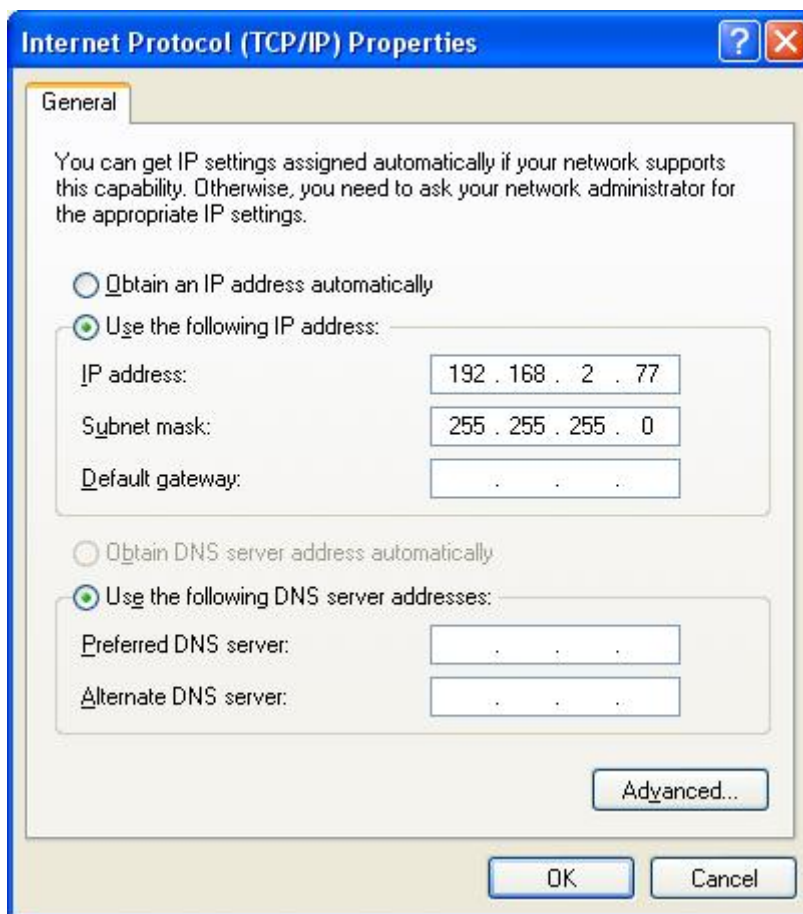


5) Power on the storage server by pressing the power switch of the storage server on as shown in the setup diagram below.



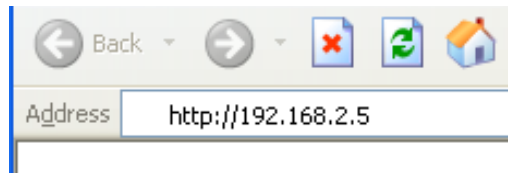
- 6) When the Power LED is steady lit, the storage server is ready.
- 7) There are two methods to setup the storage server: (1) Use the Windows-based Storage Server Wizard utility to do the basic setup. Please refer to Quick Installation Guide; (2) Use the Web-based GUI to do the advanced setup, just go to the next step.
- 8) The default IP address of storage server is 192.168.2.5. The PC to setup the storage server should be in the same subnet as the storage server. If the IP address of your PC is not in the range of 192.168.2.1~254, please modify the Windows IP address of your PC as following diagram. If you have used Windows-based Storage Server Wizard utility to setup the IP of the Storage Server, you can skip this step, because the IP of the Storage Server and your PC should be in the same subnet now.

Note: If you have to modify the Windows IP address of your PC, please remember the original Windows IP address settings of your PC. After you finished the whole quick setup procedure, you have to modify the Windows IP address settings of your PC back to the original values to make your PC work well.



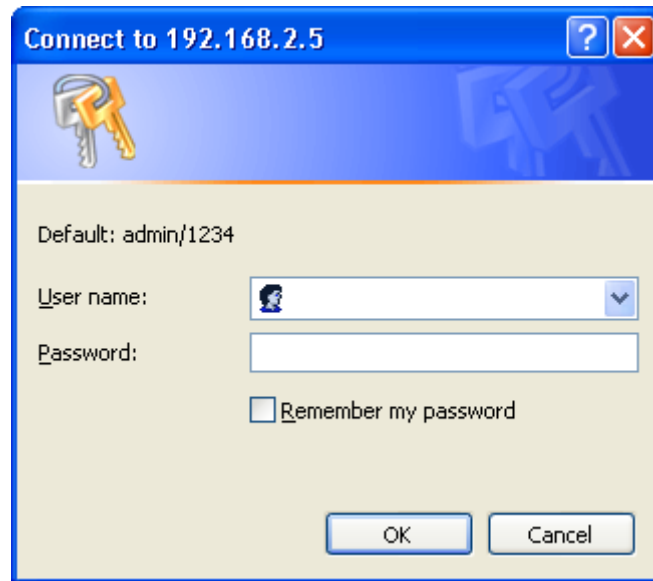
- 9) Once the IP address of your PC is in the same subnet of the storage server, enter the URL of default IP address **http://192.168.2.5** (default IP address of

this storage server) into your PC's web browser and press <enter>. If you have modified the IP of the Storage Server by some way, for example, by using the Windows-based Storage Server Wizard utility, please use the new IP of Storage Server.

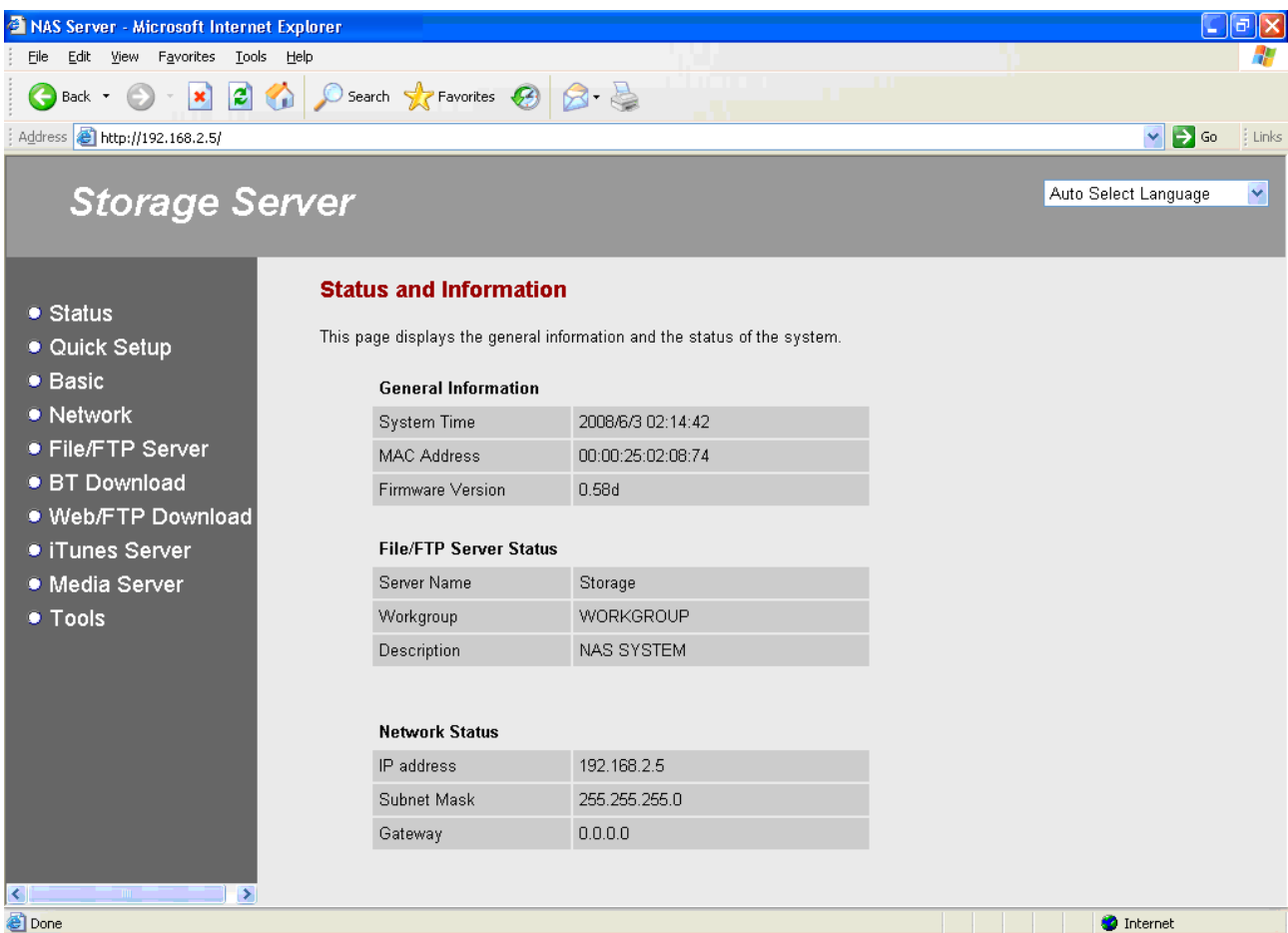


10) The login screen below will appear. Enter the “User Name” and “Password” and then click <OK> to login.

Note: By default the user name is “admin” and the password is “1234”.



When you see the screen below, you are ready to setup the storage server.



Status *(Chapter 1)*

This page displays the status and basic information of the storage server.

Quick Setup *(Chapter 2)*

Quick Setup will guide you through the basic settings of the storage server.

Basic *(Chapter 3)*

This section contains basic configurations such as: Time Zone and Password.

Network *(Chapter 4)*

This section contains network configurations such as: IP and DNS.

File/FTP Server *(Chapter 5)*

This section contains File Server and FTP Server configurations such as: User Management, Group Management, File Server and FTP Server sharing policies.

BT Download *(Chapter 6)*

This section contains BT Download configurations such as: Torrent Management and Download Status.

Web/FTP Download *(Chapter 7)*

This section contains Web Download and FTP Download configurations such as: Download URL Management and Download Status.

iTunes Server *(Chapter 8)*

This section contains iTunes Server configurations such as: Media Folder Management, Server Status and User Status.

Media Server *(Chapter 9)*

This section contains Media Server configurations such as: Media Folder Management and Rescan Interval.

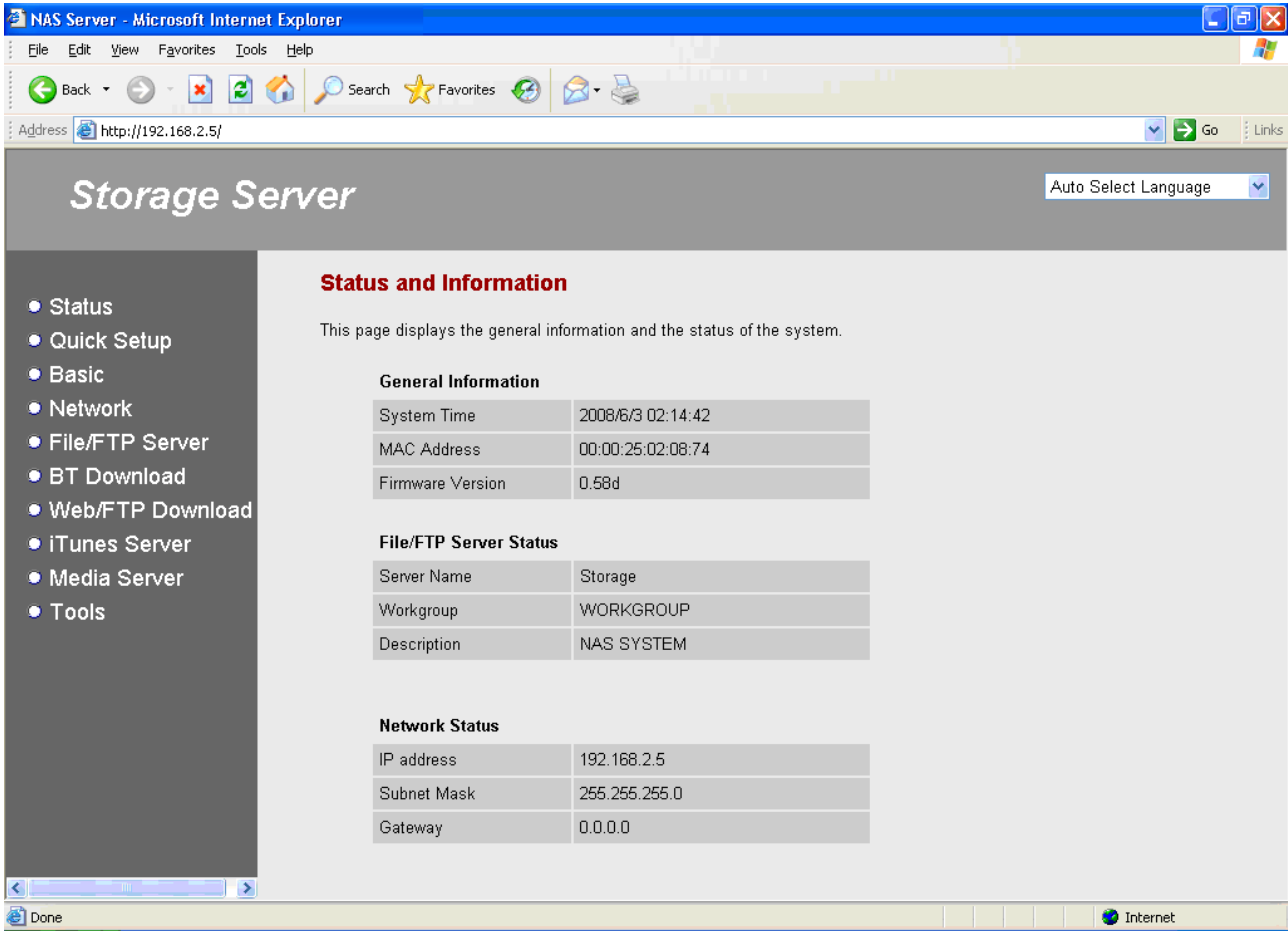
Tools *(Chapter 10)*

This section contains Configuration Tools such as: Disk Drive Partition and Format Tools, Storage Status, USB Copy Tool, Configuration Backup and Restore Tool, Firmware Upgrade Tool, System Reset Tool.

Chapter 1

Status

This page displays the status and basic information of the storage server, you should see the screen below.



Parameter	Description
System Time	Current system time.
MAC Address	The MAC address of this storage server.
Firmware Version	The version of storage server firmware.
Server Name	The name of this storage server. This is the file server name that shows in My Network Places on client computer.
Workgroup	The My Network Places group this file server will join.
Description	The description of this storage server.
IP Address	The IP address used by this storage server in your network.
Subnet Mask	The IP Subnet Mask of your LAN segment.
Gateway	The gateway IP address of your network.

Chapter 2

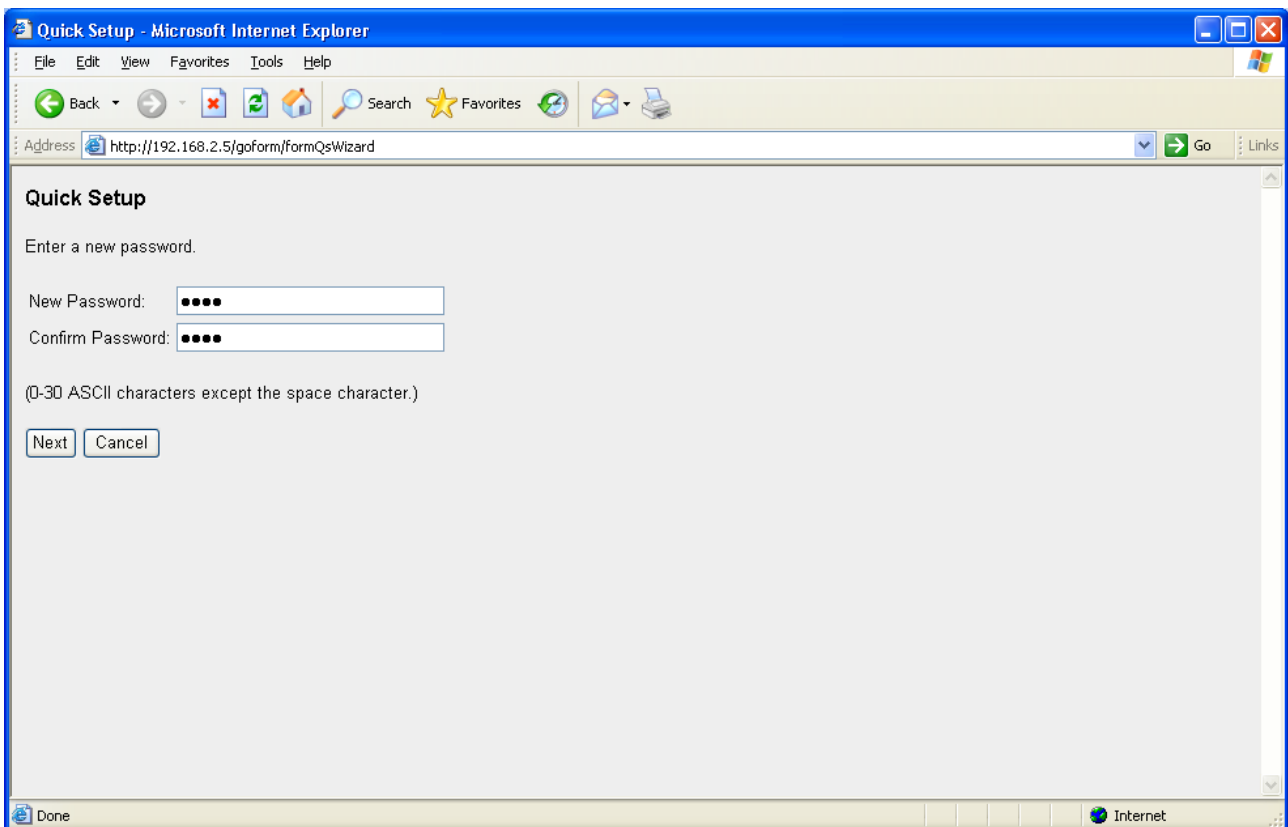
Quick Setup

Quick Setup will guide you through the basic settings of the storage server step by step. When you click “Quick Setup” in the left menu, a Quick Setup window will pop up.

Note: If this is the first time the internal SATA hard disk drive is used in the storage server, the storage server will automatically erase old partitions and data in the internal SATA hard disk drive and re-create partition and format the internal SATA hard disk drive. Please make sure original valuable data in the internal SATA hard disk drive is backed up before doing Quick Setup.

2.1 Password

Enter the new password of storage server. A valid password should consist of 0~30 alphanumeric characters. The New Password and the Confirm Password should be the same.



Click “Next” to go to the next step of Quick Setup.

Click “Cancel” to abort the Quick Setup. Any modified settings during this Quick Setup session will not take effect.

2.2 Network

Setup the IP address and DNS address of the storage server. You can manually assign IP address or let the storage server to obtain IP address from DHCP server automatically. For more detail information, you can refer to Chapter 4.

Quick Setup - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print

Address http://192.168.2.5/goform/formQsWizard Go Links

Quick Setup

Network Setting

Obtain IP address automatically

Storage Server IP Address: 192.168.2.5

Subnet Mask: 255.255.255.0

Gateway IP Address: 0.0.0.0

DNS Server IP Address: 0.0.0.0

Prev Next Cancel

Done Internet

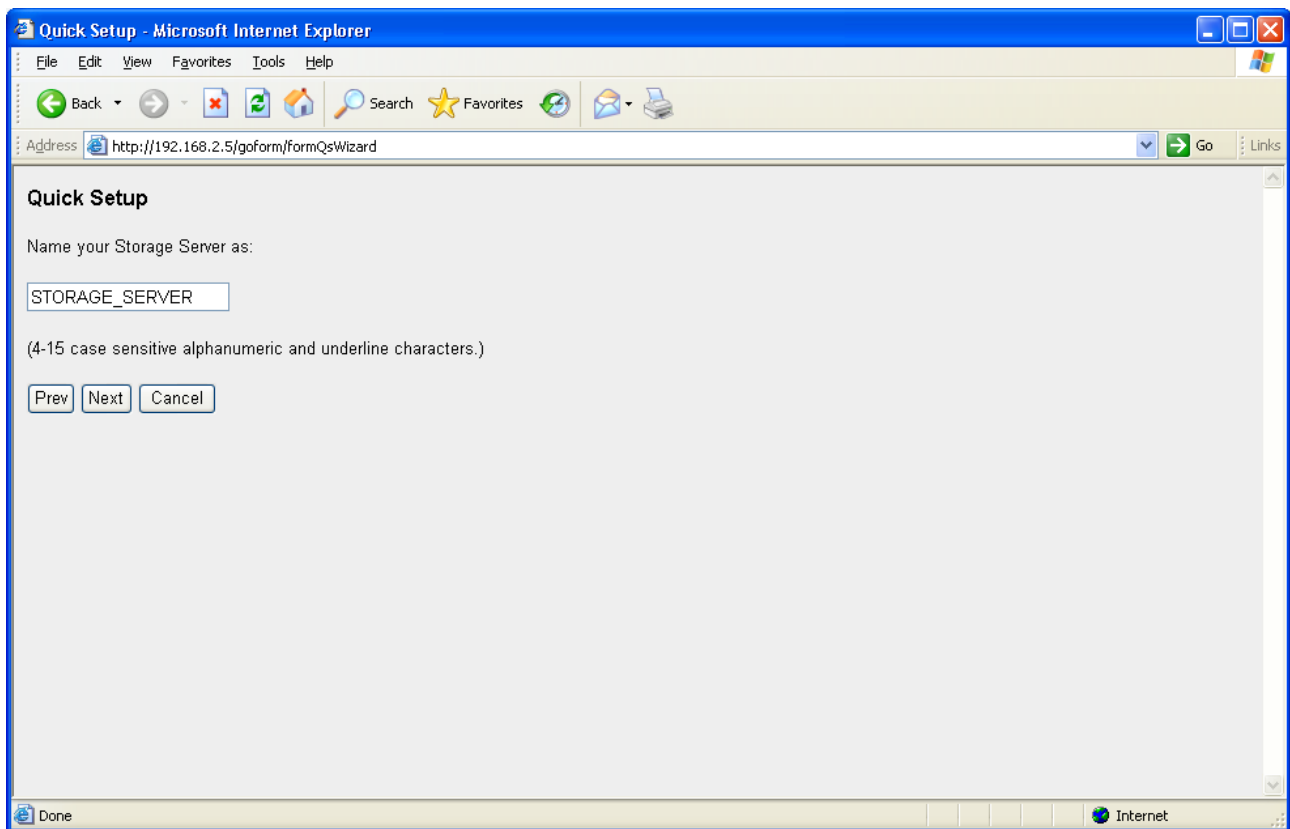
Click “Prev” to go to the previous step of Quick Setup.

Click “Next” to go to the next step of Quick Setup.

Click “Cancel” to abort the Quick Setup. Any modified settings during this Quick Setup session will not take effect.

2.3 Storage Server Name

Assign a name to the storage server. A valid storage server name consists of 4~15 case sensitive alphanumeric and underline characters.



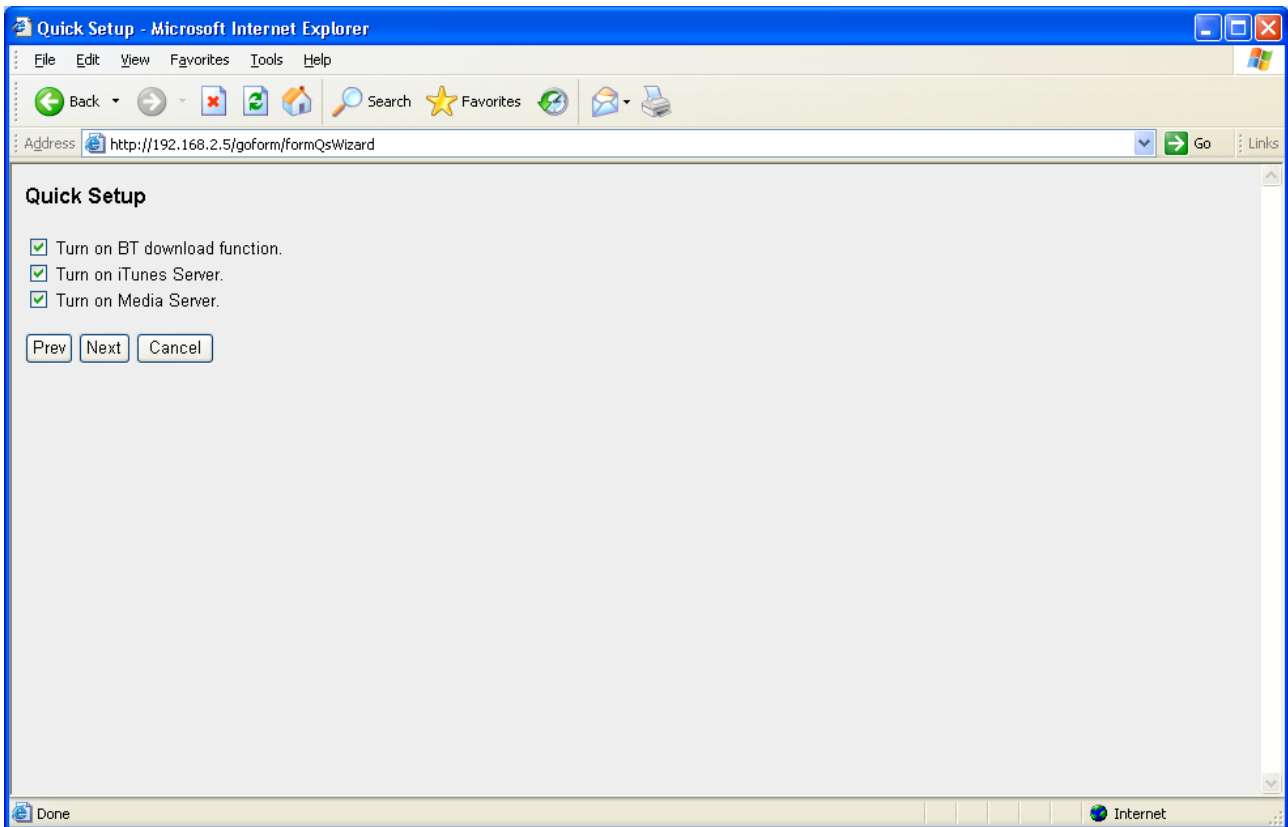
Click "Prev" to go to the previous step of Quick Setup.

Click "Next" to go to the next step of Quick Setup.

Click "Cancel" to abort the Quick Setup. Any modified settings during this Quick Setup session will not take effect.

2.4 Turn on Functions

Select functions that you want to turn on.



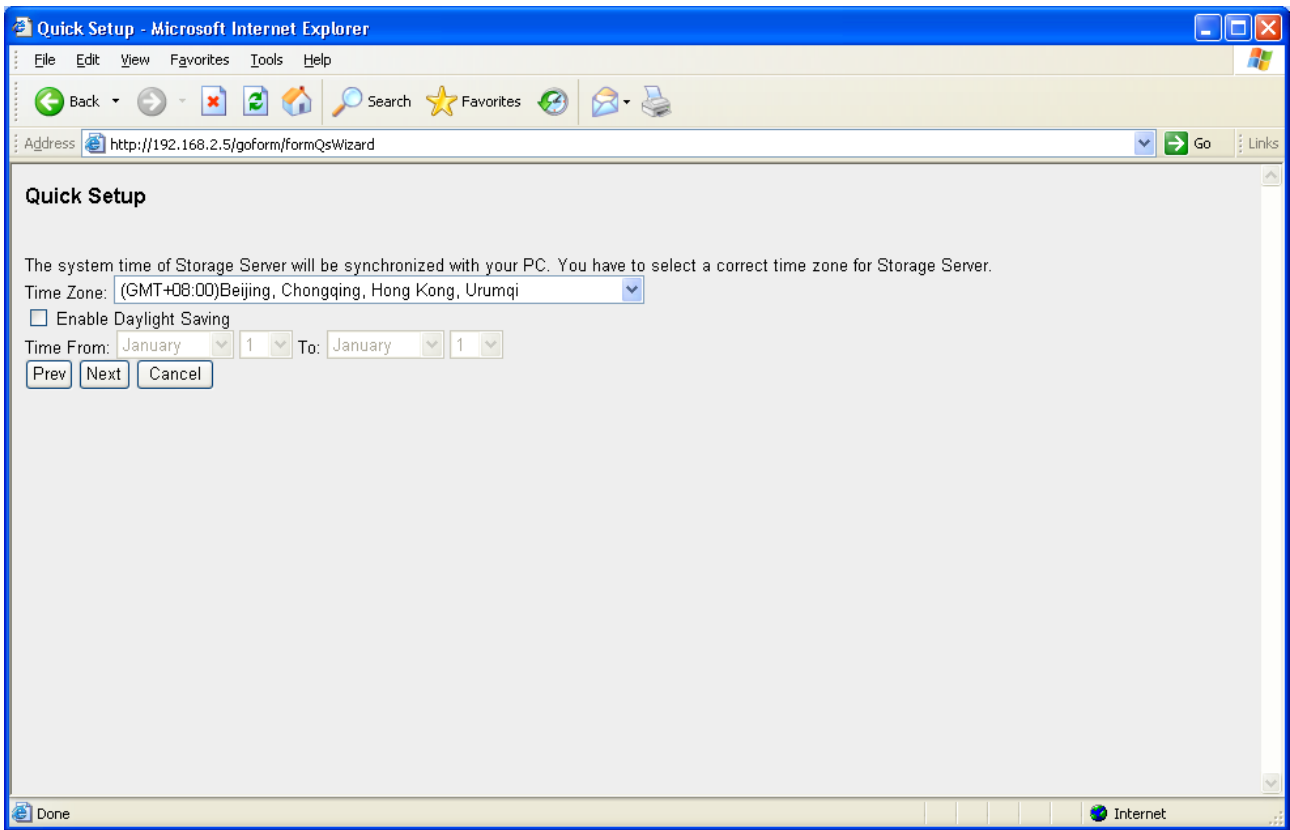
Click "Prev" to go to the previous step of Quick Setup.

Click "Next" to go to the next step of Quick Setup.

Click "Cancel" to abort the Quick Setup. Any modified settings during this Quick Setup session will not take effect.

2.5 Time Zone

Select the time zone of your location. You can also assign daylight saving period if you need. During this configuration, the storage server will synchronize its time with your computer and remember it. After this configuration, the storage server will also automatically try to synchronize its time with public time server in Internet every time when it restarts.



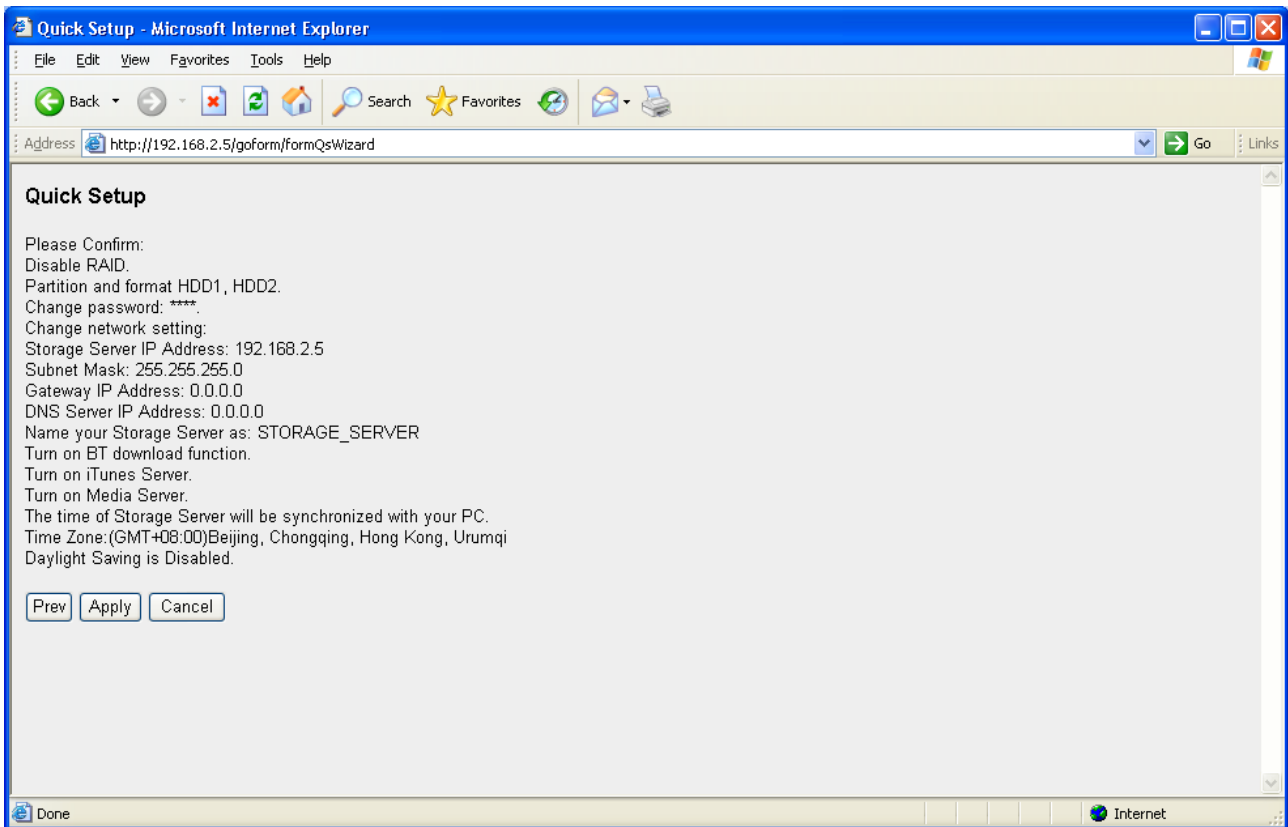
Click “Prev” to go to the previous step of Quick Setup.

Click “Next” to go to the next step of Quick Setup.

Click “Cancel” to abort the Quick Setup. Any modified settings during this Quick Setup session will not take effect.

2.6 Confirm Settings

List the setting values of Quick Setup for your confirmation.



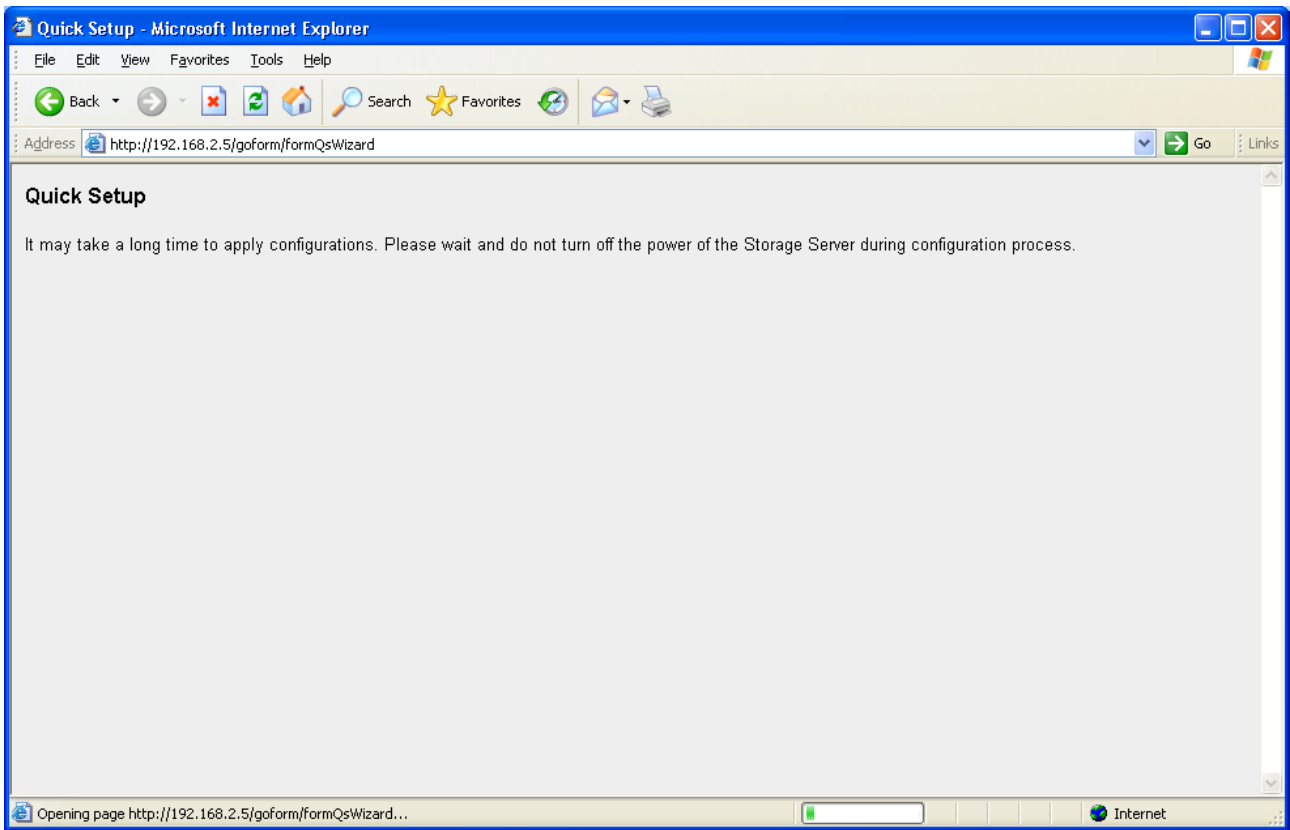
Click “Prev” to go to the previous step of Quick Setup.

Click “Apply” to make all the settings of Quick Setup take effect.

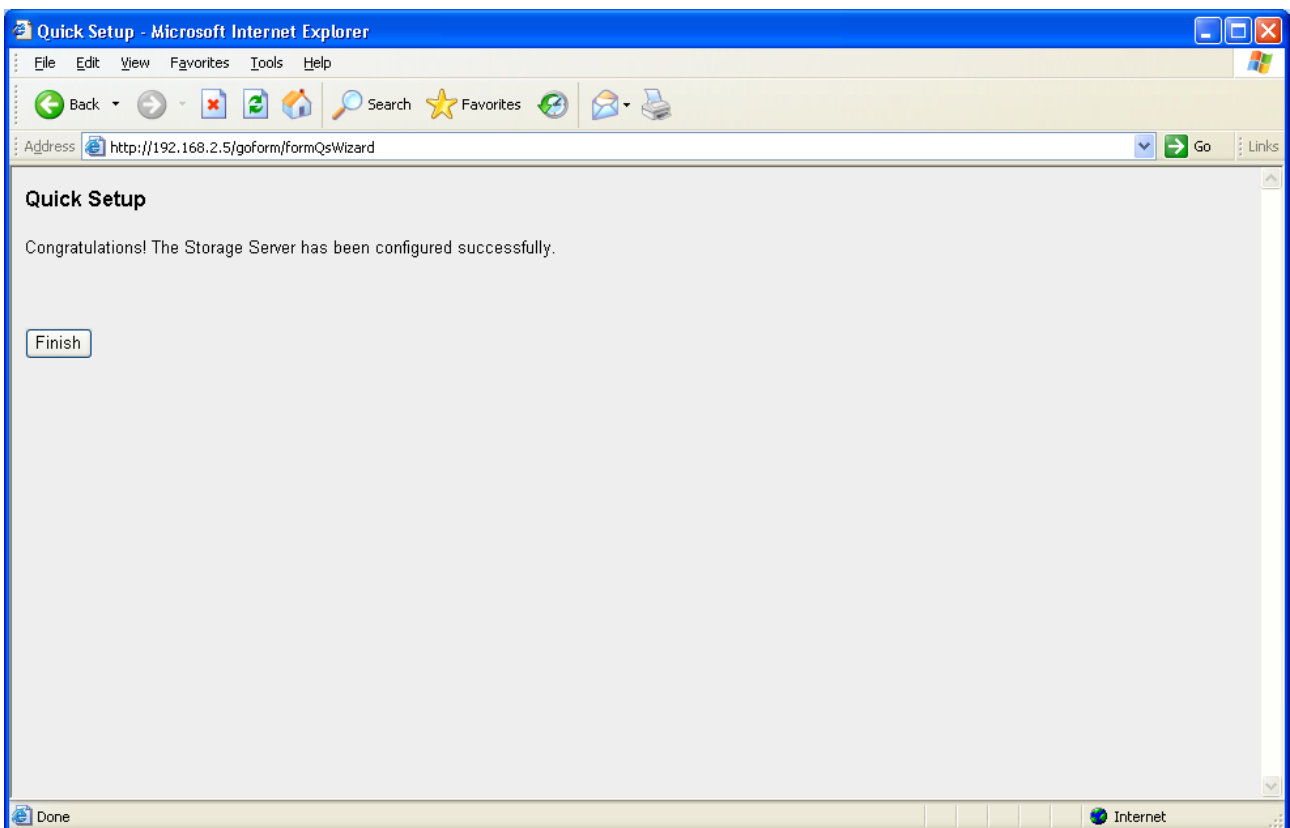
Click “Cancel” to abort the Quick Setup. Any modified settings during this Quick Setup session will not take effect.

2.7 Apply Settings

After you click “Apply” in the confirmation page, the following page will display and the Quick Setup will start to apply the settings to the storage server. It will take several minutes to apply the settings.



After the Quick Setup settings values are applied, the storage server will restart and the following page will display. Please wait for a while.



Click "Finish" after the storage server restarts.

2.8 Shared folders automatically created by Quick Setup

Quick Setup will automatically create some shared folders for you. The shared folder names and their usage are listed as follows:

- **Public_hdd1:** You can access “Public_hdd1” anonymously with reading and writing privilege by FTP and Network Neighborhood (Samba). The absolute path in the storage server of “Public_hdd1” is “[HDD1]C:\Public”.
- **Media:** The “Media” folder is located under the “Public_hdd1” folder, so the “Media” folder is also accessible by FTP and Network Neighborhood (Samba) with reading and writing privilege. The music files in “Media” folder can be accessed by iTunes clients. The video, music and image files in “Media” folder can be accessed by DLNA compliant media adapters like Sony PS3, Xbox 360...etc. The absolute path in the storage server of “Media” is “[HDD1]C:\Public\Media”.

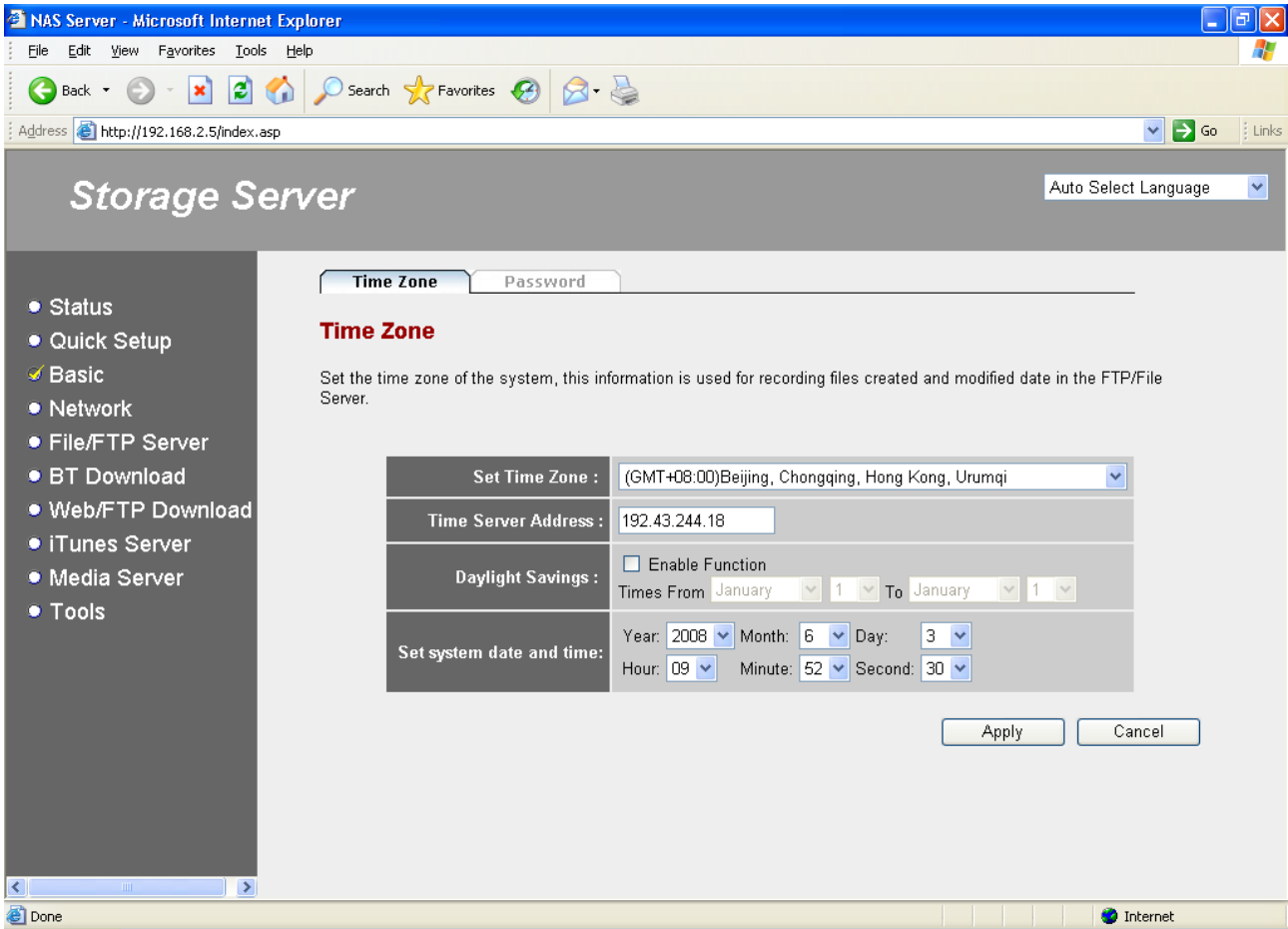
Chapter 3

Basic

The basic configurations include the Time Zone and Password setup pages.

3.1 Time Zone

The Time Zone allows this storage server to base its time on the settings configured here. This will affect functions such as update time of files stored in this storage server.



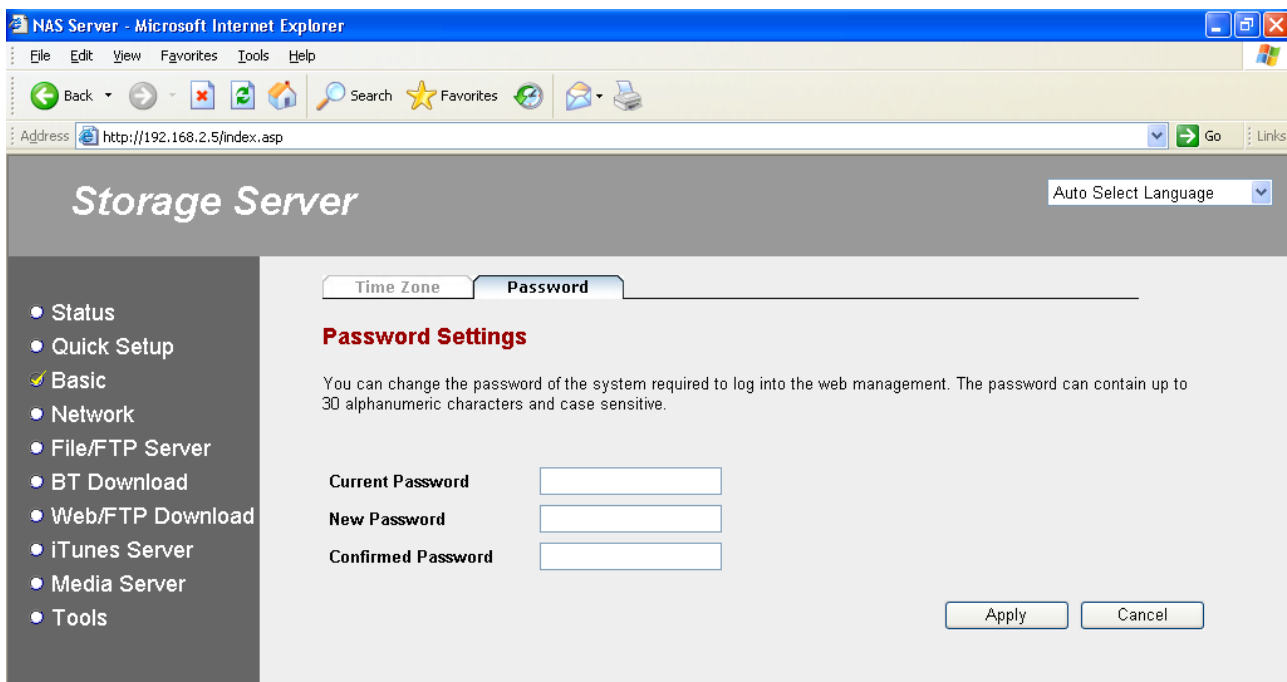
Parameter	Description
Set Time Zone	Select the time zone of the country you are living. The storage server will set its time based on your selection.
Time Server Address	You can manually assign time server address if the default time server does not work.
Daylight Savings	The storage server can also take Daylight savings into account. If you wish to use this function, you must check/tick the enable box to enable your daylight saving configuration (below)
Times From	Select the period in which you wish to start using daylight saving

Times to	Select the period in which you wish to stop using daylight saving
Set System Date and Time	If your network is not connected to the Internet, the storage server will have no chance to get correct time from the time server. In this case, you can manually assign current time here.

Click <**Apply**> at the bottom of the screen to save the configurations.

3.2 Password

You can change the password required to log into the management GUI of the storage server. By default, the password is “1234”. Please change the password as soon as possible, and store it in a safe place. Password can contain 0 to 30 alphanumeric characters, and are case sensitive.



Parameters	Description
Current Password	Enter your current password.
New Password	Enter your new password.
Confirmed Password	Enter your new password again for verification purposes.

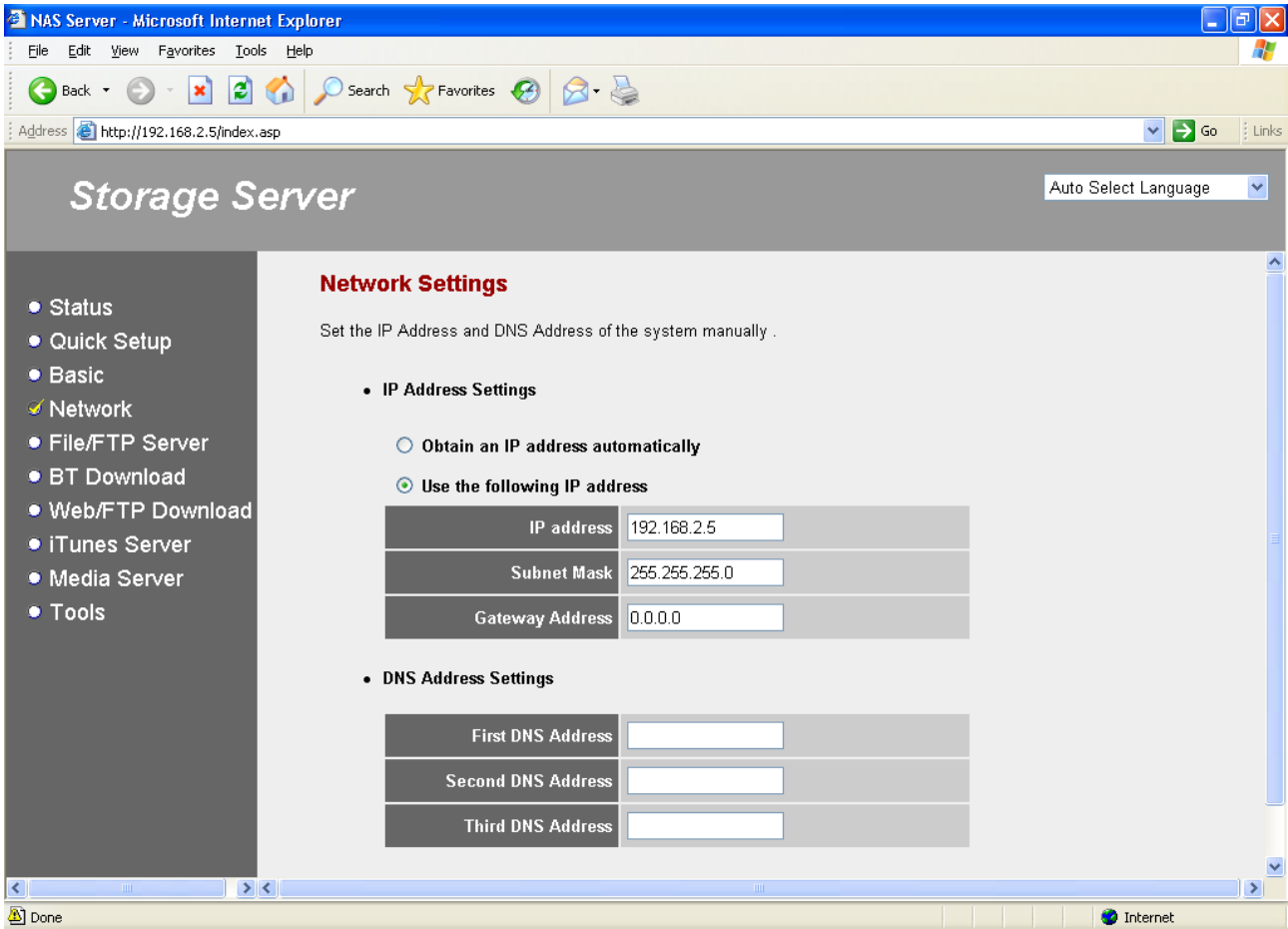
Note: If you forget your password, you have to reset the storage server to the factory default (password is “1234”) with the “Release” and “Copy” buttons (see front panel of the storage server).

Click <**Apply**> at the bottom of the screen to save the configurations.

Chapter 4

Network

The Network configurations include the IP address and DNS settings. A Domain Name System (DNS) server is like an index of IP addresses and Web addresses. If you type a Web address into your browser, such as www.router.com, a DNS server will find that name in its index and reply the matching IP address.



Parameters	Description
Obtain an IP address automatically	DHCP server is used to manage the IP address of a network. If you have a live DHCP server in your network and wish this storage server get IP address from your DHCP server, please select “Obtain an IP address automatically”. Note: According to the settings of you DHCP server, the IP address obtained from your DHCP server may change by time.
Use the following IP address	If you want to manually assign an IP address to this storage server, please select “Use the following IP address” and assign IP Address, Subnet Mask and Gateway Address to the storage server here.
IP Address	The IP address used by this storage server in your network.

Subnet Mask	The IP Subnet Mask of your LAN segment.
Gateway Address	The gateway IP address of your network. Normally, it is the LAN IP address of the router you are using to access the Internet.
DNS address	Fill in the IP address of a live DNS server.
Secondary/Third DNS Address (optional)	This is optional. You can enter another DNS server's IP address as a backup. The secondary/third DNS will be used when the above DNS server fails.

Click <**Apply**> at the bottom of the screen to save the configurations.

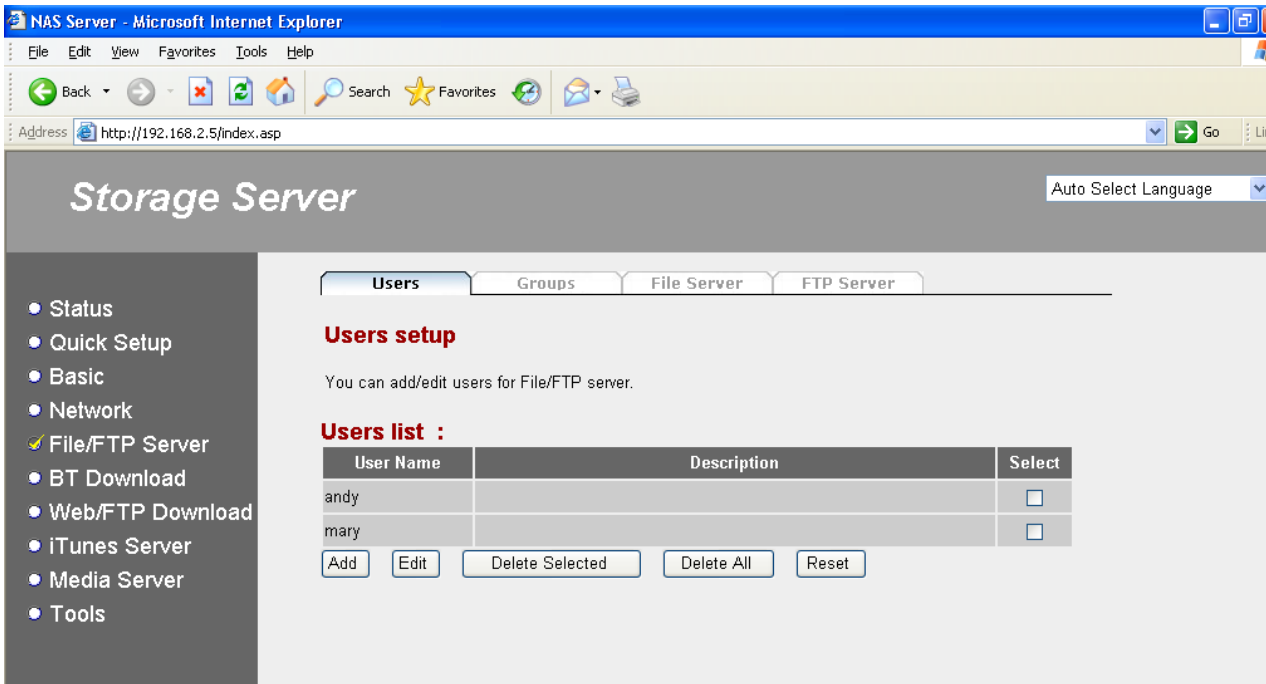
Chapter 5

File/FTP Server

The File/FTP server configurations include the Users, Groups, File Server and FTP Server setup pages.

5.1 Users

Users setup is used to add/edit users of File/FTP server.



Parameters	Description
Add	Click “Add” and fill the information of the Add a New User page to add a new user for File/FTP server.
Edit	You can select any user in Users list and click “Edit” to modify her/his profile.
Delete Selected	You can click “Delete Selected” to delete the selected users in Users list .
Delete All	You can click “Delete All” to delete all the users in Users list .
Reset	You can click “Reset” to reset selection in Users list .

Add a New User



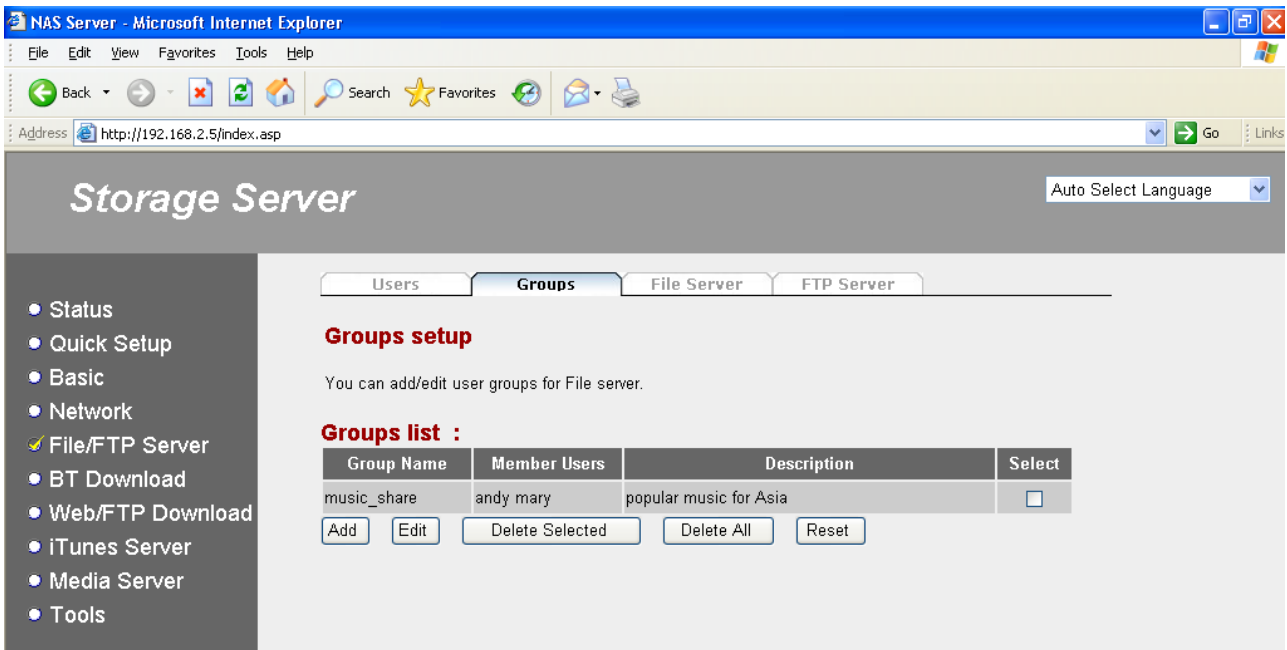
Parameters	Description
User Name	The name of this user. The allowed characters are 'a-z', 'A-Z', '0-9' and '_'. Note: The user name should be unique and should not be the same with any other user name and group name.
Description	The description of this user.
Password	The password of this user.
Confirm password	Re-type the password of this user for confirmation.

Click <**Save**> at the bottom of the screen to save the configurations.

NOTE: The max number of users supported in File/FTP server is 32.

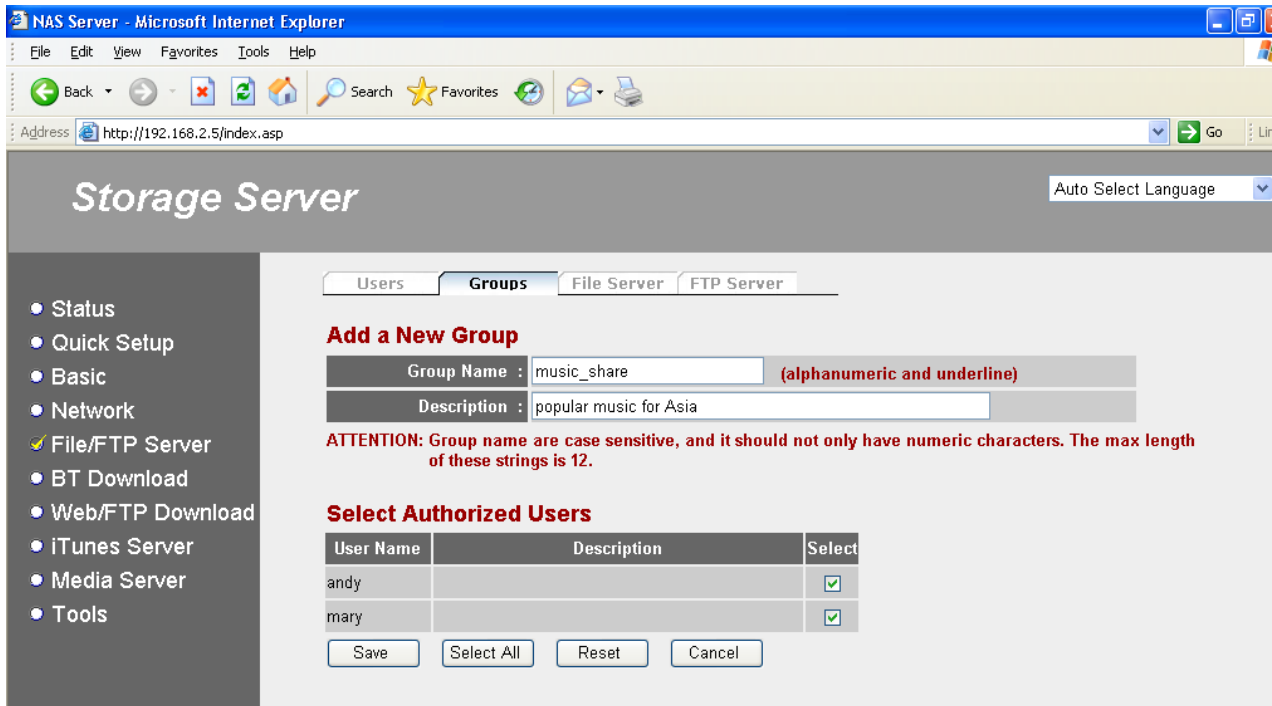
5.2 Groups

Groups setup is used to add/edit groups of File/FTP server. You can add one or more users to a group.



Parameters	Description
Add	Click “Add” and fill the information of the Add a New Group page to add a new group for File/FTP server.
Edit	You can select any group in Groups list and click “Edit” to modify its profile.
Delete Selected	You can click “Delete Selected” to delete the selected groups in Groups list .
Delete All	You can click “Delete All” to delete all the groups in Groups list .
Reset	You can click “Reset” to reset selection in Groups list .

Add a New Group



Parameters	Description
Group Name	The name of this group. The allowed characters are 'a-z', 'A-Z', '0-9' and '_'. Note: The first character of group name should be 'a-z' or 'A-Z'. Note: The group name should be unique and should not be the same with any other user name and group name.
Description	The description of this group.
Select Authorized Users	Select the users that you want to add to this group by selecting the check on the right.

Click <**Save**> at the bottom of the screen to save the configurations.

Note: The max number of groups supported in File/FTP server is 12.

5.3 File Server

This storage server supports CIFS (Samba) protocol which lets you share files stored in all attached storage devices via network neighborhood. You can assign the file server name, shared folders and folder sharing policies.

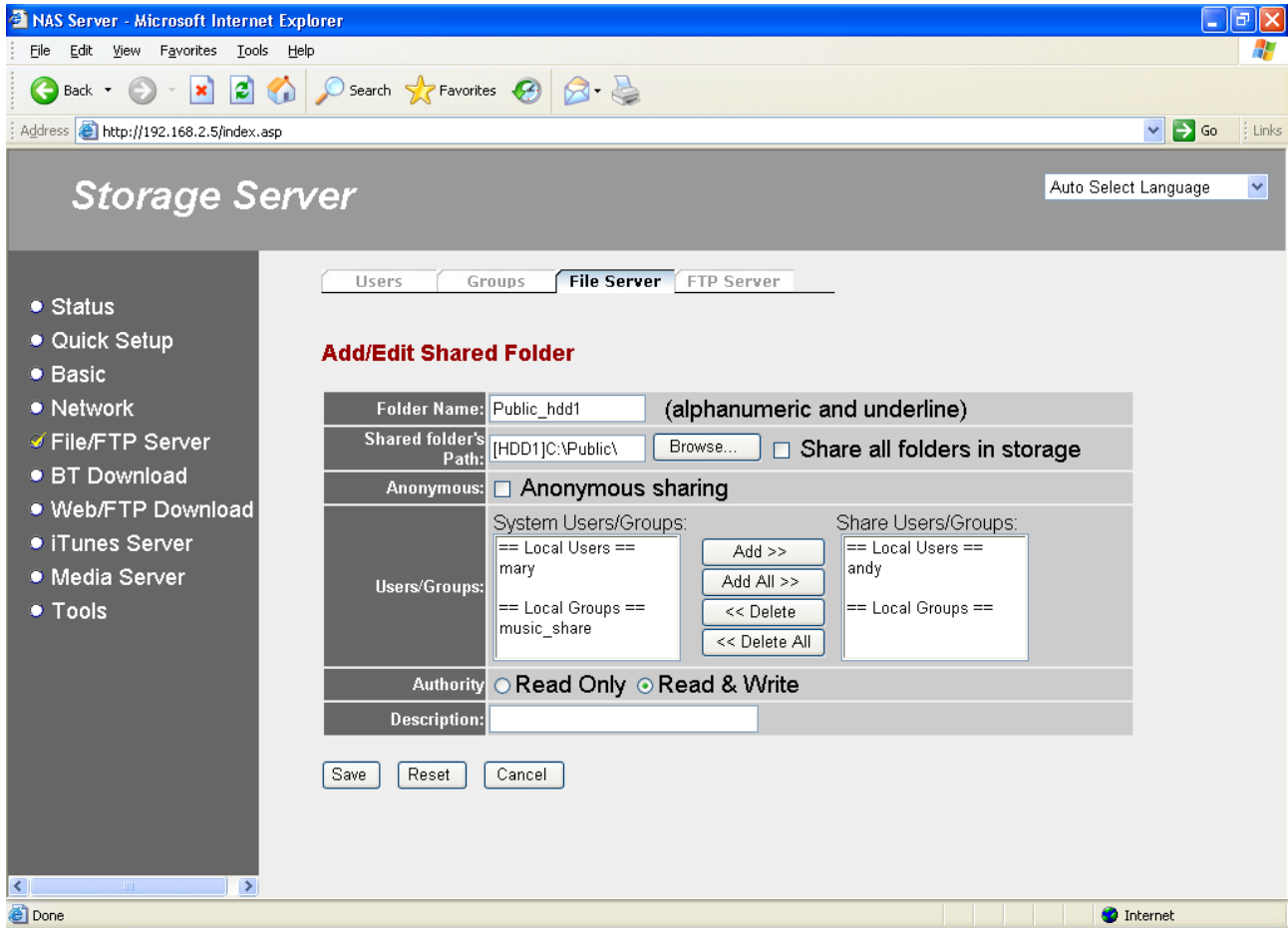
Note: The maximum file size of a single file is 2GB if the partition type is FAT16; the maximum file size is 4GB if the partition type is FAT32 or NTFS; the file size can be larger than 4GB if the partition type is EXT2 or EXT3.

Parameters	Description
Name	The file server name that shows in My Network Places on client computer.
Workgroup	The My Network Places group this file server will join.
Description	A brief description of this file server. This string will be shown at the detailed information field of My Network Places.
Add	Click "Add" and fill the information of the Add/Edit shared folder page to add a new shared folder for file server.
Edit	You can select any shared folders in shared folders list and click "Edit" to modify its setting.
Delete All	You can click "Delete All" to delete all shared folders in shared folders list.
Delete Selected	You can click "Delete Selected" to delete the selected shared

	folders in shared folders list.
Reset	You can click “Reset” to reset selection in shared folders list.
Default Sharing Policy	You can set a default sharing policy (Read & Write, Read Only or Not to Share) to any USB storage which doesn't have any shared folder yet.

Note: The max number of shared folders supported in File server is 100.

Add/Edit Shared Folder



Parameters	Description
Folder Name	The name for shared folder that shows in My Network Places on client computer.
Shared Folder's Path	Click “Browse” to select the folder to be shared or click “Share all folders in storage” to share the all disks. If you select “Share all folders in storage”, the storage server will create a share item for each partition of all currently attached storages. The share name of each share item consists of three parts, assigned folder name, disk name and partition name, and the three parts are separated by “_”. There are 3 possible disk names, HDD1, HDD2, RAID, USB1 and

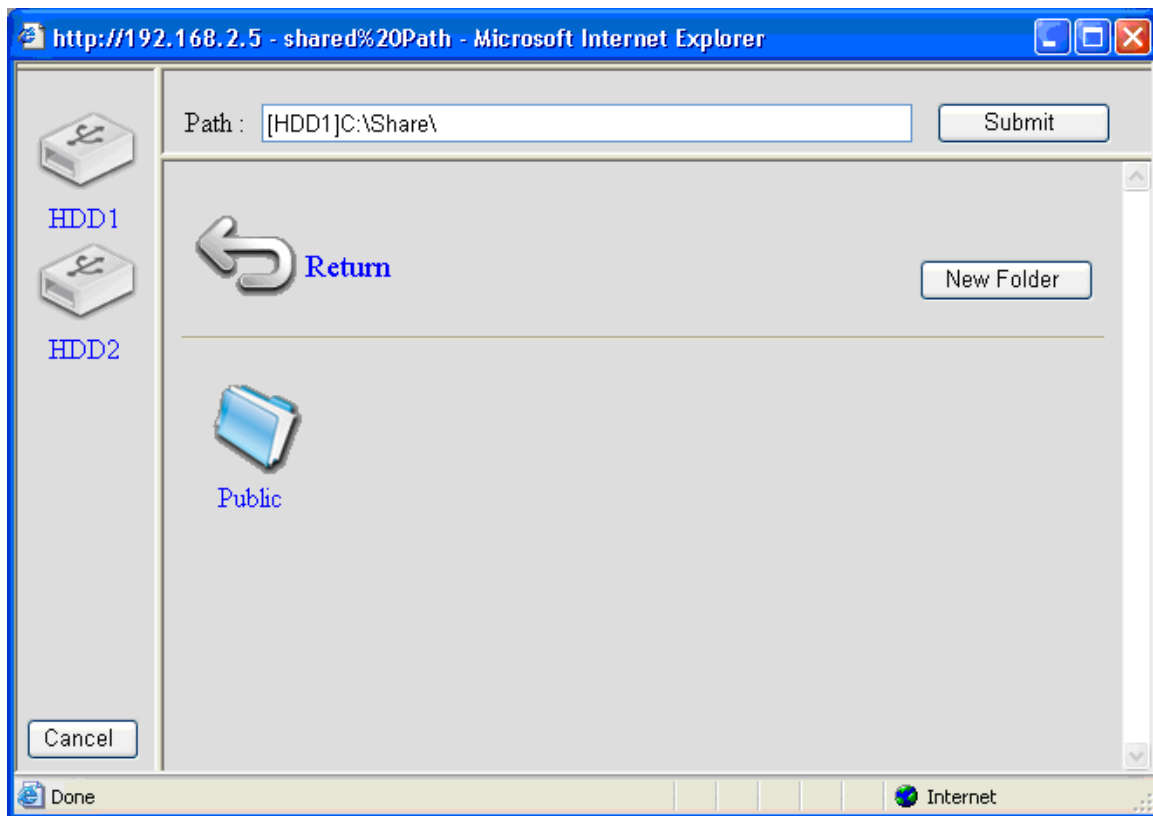
	USB2. For example, if you add a shared folder by assigning “All” as the folder name and select “Share all folders in storage”, and now you have an internal SATA hard disk drive with one partition and one USB hard disk drive with 3 partitions attached on USB2. Then after you create the shared folder, there will be 4 share items created with the name of “All_HDD1_C”, “All_USB2_C”, “All_USB2_D”, “All_USB2_E”.
Anonymous sharing	If you select “Anonymous sharing”, then all users in your network can access this shared folder without a password.
Users/Groups	You can assign some users and groups with access privilege for this shared folder. Select the users and groups in System Users/Groups and click “Add” to add them into Share Users/Groups . You can also click “Add All” to add all users and groups or click “Delete All” to remove all users and groups.
Authority	Here you can assign the read/write privilege for this shared folder. You can select “Read Only” for read only sharing or select “Read & Write” to give users full access right.
Description	The comments or descriptions for this share folder.

Click <**Save**> at the bottom of the screen to save the configurations.

Open Dialog

When you click the “Browse” button, you can see the following popup screen that shows all the attached storage devices (including the internal SATA hard disk drive and external USB mass storage devices). Please select a storage device from left panel, the right bottom panel will show the folders in this storage device. Choose the folder you want to share, and click “Submit” to share the selected folder. You can also click “New Folder” to create a new share folder.

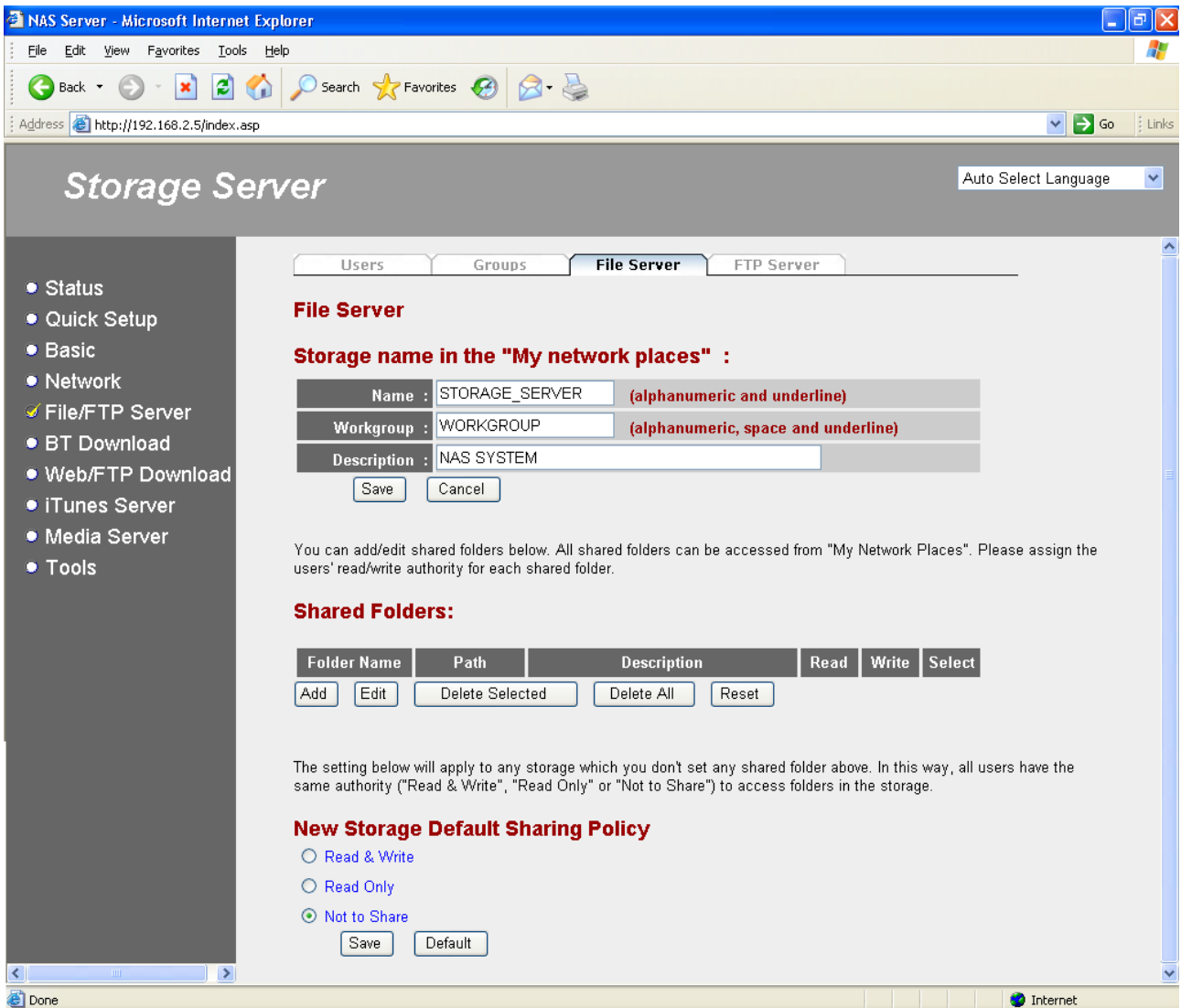
Note: Only the folders in the storage devices will be shown as icons in Open Dialog, because the unit of sharing policy is restricted to folders, not files.



5.4 FTP Server

This storage server supports FTP protocol which lets you share files stored in all attached storage devices to not only your network but also Internet (it you have Internet access and your router has correct port forwarding settings).

Note: Each user can have only one folder shared by FTP server.

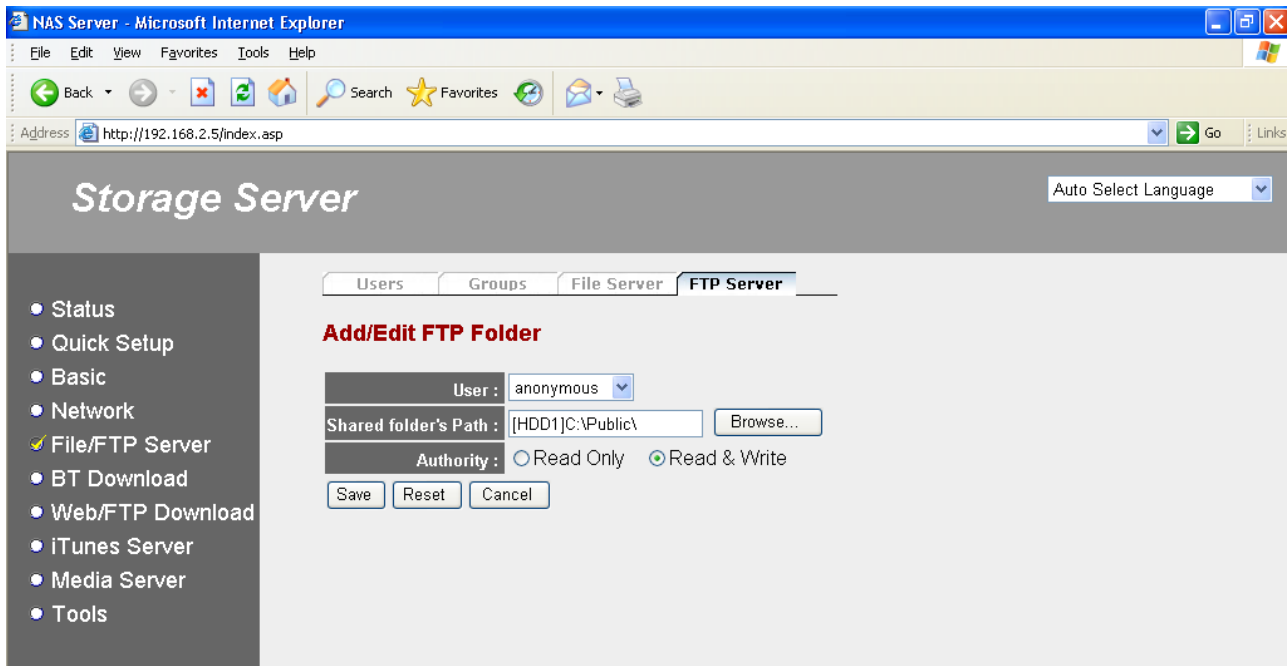


Parameters	Description
Add	Click "Add" and fill the information of the Add/Edit FTP Folder page to add a new shared folder for FTP server.
Edit	You can select any shared folder in FTP Folders list and click "Edit" to modify its setting.
Delete All	You can click "Delete All" to delete all the shared folders in FTP Folders list .
Delete Selected	You can click "Delete Selected" to delete the selected shared folders in FTP Folders list .
Reset	You can click "Reset" to reset selection in FTP Folders list .
Max Users	Set the maximum concurrent users for the FTP server.
Idle Time	Set the time that FTP server will wait before disconnecting a FTP client when it is inactive.
FTP Client Language	Select a language (or encoding) used by the FTP clients.

(Encoding)

Click <**Save**> at the bottom of the screen to save the configurations.

Add/Edit FTP Folder



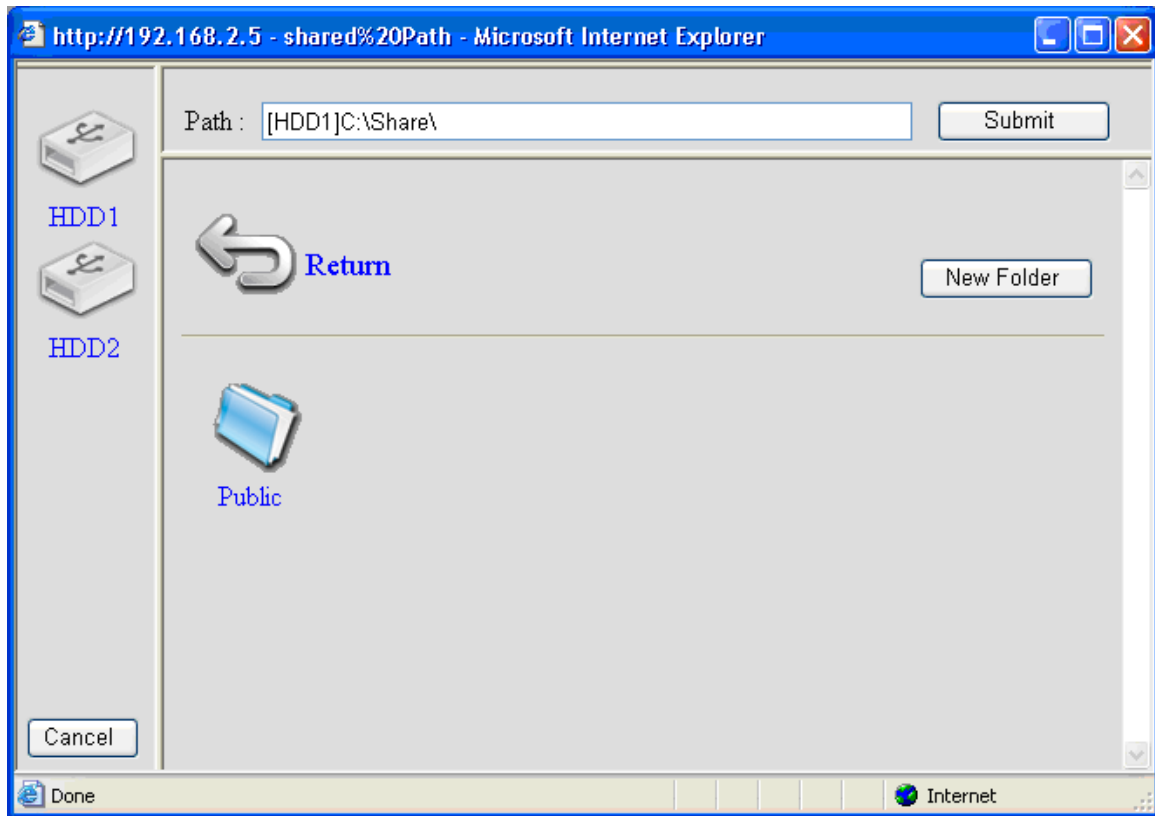
Parameters	Description
User	The name of the user. If you select “anonymous” as user, the users can access this shared folder with “anonymous” user name and password is not required.
Shared Folder's Path	Click on “Browse” to select the folder to be shared.
Authority	Here you can assign the read/write privilege for this shared folder. You can select “Read Only” for read only file sharing or select “Read & Write” to give the user full access privilege.

Click <**Save**> at the bottom of the screen to save the configurations..

Open Dialog

When you click the “Browse” button, you can see the following popup screen that shows all the attached storage devices (including the internal SATA hard disk drive and external USB mass storage devices). Please select a storage device from left panel, the right bottom panel will show the folders in this storage device. Choose the folder you want to share, and click “Submit” to share the selected folder. You can also click “New Folder” to create a new share folder.

Note: Only the folders in the storage devices will be shown as icons in Open Dialog, because the unit of sharing policy is restricted to folders, not files.

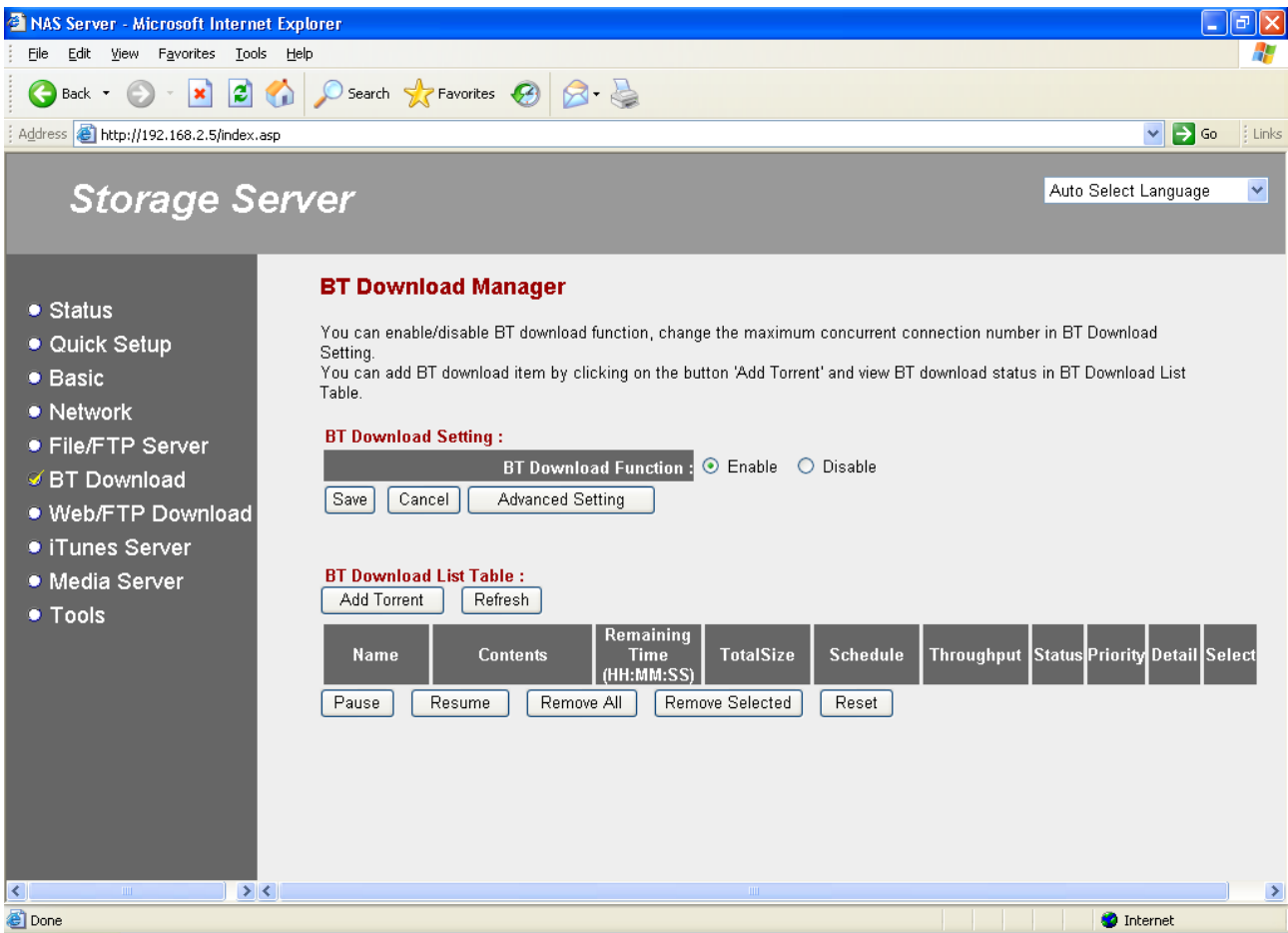


Chapter 6

BT Download

This storage server supports BT (stands for BitTorrent) peer-to-peer file download function. You can let this storage server download files via BitTorrent protocol without switching your computer on. You can also see all downloading BT items here. Please make sure that this storage server has enough remaining storage space to save the download files.

Note: Due to the download mechanism used by BitTorrent, it's not recommended to use USB flash disks to save the files you wish to download.



Parameters	Description
BT Download Function	You can enable or disable BT Download Function here.
Advanced Setting	Click this button and Advanced Setting page will show.
Add Torrent	Click this button to add a new torrent (files with .torrent extension) file, so you can start BT Download. You'll be prompted to provide the location of .torrent file (See detailed description below)

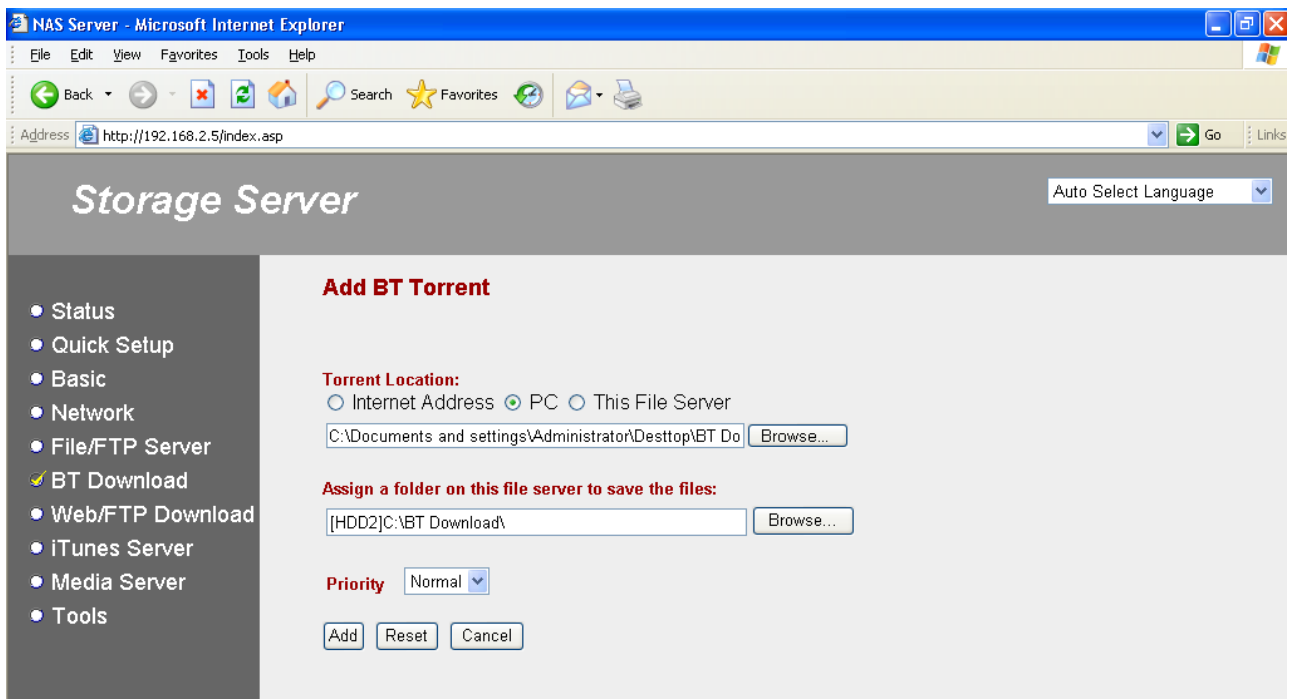
Refresh	Click this button to get latest status of BT Download.
Pause	Select one or more downloading BT items in the list, and click this button to pause them.
Resume	Select one or more paused BT items in the list, and click this button to resume downloading.
Remove All	Remove all BT items from the list.
Remove Selected	Remove selected BT items from the list.
Reset	Deselect all selected BT items in the list.

Click <**Save**> button to save the configurations.

Note: The max number of BT download items is 32.

Add BT Torrent

After you click 'Add Torrent' button, you'll be prompted to provide the location of torrent file:

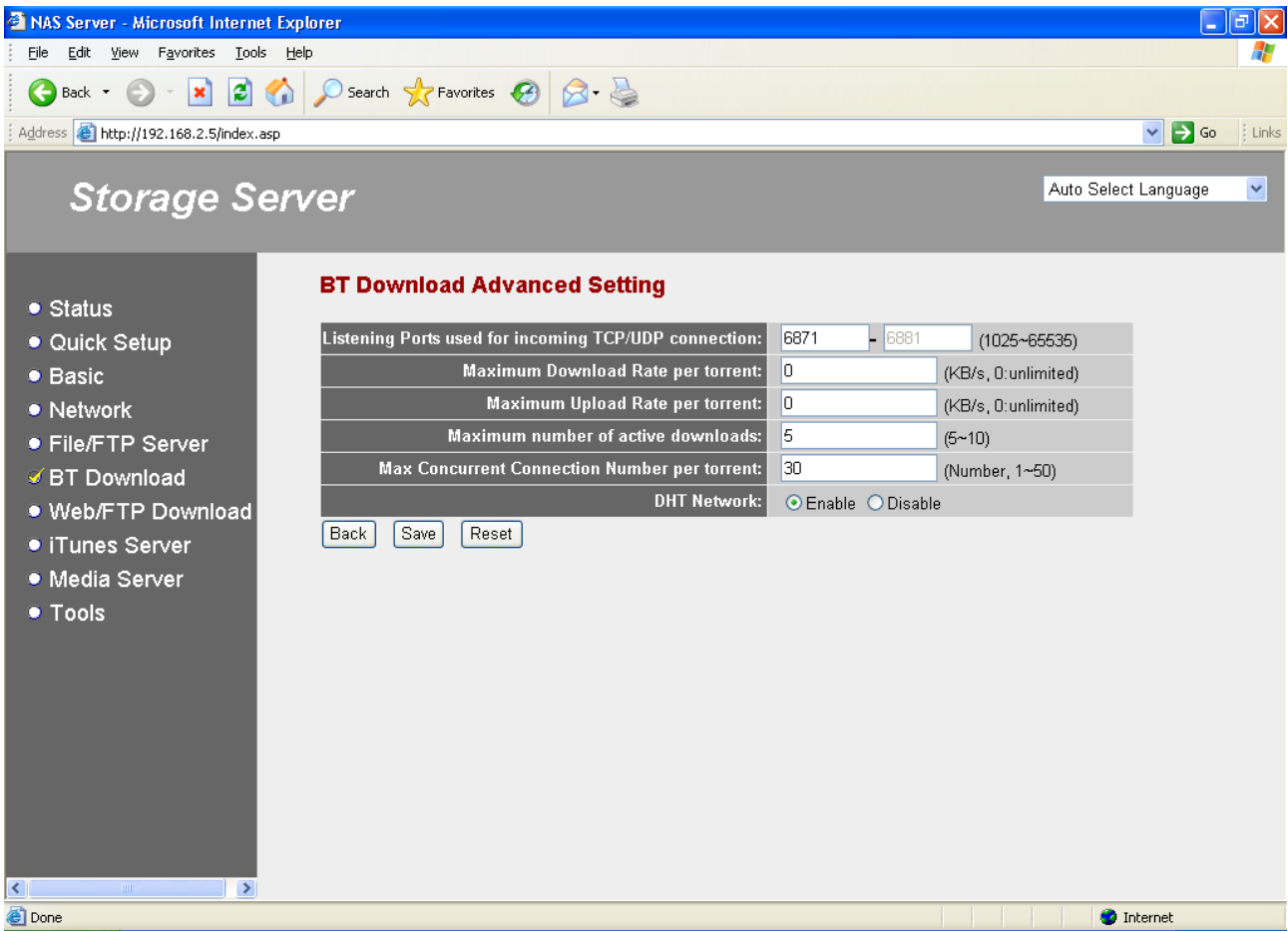


Parameters	Description
Torrent Location	Please specify the location of .torrent file. You can provide the .torrent file location on Internet in URL format (ex. http://www.torrentfile.com/files/movie.torrent), upload from your PC, or browse the file from an attached storage device. If you select "Internet Address", please fill the URL address of torrent

	file, or you can just copy the URL address of torrent file from web browser; If you select “PC” or “This File Server”, a file browsing window will popup, and you can select the torrent file from your PC or an attached storage device.
Assign a folder on this file server to save the files	Please click ‘Browse’ button and a file browsing window will popup. Please specify the folder you wish to save downloaded files. (You can create a new folder by clicking “New Folder” button in file browsing window).
Priority	Please assign a priority level to this BT download item. Available options are ‘High’, ‘Normal’, and ‘Low’. The priority will affect the order of BT download. For example, if you set the maximum active BT download item number to be 5 in the Advanced Setting page, only 5 active BT Download items can be downloaded at the same time. If you have more than 5 BT Download items, every BT Download item with lower priority will be downloaded only when no more than 4 higher priority active BT download items are downloading.
Add	Click this button to add the BT Download job to the list.
Reset	Reset all fields in this page to default value.
Cancel	Cancel adding a new BT Download job and return to previous page.

Advanced Setting

After you click “Advanced Setting” button, the **BT Download Advanced Setting** page will show. You can set the port number used by BT, bandwidth control, maximum active download number and enable/disable DHT here.



Parameters	Description
Listening ports used for incoming TCP/UDP connection	The port range BT listening to during downloading. If you are using a NAT router to access the Internet, let the router forwarding these ports to the IP of storage server will increase the BT download speed.
Maximum download rate per torrent	The maximum download rate per torrent in Kbytes per second. Enter "0" if you do not want to limit the download speed of BT.
Maximum upload rate per torrent	The maximum upload rate per torrent in Kbytes per second. Enter "0" if you do not want to limit the upload speed of BT.
Maximum number of active downloads	The maximum number of active torrents that can be downloaded at the same time. If you add more download items, some items have to wait in turn.
Maximum concurrent connection number per torrent	The maximum number of connections can be used to download a BT download item at the same time.

DHT network	Enable DHT network would let the BT have a chance to find more peers to download even when no tracker servers are available.
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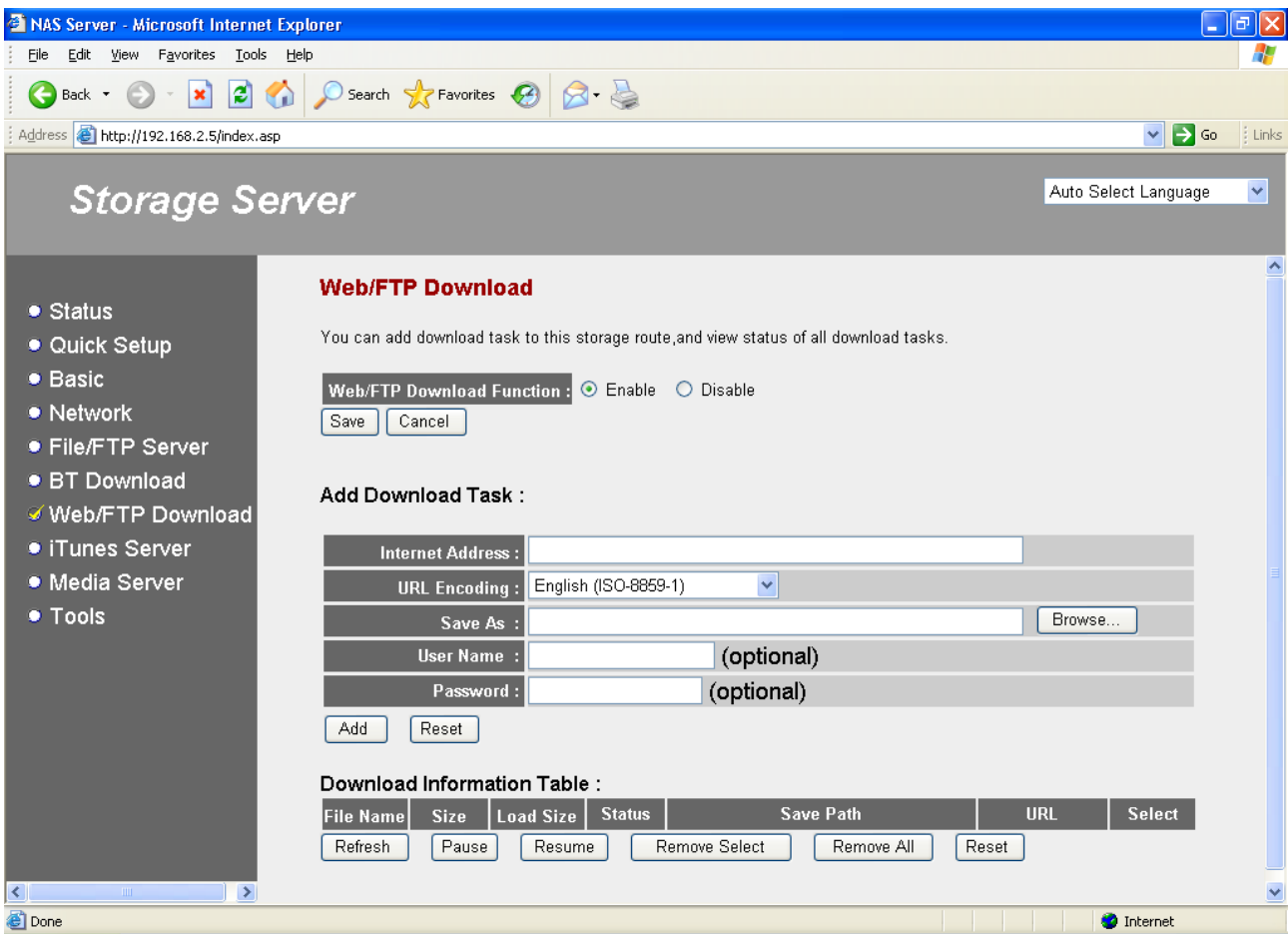
Chapter 7

Web/FTP Download

This storage server supports downloading file from Web and FTP server, so you can download large file from Web or FTP server without keeping your computer switched on.

Note: Before a file can be downloaded and saved, please make sure the free space of the storage is enough.

Note: Only 5 active Web/FTP Download items can be downloaded at the same time. If you have more than 5 Web/FTP Download items, some items have to wait in turn.



Parameters	Description
Web/FTP Download Function	You can enable or disable Web/FTP Download Function here. Click "Save" to apply changes or "Cancel" to discard the change you made.
Internet Address	Please specify the URL of file you wish to download from Web or FTP server.

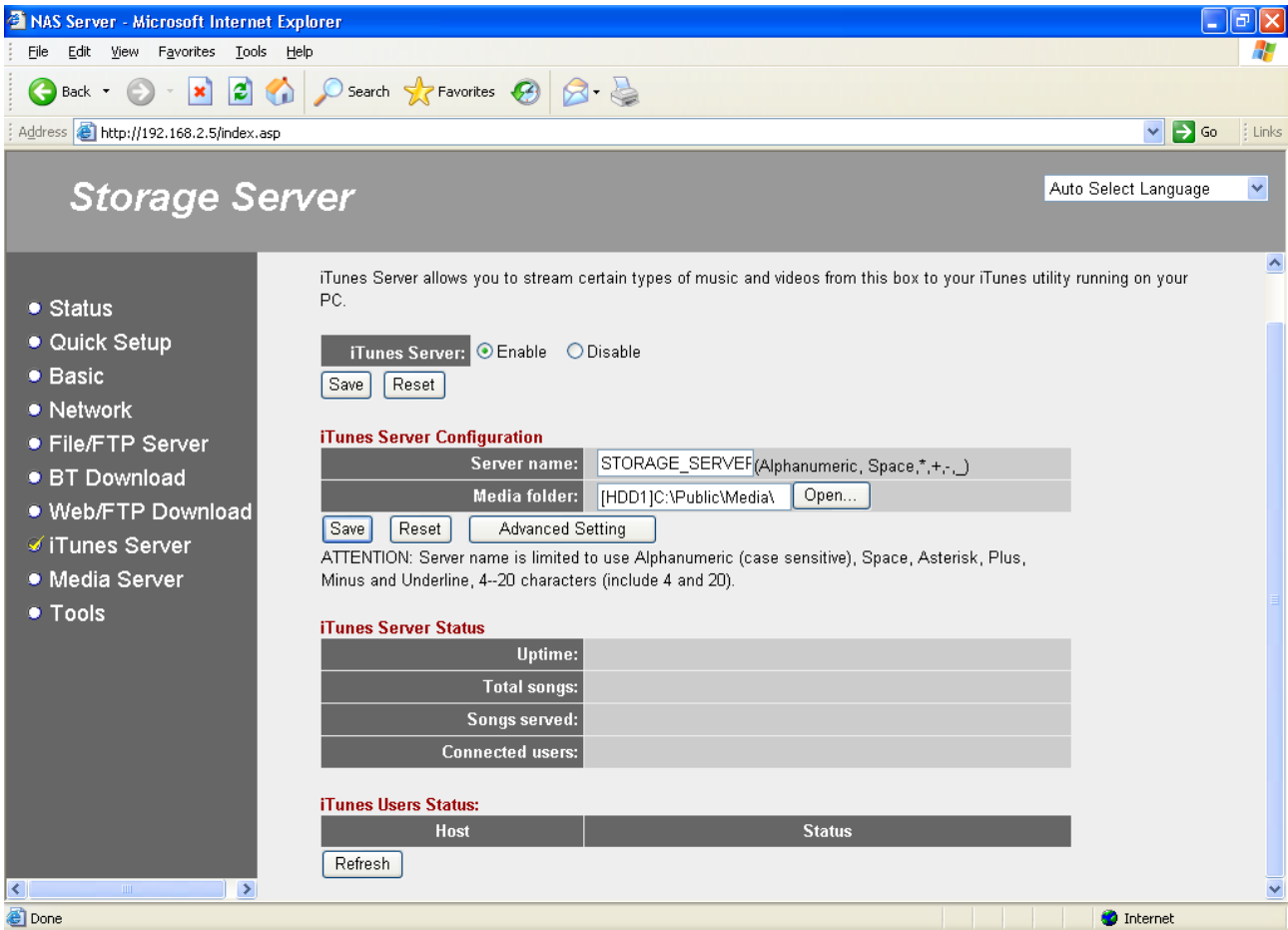
	For example: ftp://ftp.fileserver.com/files/download.zip or http://www.downloadfile.com/files/download.zip
URL Encoding	The URL encoding method of the download source Web/FTP server. The Web/FTP server will encode double-byte characters of URL. If the URL encoding method assigned is not the same with the Web/FTP server, download will fail.
Save As	Please specify the location you wish to save downloaded file. Click "Browse" button to select the folder you wish to save the file.
User Name	This field is optional. Please input the server's username here if the server requires it.
Password	This field is optional. Please input the server's password here if the server requires it.
Add	Click this button to add the download job above to the download list and start downloading.
Reset	Reset all fields in this page to default value.
Refresh	Click this button to get latest status of Web or FTP download.
Pause	Select one or more downloading items in the list, and click this button to pause them.
Resume	Select one or more paused items in the list, and click this button to resume downloading.
Remove All	Remove all items from the list.
Remove Selected	Remove selected item from the list.
Reset	Deselect all selected items in the list.

Note: The max number of Web/FTP download items is 32.

Chapter 8

iTunes Server

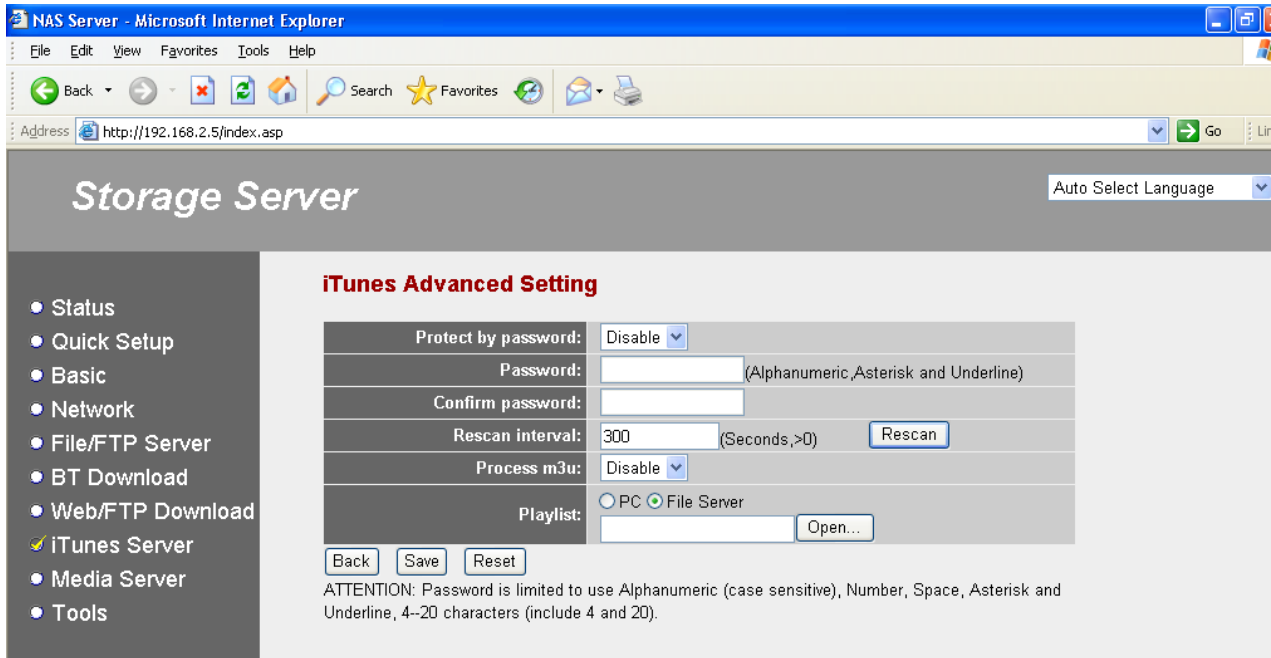
iTunes is a popular and powerful multimedia player, and supports streaming media. If you have media files supported by iTunes, you can share these file by iTunes server and let other computers or iTunes-compatible media players play these media files online.



Parameters	Description
iTunes Server	You can enable or disable iTunes Server here. Click “Save” to keep changes or “Cancel” to discard the change you made.
Server name	Please assign a name to iTunes server. All iTunes clients will need this name to locate this iTunes server. The length of a valid server name is from 4 to 20 characters. It is case sensitive.
Media folder	Please specify the folder where the media files are stored, and all media files inside the folder you specified here will be shared to all iTunes clients. You can click ‘Open’ button to select the folder on the attached storage device.
Advanced	Click this button to modify advanced settings for this iTunes

Setting	server. Detailed instructions are listed below.
Refresh	Click this button to get latest status and user list of iTunes Server.

After you click “Advanced Setting”, you’ll be prompted to configure the advanced settings of this iTunes server:



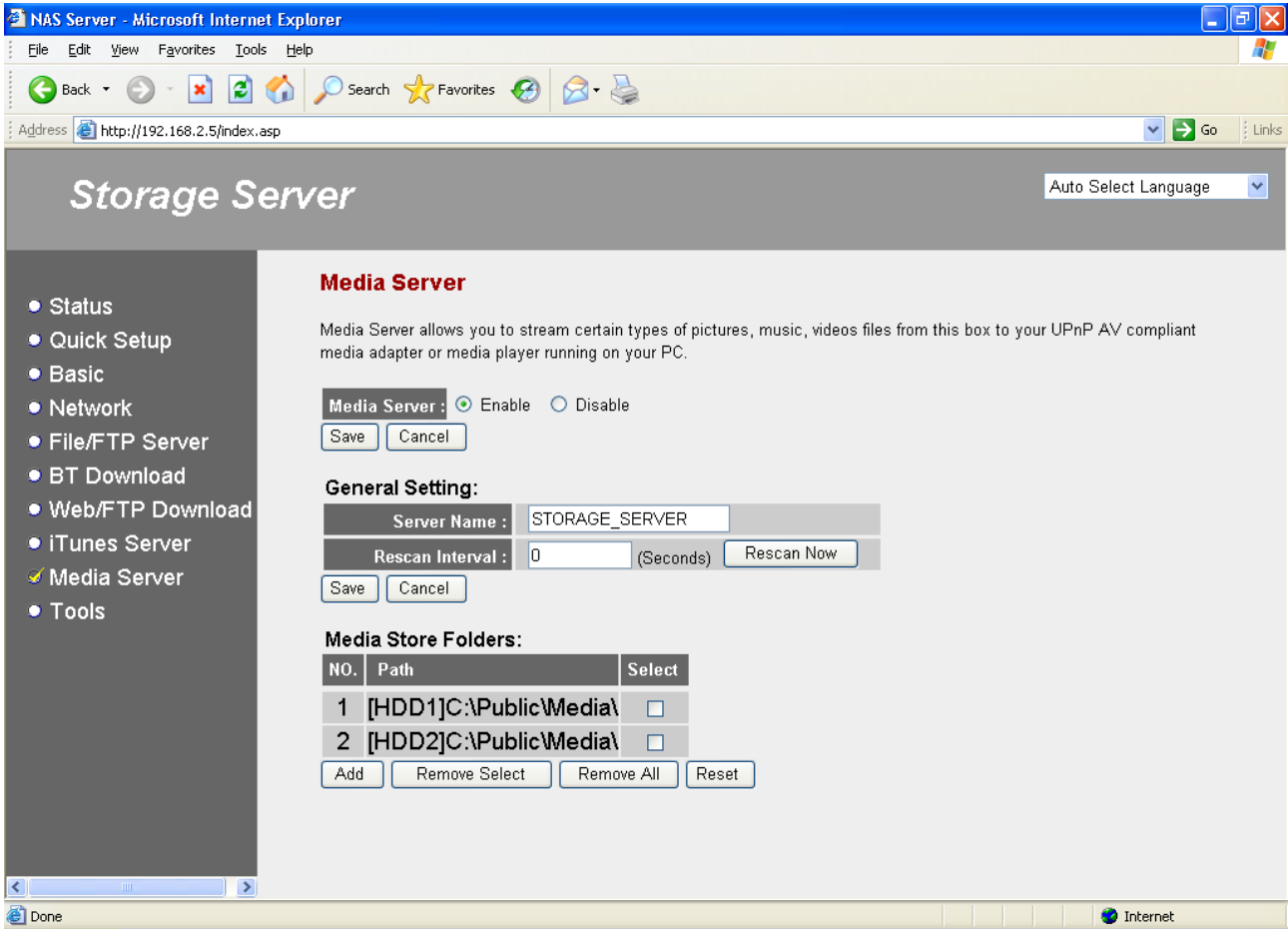
Parameters	Description
Protect by password	You can protect this iTunes server by password, so only iTunes clients who know this password will be able to share media files. By selecting “Disable”, everyone in your network will be able to access your media files, and if too many users are accessing the media files at the same time, iTunes server may respond slower or even stop responding. It’s recommended to select “Enable” to protect your iTunes server by password if you want to prevent non-privileged people from using your media files.
Password	If password protection is enabled, please specify the password of iTunes server here.
Confirm Password	Please confirm the password of iTunes server here.
Rescan interval	Please specify the time interval in second between two iTunes server scans. The iTunes server periodically scan media folder for newly added files. The valid rescan interval is from 30 to 65535 seconds. You can also click “Rescan” button to start a scan immediately. The required scan time varies depend on the number of media files. It may take several minutes to finish.

	It's recommended to use default value (300) to prevent iTunes server from rescanning too frequently. A short rescan interval will make iTunes server respond slower.
Process m3u	If the folder where media files are located includes any m3u (playlist) file, iTunes server will read it and generate proper playlist for iTunes clients.
Playlist	If you have a playlist file, you can upload it from PC or select it from an attached storage device (by selecting "File Server"). You can click "Open" to choose playlist file from your PC or attached storage device.
Back	If you want to discard all settings listed in this page, click this button to return to previous page.
Save	Click this button to save all settings in this page. You'll be prompted to restart the iTunes server, so all changes you made in this page will take effect after restarting.
Reset	Reset all fields in this page to default value.

Chapter 9

Media Server

The media server of this storage server allows you to share your media files to DLNA compliant media adapters and players through network.



Parameters	Description
Media Server	You can enable or disable media server function here. Click “Save” to keep changes or “Cancel” to discard the change you made.
Server Name	Please specify the name of media server here. Media players need this name to locate this media server.
Rescan Interval	Please specify the time interval in second between two media server scans. The media server periodically scan media folder for newly added files. The valid rescan interval is 0 or from 30 to 65535 seconds. 0 rescan interval means NO AUTO RESCAN. You can also click “Rescan” button to start a scan immediately. The required scan time varies depend on the number of media files. It may take several minutes to finish.

	It's recommended to use the value larger than 300 to prevent media server from rescanning too frequently. A short rescan interval will make media server respond slower.
Save	Click this button to save general settings of media server.
Add	Click this button to add a new folder to store shared media files. You'll be prompted to select a folder on the attached storage device.
Remove Select	Remove selected folder from the list.
Remove All	Remove all folders from the list.
Reset	Deselect all selected folders in the list.

Note: The max number of shared folders supported in Media Server is 12.

Chapter 10

Tools

The storage server provides several management tools, including Storage Tools, Storage Status, USB Copy, Config Tools, Firmware Upgrade and Reset.

10.1 Storage Tools

You can use the Storage Tools to manage the partition and format of the attached storage devices. It also allows you to build RAID 0 or RAID1 if you have two internal SATA hard disk drives installed.

RAID 0 helps to you merge two hard disk drives together in striped way. It simulates a big hard disk drive and the available space of the virtual big hard disk drive is the sum of the two physical internal SATA hard disk drives. RAID 0 only works when both internal SATA hard disk drives are healthy. If any one of the two internal SATA hard disk drives fails in RAID 0 mode, you will lose whole data and it is unrecoverable.

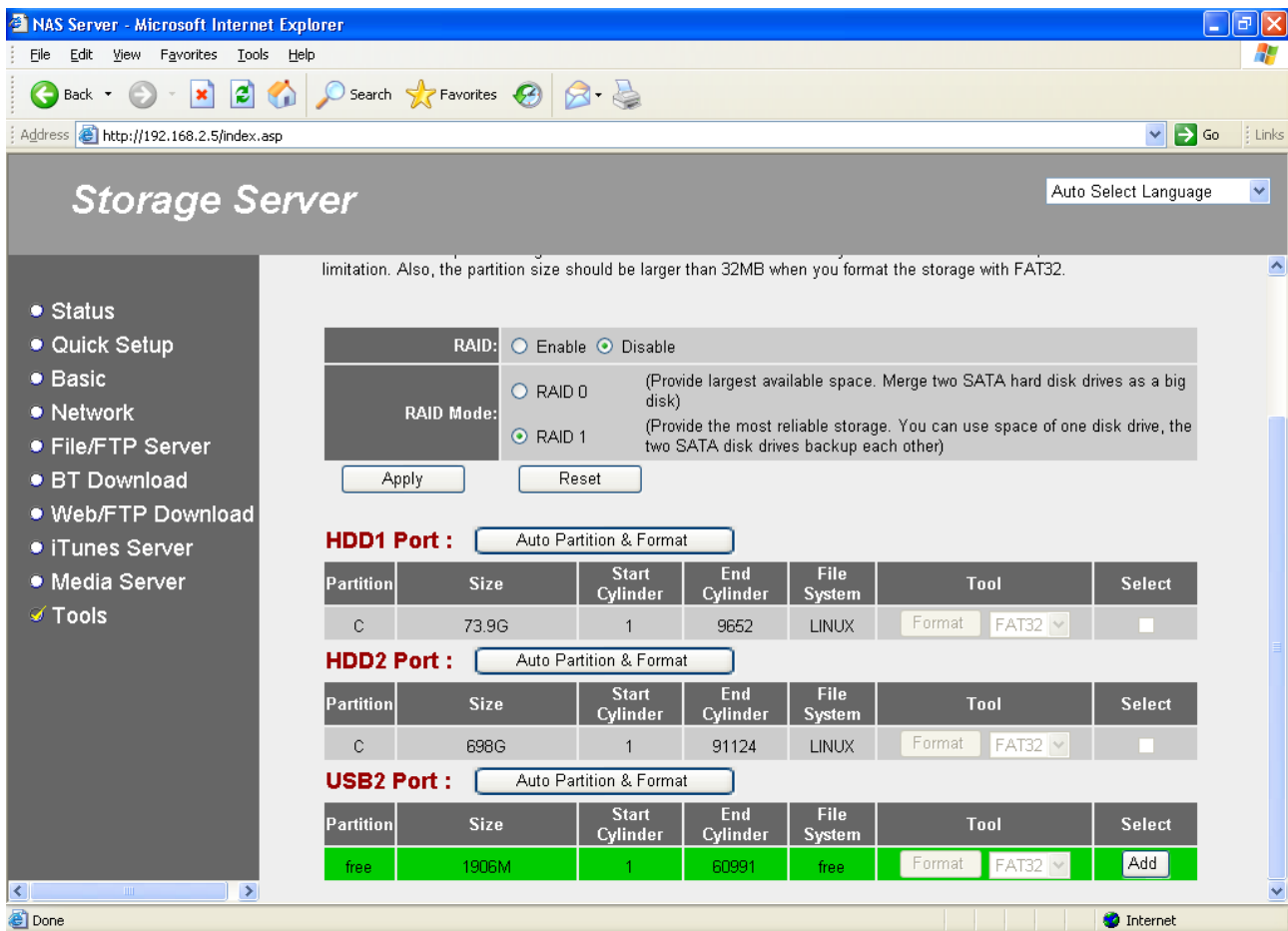
RAID 1 maintains two copies of your data in the two internal SATA hard disk drives. Each disk drive keeps one copy. So RAID 1 still works correctly if just only one of the two internal SATA hard disk drives fails. Because RAID 1 keeps two copies of whole data, the disk space utilization is only 1/2. RAID 1 simulates a stable hard disk drive and the available space of the virtual stable hard disk drive is the size of the smaller physical internal SATA hard disk drive if the sizes of the two internal SATA hard disk drives are different (The additional space of the larger hard disk drive is useless).

Note: When you use the Storage Tools to partition or format the hard disk drive (no matter internal SATA hard disk drive or external USB hard disk drive), the system will stop all service first. So please make sure that you have finished all file transfer before using Storage Tools.

Note: Storage Tools only can be used to manage internal SATA hard disk drives and USB mass storage devices attached to USB2 port. You can not use Storage Tools to partition/format USB mass storage devices attached to USB1 port. If you want to partition/format a USB mass storage device, please attached it to USB2 port or move the USB mass storage device to a PC and use the PC to do partition/format.

Note: For the internal SATA hard disk drives, the storage server only allows you to do "Auto Partition & Format". Only the external USB hard disk drive attached to USB2 port can be manually partitioned and formatted.

Note: If you want to build RAID for the storage server, it is strongly suggested that the two internal SATA hard disk drives are the same brand and model.



Parameters	Description
RAID	If you have two internal SATA hard disk drives installed in this storage server, you can select “Enable” to enable the RAID function. You also can select “Disable” to disable the RAID function and let the two internal SATA hard disk drives work independently. If you only have one internal SATA hard disk drives installed in this storage server, you can not enable the RAID function.
RAID Mode	You can select to let the storage server build RAID 0 or RAID 1 on the two internal SATA hard disk drives.
Auto Partition & Format	By clicking this button, the system will partition and format the attached storage device automatically. Please refer to the detail descriptions below.
Fix RAID	The “Fix RAID” button only appears when the storage server finds that RAID is not working well due to some problem. If any one of the internal SATA hard disk drive fails, the LED of the failed hard disk driver will blink. After you clicking the “Fix RAID” button, you should shut down and power off the storage server, and then replace any failed hard disk drive with a good one. When you power on the storage server again, the storage server will try its best to fix the RAID.

	<p>Note: It is possible to fix the RAID and keep all data correctly if you use RAID 1 and just only one of the two internal SATA hard disk drives fails and you have replaced the failed hard disk drive with a good one and the space of the new hard disk is not smaller than the failed one.</p> <p>Note: If you replace the failed hard disk drive with a smaller hard disk drive when you try to fix a RAID in RAID 1 mode, part of the data previously stored in the RAID may be lost.</p> <p>Note: It is IMPOSSIBLE to fix the RAID and keep all data correctly if you use RAID 0 and the RAID's failure is due to one of the two internal SATA hard disk drives fails. The storage server just clears all old data and rebuilds a new RAID when you click "Fix RAID" button in RAID 0 mode.</p> <p>Note: Sometimes, if you do not follow the normal shut down procedure and just directly power off the storage server, it may make the RAID in a wrong status and the storage server will ask you to fix RAID. In this situation, you can click "Fix RAID" button, shut down storage server and then start storage server again. The RAID will work well again. If the storage server is still asking you to fix RAID, it may due the some internal SATA hard disk drive failure. You have to follow the fix RAID procedure described above to replace the failed hard disk drive.</p>
Tool	<p>You can format the attached storage device by this tool. The Storage Tools supports FAT16, FAT32, EXT2 and EXT3 format. The format may take several minutes to finish, depends on the size of the partition.</p> <p>Note: The data originally stored in the partition will be erased after the format even you stop it before the job is finished.</p>
Add a Partition	<p>By clicking "Add" button, you can launch the "Add a Partition page" to add a new partition in the attached storage device.</p>
Remove Selected Partitions	<p>You can click "Remove Selected Partitions" button to remove the selected partitions in the attached storage device.</p> <p>Note: The data originally stored in the partitions will be erased after they are removed.</p>
Remove All Partitions	<p>You can click "Remove All Partitions" to remove all the partitions in the attached storage device.</p> <p>Note: The data originally stored in the partitions will be erased after they are removed.</p>
Reset	<p>You can click "Reset" to reset selection in partition list.</p>

Note: If you disabled the RAID previously and now want to enable it again. The old data can be kept correctly after you re-enable the RAID only when all the following conditions hold. Otherwise, you can only choose to create a new RAID and erase old data stored in the two internal SATA hard disk drives:

- The RAID mode before you disabled the RAID and the RAID mode that you want to enable now should be the same.
- The two current internal SATA hard disk drives are the same with the two internal SATA hard disk drives before you disabled the RAID.
- You never change the data of both internal SATA hard disk drives after you disabled the RAID and before you enable the RAID.

Auto Partition & Format

This function will build partition and format the attached storage device according to the following rules.

Note: The data originally stored in the attached storage device will completely disappear after you doing “Auto Partition & Format” even you stop it before the job is finished.

Note: The rules of internal SATA hard disk drive and external USB mass storage device are different.

Internal SATA hard disk drive (includes RAID mode):

- (i) It creates a single partition with the size of the whole SATA disk drive or the whole RAID virtual hard disk drive.
- (ii) It formats the created partition by EXT2 format.

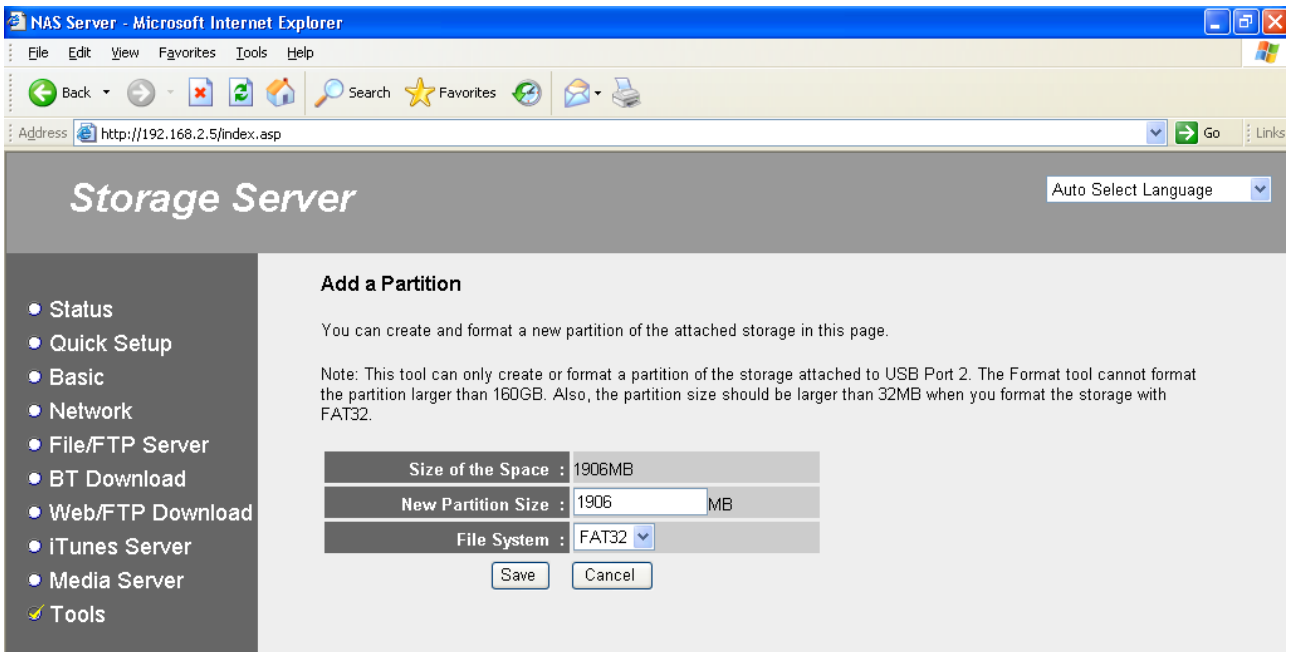
External USB mass storage device:

- (i) If the size of the USB mass storage device is larger than 160GB, it divides the USB mass storage device into several 160GB partitions. The size of the last partition may be less than 160GB. Otherwise, it creates a single partition with the size of the whole USB mass storage device.
- (ii) If formats all the created partitions by FAT32 format.

Note: During the process, user can click the “Stop” button to stop the job before it is finished and back to Storage tools page to add or remove partition manually.

Add a Partition

You can create a new partition in the attached storage device and format it.



Parameters	Description
Size of the Space	The total free space that can be assigned to this new partition.
New Partition Size	You can assign the size of the new partition.
File System	The Storage Tools will format the new partition. You can select FAT16, FAT32, EXT2 or EXT3 format. The format may take several minutes to finish, depends on the size of the partition.

Note: The partition size of FAT16 file system should be less than 2GB; for FAT32 the partition size should be less than 160GB; EXT2 and EXT3 have no such limitation.

10.2 Storage Status

This Page shows the status of all attached storage devices.

Parameters	Description
Unplug	You can click this button to unplug the external USB mass storage device. If the LED of the USB port is off, you can safely detach the USB mass storage from this storage server.
Partition	The partition name of the attached storage device.
Size	Total space of this partition.
Used	Total used space of this partition. Here shows the size in byte and the percentage of the total space.
Free	The remaining free space of the partition.
Status	The type of the partition. It can be FAT16, FAT32, NTFS or Linux.
Refresh	You can click this button to refresh the Storage Status.

10.3 USB Copy

USB Copy tool allows you to copy the content of one external USB mass storage device to another attached storage device. When you press the Copy button on the front panel of this storage server, the copy job will be triggered.

Note: Before you trigger the USB Copy function by pressing the Copy button on the front panel of this storage server, make sure that the destination folder has enough free space to store all data of the source USB mass storage device.



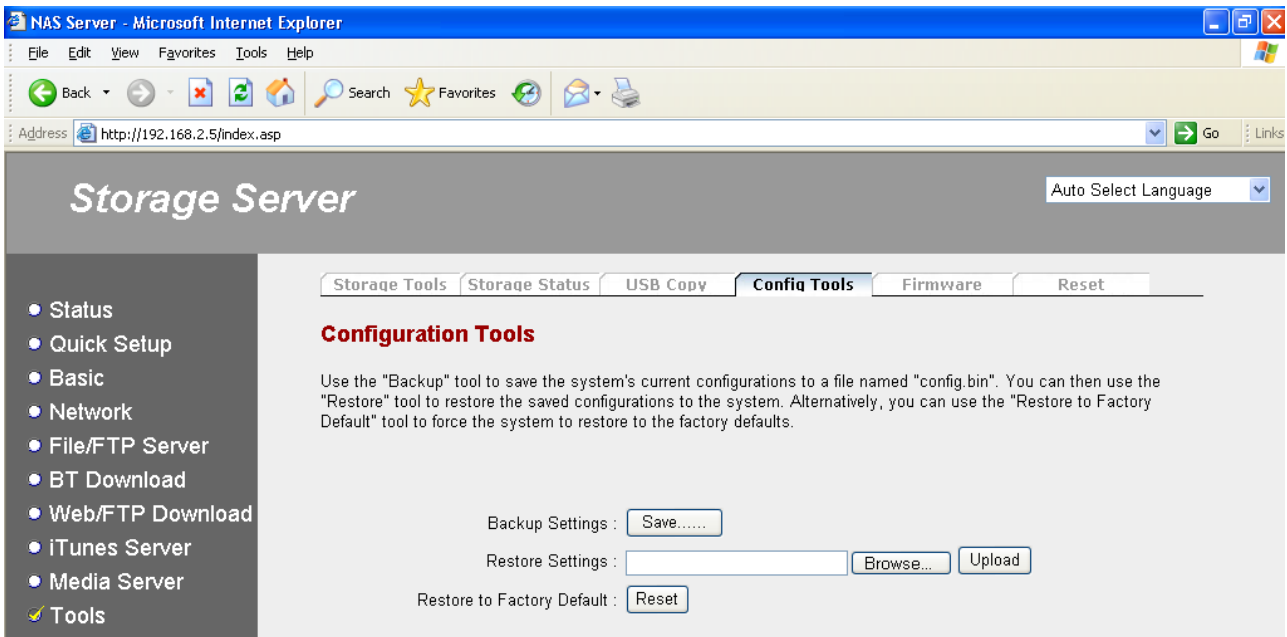
Parameters	Description
Source Path	Select USB port that the source USB mass storage device of the USB Copy job will be plugged in.
Saved Path	Select a shared folder as the destination of the USB Copy. The USB Copy tool will create a folder named “USBCopy” under the shared folder you selected. Each time when you press the Copy button on the front panel of the storage server to trigger the USB Copy job, a new folder named with the trigger time will be created under the “USBCopy” folder and the newly created folder will be the destination folder of the USB Copy job.

Click <**Save**> button to save the configurations.

10.4 Configuration Tools

The Configuration Tools allow you to save (backup) the storage server’s current settings. Saving the configuration provides an added protection and convenience when there’re some problems with the storage server, and you have to reset to factory default to solve the problem. You can upload the saved configuration to the

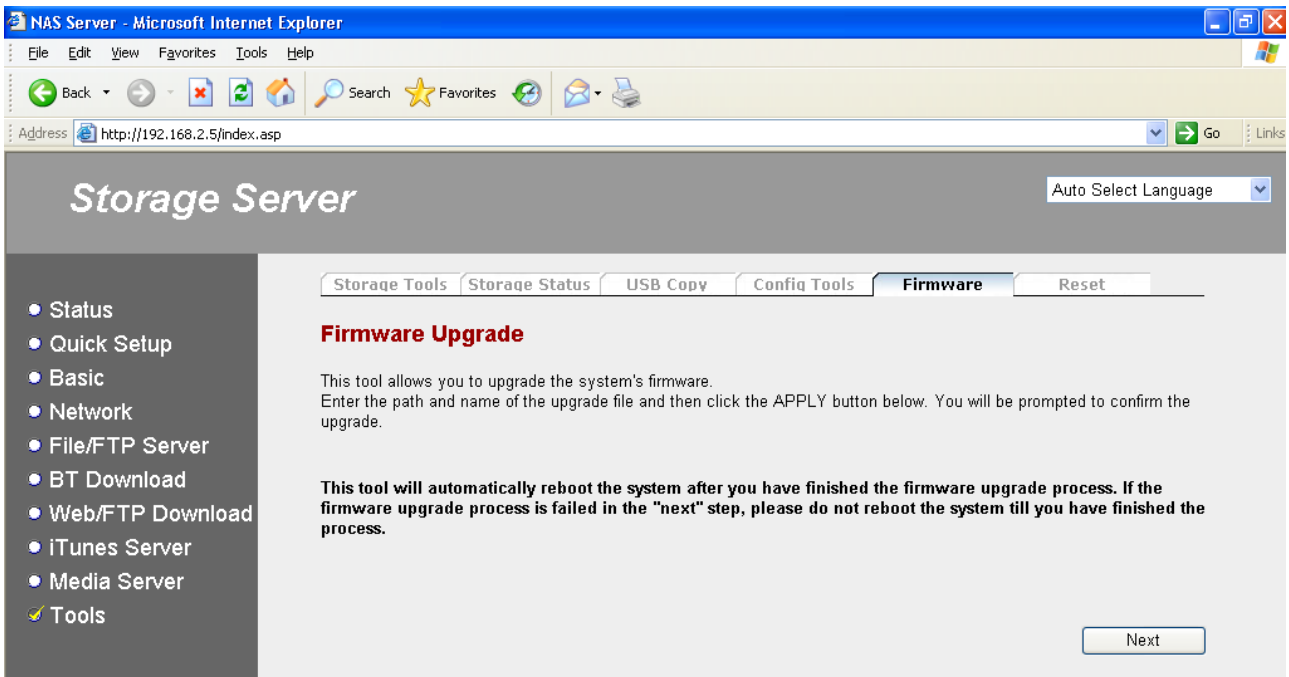
storage server through the **Restore Settings** tool. If extreme problems occur you can use the **Restore to Factory Default** tool, this will set all configurations to its original default settings (e.g. when you purchased the storage server)



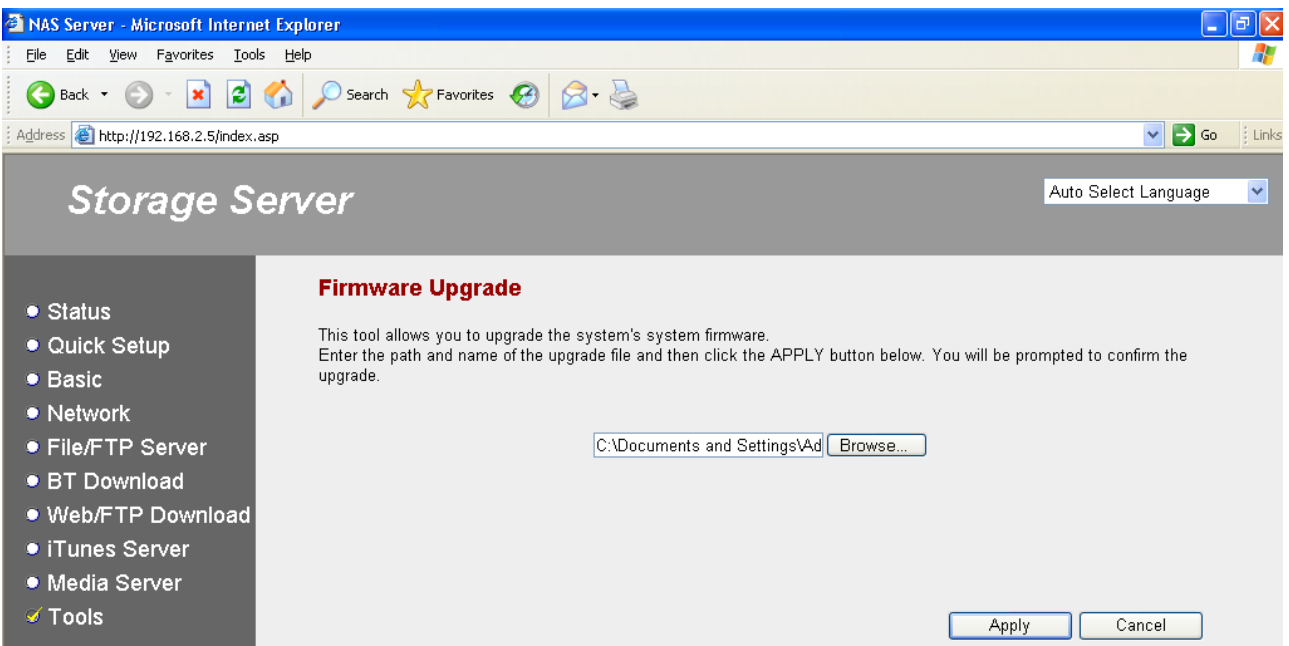
Parameters	Description
Configuration Tools	Use the " Backup Settings " tool to save the storage server's current configuration to a file named "config.bin" on your PC. You can then use the " Restore Settings " tool to restore the saved configuration to the storage server. Alternatively, you can use the " Restore to Factory Defaults " tool to force the storage server to perform a power reset and restore to original factory settings.

10.5 Firmware Upgrade

This page allows you to upgrade the storage server's firmware



Click “Next” to go to the upload firmware file page.



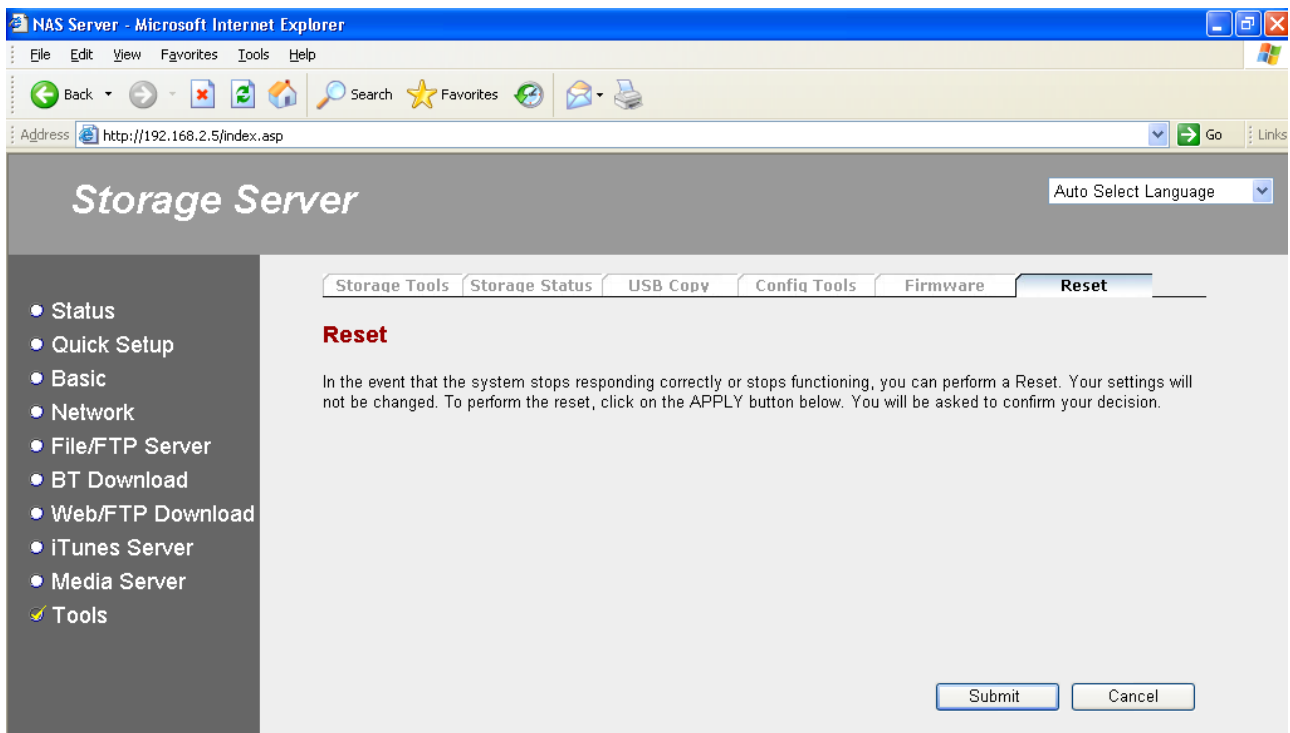
Parameters	Description
Firmware Upgrade	This tool allows you to upgrade the storage server’s system firmware. To upgrade the firmware of your storage server, you need to download the firmware file to your local hard disk, and enter that file name and path in the appropriate field on this page. You can also click the browse button to locate the firmware file on your PC.

After you selected the new firmware file, click “**Apply**” at the bottom of the screen to start the upgrade process. (You may have to wait few minutes for the upgrade to complete). Once the upgrade is complete you can start using the storage server.

Warning: When upgrading firmware, be sure not to switch the computer off, or restart your computer, or break the network connection of your computer.

10.6 Reset

You can reset the storage server's system when there's something wrong with the storage server. The reset function will reboot your storage server.



Parameters	Description
Reset	In the event that the system stops responding or stops functioning, you can perform a reset. Your settings will not be changed. To perform the reset, click on the "APPLY" button. You will be asked to confirm your decision. The reset will be complete when the power LED stops blinking. Once the reset process is complete you may start using the storage server.