

# User's Manual NAS-7202 2-Bay SATA NAS RAID Server

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Revision

User's Manual for PLANET 2-Bay SATA NAS RAID Server

Model: NAS-7202

Rev: 1.00 (October. 2011)

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# 1. Introduction

Thank you for purchasing NAS-7202. It is a flexible, economical and powerful solution for your network storage application. The following instructions will help you to learn more about the connections, set-ups, and configurations of it.

## 1.1 Overview

This user's manual explains how to operate the NAS-7202 from a computer. Basically, the user's manual is written to be read on the computer display. However, users might consider printing it out to access easily and read it before you operate the NAS-7202. This manual shows how to set up the NAS-7202.

## 1.2 Key Features

Supports RAID 0, 1 and JBOD

Provides scalability up to 6TB (with 3TB per HDD)

Supports Windows / MAC utility and Web based management

Share music, pictures, movies and data over network

Supports BT download, DLNA, iTunes Media Server

The administrator can allocate the amount of available disk space to individual users

Aluminum enclosure with an internal cooling fan for continuous operation

2 standard USB 2.0 port for external USB HDD and print server sharing

Gigabit Ethernet for speedy performance with read speed up to 400Mbit/s

10/100/1000 Base-TX (Auto MDI / MDI-X) interface supports auto crossover detection

Supports most popular OS including Windows 7 / Vista / XP, Mac OS x v10.5 or above, Linux Kernel 2.6 and above.

# 1.3 Package Contents

NAS-7202 x 1

Power Adapter x 1

RJ-45 Cable x 1

CD-ROM x 1

Quick Installation Guide x 1

HDD Screw x 8

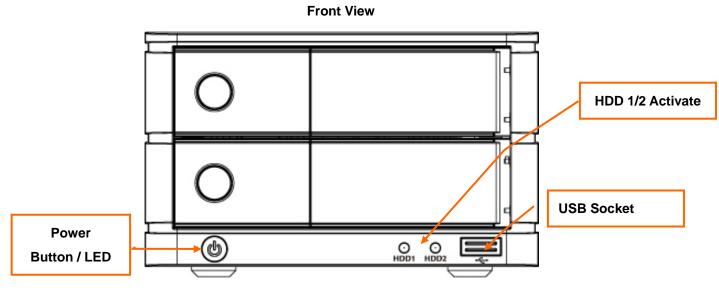


- If any of the above items are missing, please contact your dealer immediately.
- 2. Using the power supply that is not the one included in unit packet will cause damage and void the warranty for this product.

# 2. Front and Rear Panel

## **Physical Details**

The following figure illustrates the front/rear panel of NAS-7202.

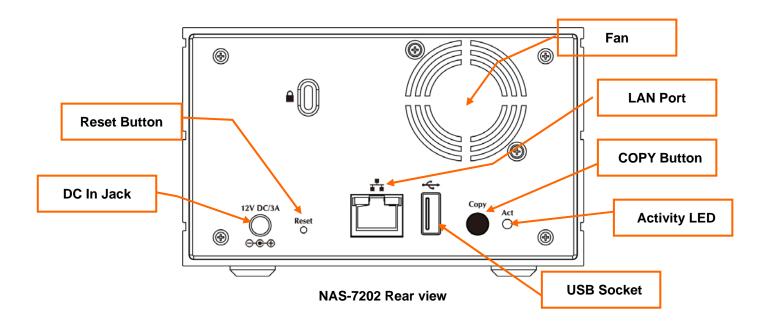


NAS-7202 Front view

| LED    | Color         | Description  |
|--------|---------------|--|
| Davier | On: Power on. |  |
| Power  | Power Blue    | Off: Power off.                                    |
| HDD    | Green         | Blinking: HDD is accessing. Off: HDD is no action. |

| Button | Description                  |
|--------|------------------------------|
| Power  | Press to start or shut down. |

| Connector | Description               |
|-----------|---------------------------|
| USB       | Connect your print server |



| LEDs | Color  | Description                    |
|------|--------|--------------------------------|
| Act  | Orange | Activity status of USB Storage |

| Connector    | Description                                       |
|--------------|---|
| DC Connector | Connect the bundled power adapter.                |
| LAN          | Supports 10/100/1000Base-T interface.             |
| USB          | Connect your USB flash disk for firmware upgrade. |

| Button | Description                            |
|--------|--|
| Reset  | Press to reset NVR to factory default. |

# 2.1 Hardware Installation

Step 1: Push the silver button to release the HDD tray.



Step 2: Pull out the HDD tray.



Step 3: Place the HDD on the tray and secure the HDD with the screws at the bottom (as illustrate).



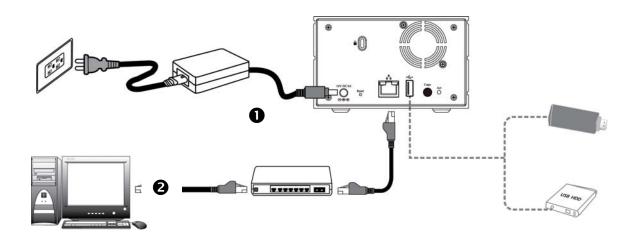
Step 4: Push the tray back in the unit and press down the black bar to secure the tray.



**♣** Note

Before slide in the HDD, please do make sure the HDD is in the correct direction. Slide in and push the HDD with violent could damage the SATA interface of the RAID Server.

# 2.2 Connection and Removing Connection



| Steps | Description  |
|-------|--|
| 1     | Connect NAS-7202 and a Switch, Hub, Router, or computer with RJ-45 Ethernet cable.               |
| 2     | [optional] Connect USB storage device(s) to this device with USB cable(s).                       |
|       | NAS-7202 can automatically mount the USB devices connected.                                      |
| 3     | Connect the power supply to NAS-7202.  |
| 4     | Press the "Power button" to turn on NAS-7202. The HDD activate LED on the front panel will light |
|       | up during booting-up. NAS-7202 will be ready to use when the blue LED lights up steady.          |

# 3. Setup Wizard

## 3.1 Use the product on PC (Windows XP/Vista/Windows 7)

#### 3.1.1 Client tool installation

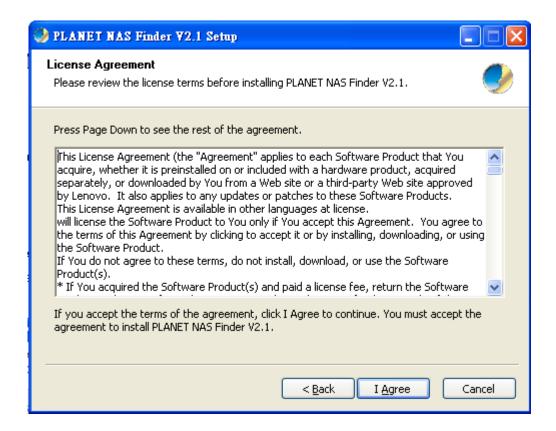
Once you insert the CD into your computer, open up the folder and double click "NAS Finder for Windows V2.1 Setup.exe" for installation. The Language setup window will pop up.



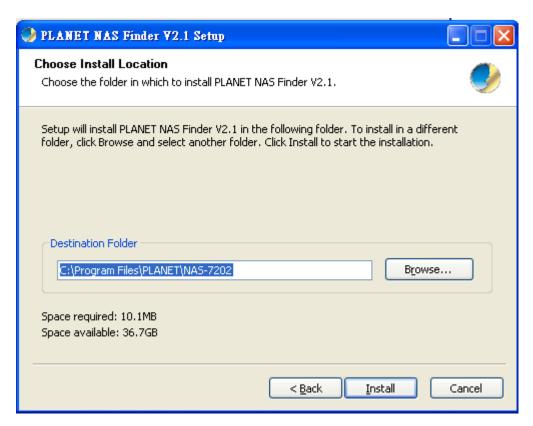
After a language is selected (If the operating system is English System, this step is not needed), click "OK", and then the PLANET Tools Setup Wizard will pop-up.



Click "Next" to continue, a License Agreement window will pop up. The software installation will continue only after the terms listed under License Agreement are accepted by clicking "I Agree".



After clicking "I Agree", enter installation path selection screen. Click "Browse" to choose a custom installation path or use the default setting to install.



Click "Install" button for the installation of software and the installation progress will be shown at the bottom of interface of path. After the installation, a dialogue box of "running the program now or not" pops

up and it is shown as follows.



Click "Finish" to complete the installation, the installation is completed. The PLANET Tools shortcut icon will appear on the desktop automatically and the Quick Launch Toolbar.



Right click tool icon at the toolbar, you can search devices located in your LAN and select language.



### 3.1.2 Use the client tool

#### 3.1.2.1 My Storage

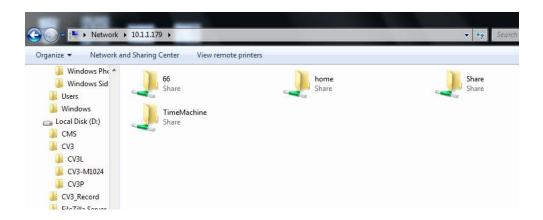
Open this tool and click "Storage" button to access my storage.



System will pop up a window as below. Enter user name and password and click "OK" to login. (The default User Name and Password are both "admin").



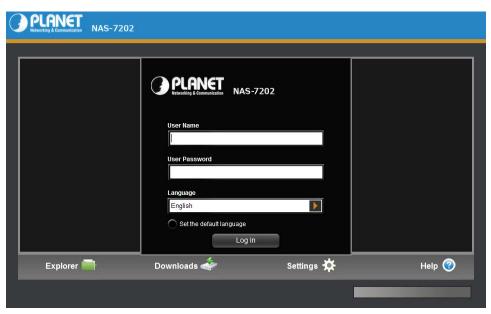
Finally you can discover these folders: home \ Share \ Time machine and others created by admin.



#### 3.1.2.2 Web login



As shown in the picture above, please select your device, and click "Login" button. It will go to the Web management page on web browser.



Enter User Name and Password to login. Default User Name and Password are "admin". (If you want to change User Name and the Password, once you login as admin, you can custom your User Name and

Password by the pop up wizard.

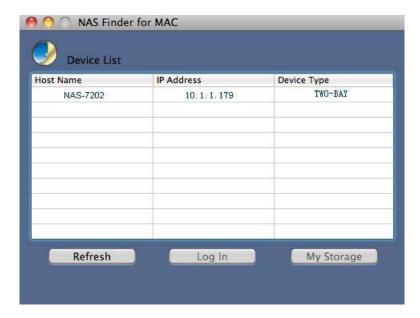


**♣** Note

Also you can access web manually by typing IP address on web explorer, like http://xx.xx.xx. (Default is "192.168.0.100").

# 3.2 Use the product on MAC (above Mac 10.5.5)

Use the MAC version client tool to search device, then press "log in" to access NAS by safari.

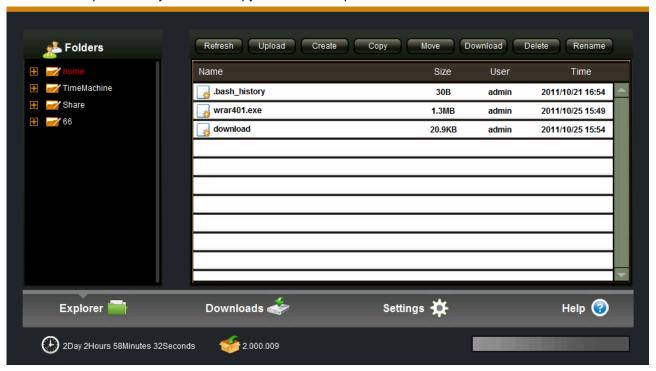


Or you can access NAS by way of opening Safari and type IP address as http://xx.xx.xx. (Default is "192.168.0.100") and go.



# 4. Explorer

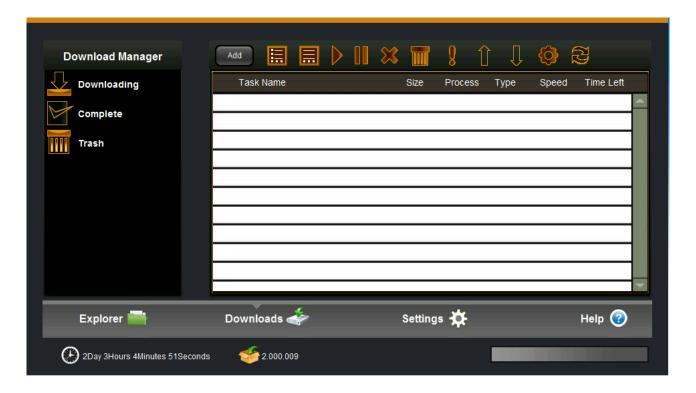
There is a NAS folder explorer through WebDAV, you can do download(upload) files from(to) between NAS and client computer. Also you can do copy/move/create operation on NAS.



# 5. Downloads

To add new BT download task, set the "BT seed" option first, find and select BT Seed File, then select an appropriate path for the download file to be save. Click "confirm" and the newly created download task is displayed on the downloading list.

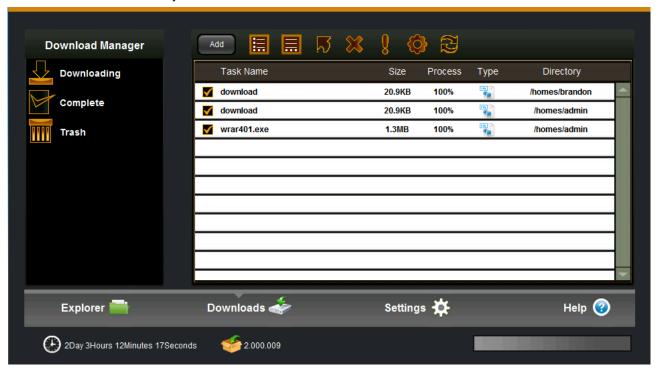
# 5.1 Downloading



| Item     | Action   |
|----------|--|
| Start    | Click "Start" to resume a Task, which has been paused  |
| Stop     | Click "Stop" to suspend the downloading task.  |
| Delete   | Click "Delete" to stop and delete the download task. The deleted task will be removed to Trash and it can be restored. |
| Info     | Select one task, and press information icon to see the more detail information of this task.                           |
| Settings | You can set downloading task number, max download speed, max upload speed and so on.                                   |

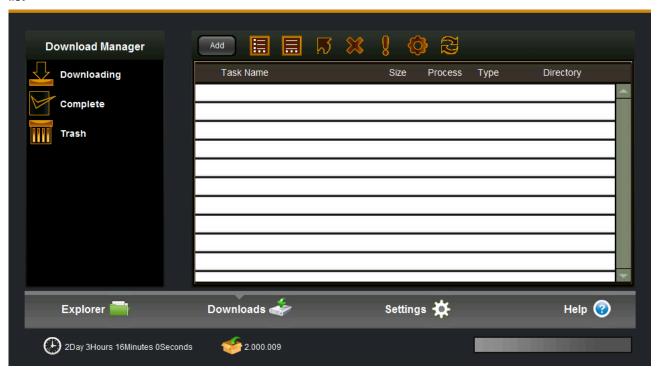
# 5.2 Complete

The completed tasks are displayed on the sidebar of the completed tasks list. Select a task and click "Delete" to delete the completed task. Only the download task will be deleted and the actual downloaded file will still remain in the saved directory.



## 5.3 Trash

Trash has a function of retrieving a deleted task to continue downloading. Click "Trash" to select a deleted task that you want to continue downloading and then click "Reload". The task will be restored to the download list



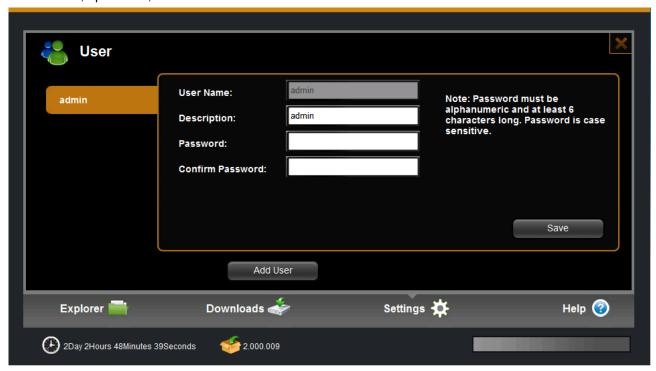
Note N

It will continue downloading from the last completed percentage when it was deleted.

# 6. Settings

## 6.1 User

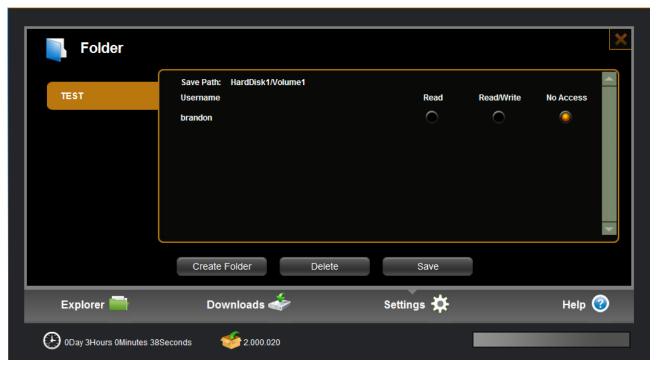
Administrator cans create/edit/remove general user accounts. The general user accounts are used to login services to confirm whether can accessed these services, including web management access, samba access, NFS access, ftp access, AFT/time machine service and so on.



| Item      | Action   |
|-----------|--|
| User Name | This is the user account name when you login in  |
| Password  | The password is case sensitive and should be 6 to 64 displayable characters, including letters, numbers. |
| Add user  | Press "Add user" button, enter the user information and press "save" button to create one user account.  |
| Note      | Password must be alphanumeric and at least 6 characters long. Password is case sensitive.                |

#### 6. 2 Folder

Administrator can create/remove and edit share folders, for each share folder, administrator can set access privilege separately for each user account.



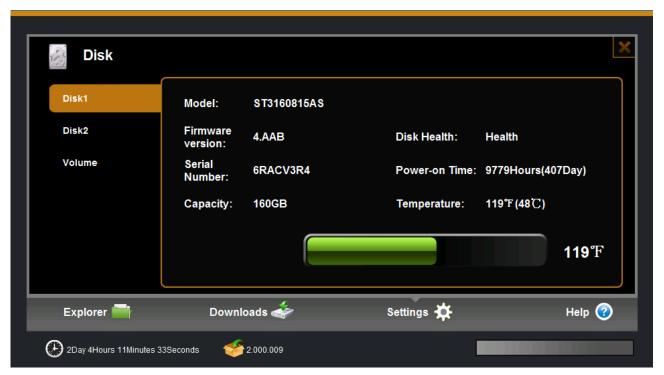
Select the target share folder at left list, at right window, set privilege which general users access to folder. Press "save" button to execute the change.

There are "Read", "Read/Write" and "No Access" option for access privilege setting. The default setting is "no access", that's mean this user cannot even see this folder.

The folder name only uses letters and numbers. The dash (-) or underscore (\_) may be used to separate two names. Maximum folder name is up to 26 characters.

The privilege setting works in all kinds of access modes, including ftp/samba/web/AFP and so on.

## 6.3 Disk



1) **Disk**: Here is the hard disk physical information. Administrator can check disk model, Power on time, disk health status, capacity and temperature.

That information comes from hard disk S.M.A.R.T message.

If the temperature is up to 55 degree C, the build in Fan will begin to work.

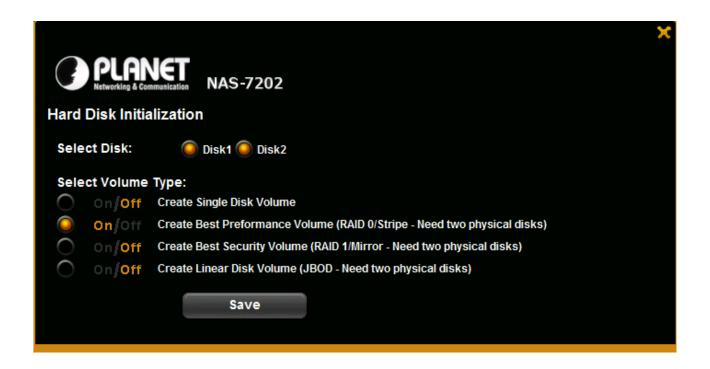
- 2) External USB storage: you can get the capacity information, and safely remove it.
- **3) Volume:** There are volume settings; for example, create a new volume, and format current volume. Also it can check volume information such as, available free space and types of file system.

Only support XFS format file system

Format or create volume operation will cause lost data in the hard disk. In wizard setting, when you enter to create disk volume, there are four disk array mode to choose ,such as "Create single Disk Volume", "Create RAID 1 Volume" and "Create JBOD Volume".



Creating single disk volume, If you just put one disk, please places it on disk1 (disk1 that location on the disk box above)



| Item                         | Action  |
|------------------------------|---|
| Create Single<br>Disk Volume | If you don't want to create the disk array model, perhaps you can choose the mode. If install two hard disks, you should create two volumes, also system files stored the first volume and the two volumes without correlation.   |
|                              | Note: This mode can also be one hard disk, and then you just need create one volume.  |
| Create RAID 0 Volume         | RAID 0, also known as Striping or Stripe, It represents the highest of all RAID levels of storage performance. Improve the performance of RAID 0 storage principle is the continuous data access across two disks, This data parallel operation on the bus can take advantage of the bandwidth, significantly improving the speed of disk storage.  If one of disks has a smaller capacity, the total array size will be based on the smaller capacity multiplied by 2. For example, if a 120GB disk is striped together with a 100GB disk, the size of the array will be 200GB.  Note: if one hard disk is unhealthy, all data is lost. And this mode is not conducive to data security storage. |
| Create RAID 1<br>Volume      | RAID 1 also known as Mirror or Mirroring (mirroring), and its purpose is to ensure maximum data availability and user-repairable. RAID 1 mode is the user data written to disk one hundred percent automatically copied to another hard disk. Mirror, although not improve storage performance, but because of its high data security,  |

making it particularly suitable for storing important data, such as server and database storage and other fields.

Total array size can only be as big as the smallest capacity disk. For example, if you connect a 120GB disk and a 100GB disk, the size of the array will only be 100GB.

Note: In order to improve the stability of RAID and disk utilization, we suggest the best use of the two disks which are the same brand, same capacity, and same cache.

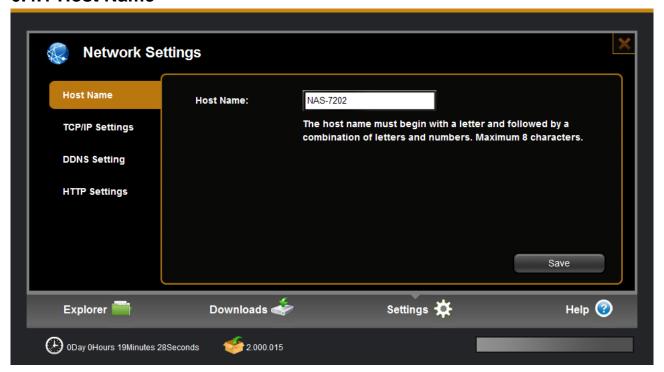
#### **JBOD**

JBOD (Just a Bunch Of Disks, JBOD) is installed on a floor with multiple disk drive storage devices. Usually referred to as Span. JBOD is logically combine several physical disks one by one in series together, thus providing a large logical disk. Data storage starts from the first hard disk when the first disk storage space is exhausted, and then began to turn from the back of the disk to store data. JBOD access to exactly the same performance on a single disk access operation. JBOD does not provide data security. It simply provides a method of using disk space, JBOD storage capacity equal to the composition of the sum of the capacity of all disks.

# 6.4 Network Setting

Network settings include hostname, TCP/IP setting, DDNS setting, HTTP setting.

## 6.4.1 Host Name



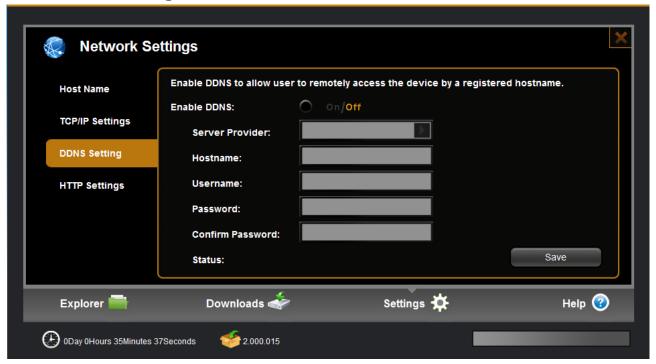
| Item     | Action  |
|----------|---|
| Hot Name | Host name is used to identify this product in LAN. You can use the host name to login in samba (on windows series, type".\\hostname." in file manager address bar), ftp (on windows series, type"ftp: //hostname" in web explorer address bar), and web (on windows series, type"http://hostname" in web explorer address bar). Also you can use the host name to identify the NAS on our application tools on PC/MAC. And so on. |
|          | The host name must begin with a letter and followed by a combination of letters and numbers. Maximum 8 characters.  |

# 6.4.2 TCP/IP Settings



| Item   | Action  |
|--------|---|
| Auto   | Auto: It is default option, if the LAN have DHCP server, the NAS will get these configurations from DHCP server, if not or cannot get configurations successfully, the system will set to default IP address: 192.168.0.100 |
| Manual | You can configure these settings manually; you can reference your computer configurations or get more help from internet.   |

## 6.4.3 DDNS Setting

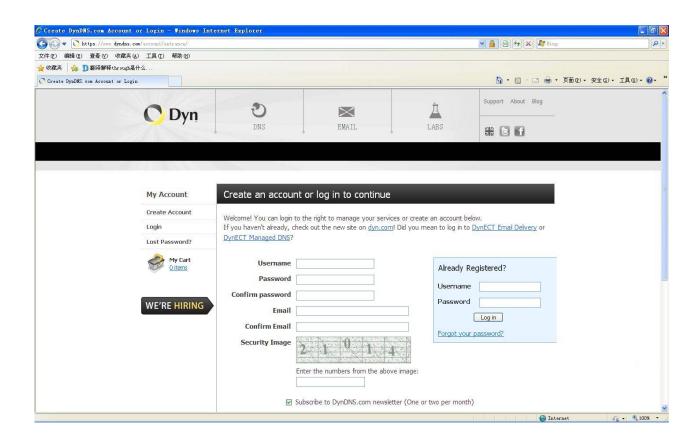


DDNS means Dynamic DNS; it is a method / protocol / network service that provides the capability for a networked device, to notify a <u>Domain Name System</u> (DNS) <u>name server</u> to change. In real time, the active DNS configuration of its configured hostnames, addresses or other information. So DDNS can let you access your NAS-on Internet at anywhere.

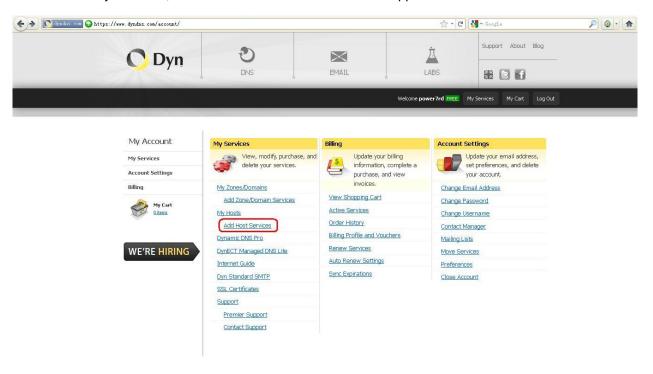
Configure DDNS steps:

- Step 1: Enable DDNS option through accessing web page of NAS
- Step 2. Select on DDNS server provide, and register an account if you do not use yet.

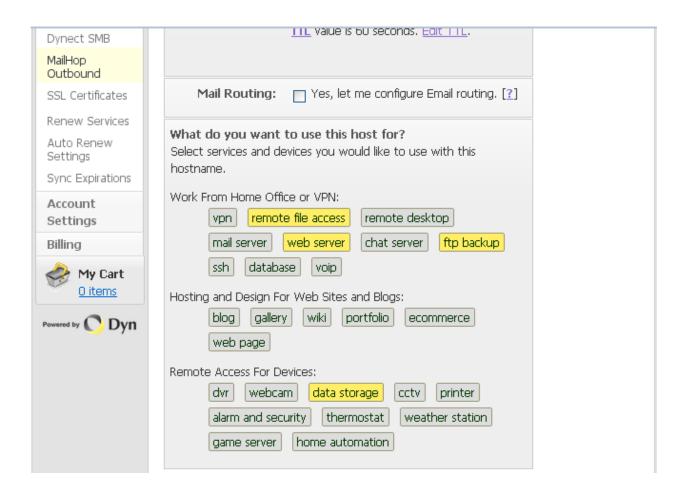
Let's take dyndns.org as an example. Register an account in <a href="https://www.dyndns.com/account/entrance">https://www.dyndns.com/account/entrance</a>. free of charge, shown as follows:



An account and password are acquired once the registration succeeds, and then apply for a DDNS domain name. Enter "my account", click "add host services" to enter the application window of domain name.

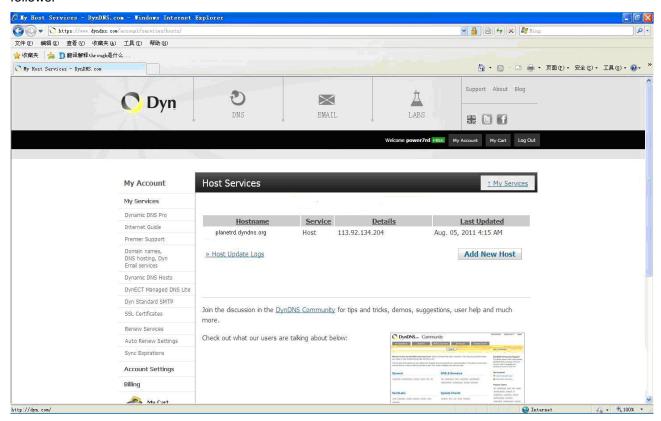


Fill hostname/IP address, (hostname will be as domain name go to access NAS, fill IP address by Address list box below showing). If your PC and NAS are in the same LAN, type http://domain name (planetrd.dyndns.org) to access NAS in the WAN (filling domain name and IP are corresponding)



Meanwhile, select the purpose of application;

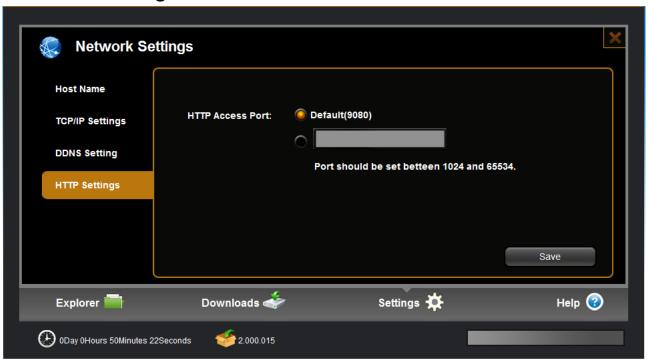
Your domain name can be seen in Host Service of DynDNS website once the application succeeds, shown as follows:



**Step 3:** Enter the hostname/username/password as just got from server provider. And press "confirm" to execute the setting, also you should add NAS IP address to router DMZ zone, see router manual for more reference. Follow:



# 6.4.4 HTTP Settings



**Item Action** 

HTTP Access Port HTTP setting is used to set web access port, the default port is 9080, you can modify as need. Also we support standard default port 80 additional at same time. This port is very important for DDNS.

### 6.5 Network Services

Two Methods to access NAS by FTP are described below. Please make FTP service enable in the web management.

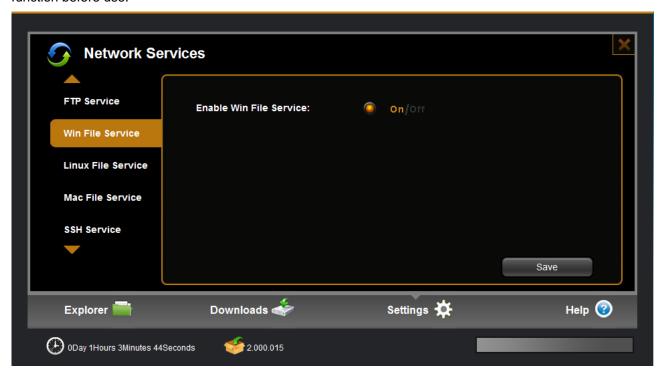
#### 6.5.1 FTP Service



- 1) User can access NAS data through FTP service in LAN or WAN(based on DDNS).
- 2) Support Unicode filename: select the right option based on your language you used.
- 3) Anonymous enable: enable this option to let anonymous user access your data, anonymous user only can see "share" folder.
- 4) FTP access port: the default access port is standard 21, you can change the option if needed.

#### 6.5.2 Win File Service

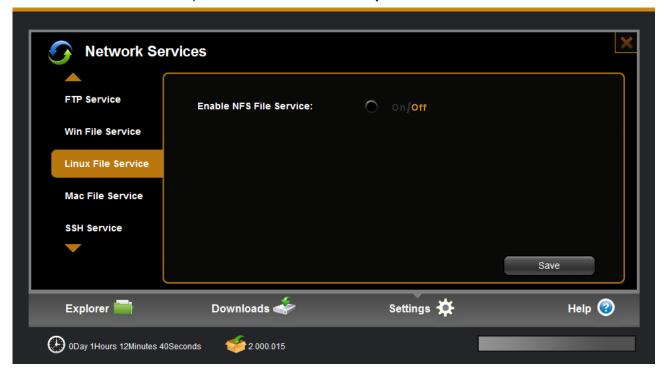
Win file service make it possible that you can share files with others in local area network. First enable this function before use.



#### 6.5.3 Linux File Service

It is used on Linux OS to access NAS through NFS.

Allow write IP address: Access IP is used to specify a range of IP address in your local network for computers that can access and do write operation on NFS share directory.



### How to use NFS:

Starting NFS mountd:

| 2. On Linux OS, open terminal and change into ro   | oot account as below                                  |
|--|---|
| [steve@localhost ~]\$ su                           |   |
| password:  |   |
| 3 .In Terminal, show the NAS server's directory as | s below commands:                                     |
| [root@localhost steve]#showmount -e xxx.xxx.xx     | x (NAS's IP address)                                  |
| Export list for xxxx.xxx.xxx.xxx:/data/HardDisk1/V | olume1 *  |
| 4. In Terminal, restart the NFS server as below co | ommand:   |
| [root@localhost steve]# service nfs restart        |   |
| Shutting down NFS mountd:                          | [ OK ]  |
| Shutting down NFS daemon:                          | [ OK ]  |
| Shutting down NFS quotas:                          | [ OK ]  |
| Shutting down NFS services:                        | [FAILED]  |
| WARNING: Deprecated config file /etc/modprobe      | .conf, all config files belong into /etc/modprobe.d/. |
| Starting NFS services:                             | [ OK ]  |
| Starting NFS quotas:                               | [ OK ]  |
| Starting NFS daemon:                               | [ OK ]  |

1. Enable the NFS server function in "service-→Linux file service "on web.

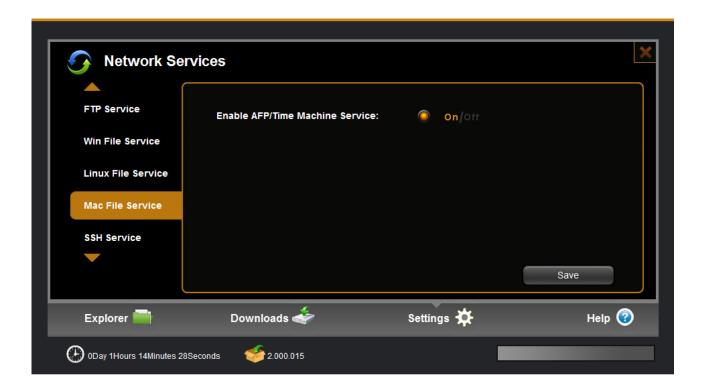
5. In Terminal, mount the NAS directory to Linux OS as below command: [root@localhost steve]# mount -t nfs 192.168.7.186:/data/HardDisk1/Volume1/Share /mnt -o nolock

[ OK ]

At last you can check that the NAS directories have been displayed in filesystem-(mnt on your Linux computer, and you can do operation as it is in local.

#### 6.5.4 MAC File Service

This is function is used to work with Mac computer and compatible with Time Machine backup function, for more information about Time Machine. If you need help, please refer to MacOs help or go on their website for more information.

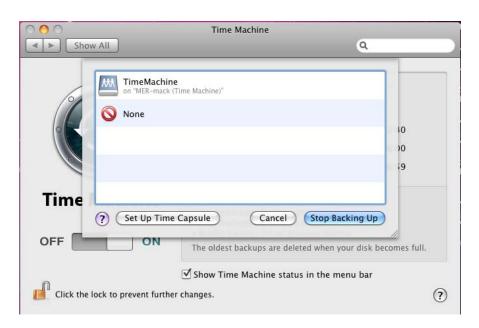


#### How to use this function:

Enable this function in server--- > Mac file service on web

On MAC computer, go to system preference->Time Machine, turn on the function and in "select disk" option, select the NAS folder as the target, you need type the NAS account and password. Now it work and then your backup data will be stored into NAS at Time Machine folder.

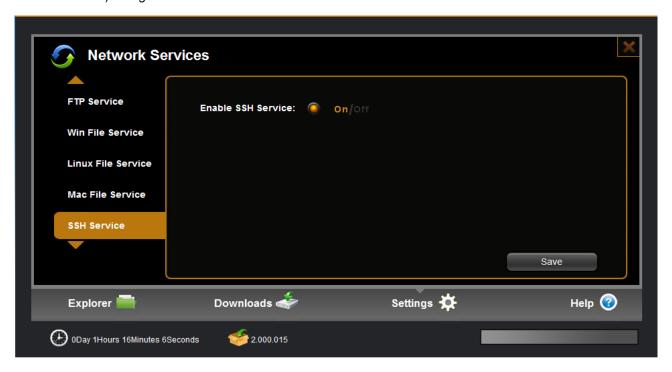




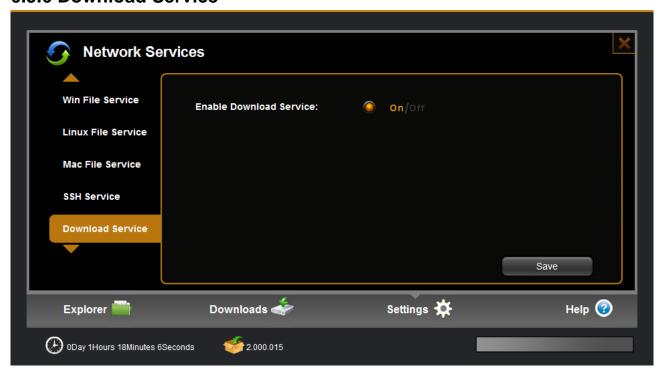


#### 6.5.5 SSH Service

SSH allowed you to remote login to the NAS Linux OS and do some operation, you can use "putty" or other tool to connect. You can use admin or general account to login, or you can use "root "account (password: IOvst20080826) to login.



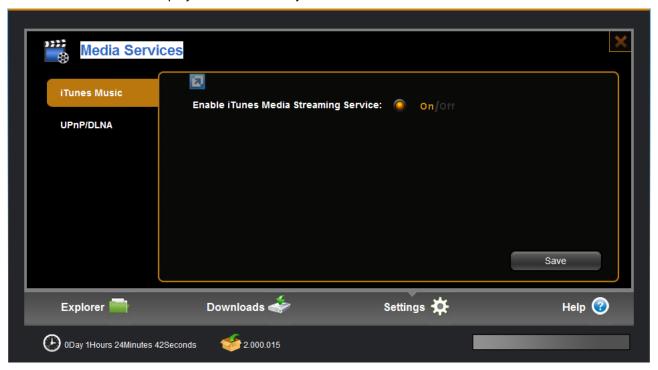
### 6.5.6 Download Service



### 6.5.7 Media Services

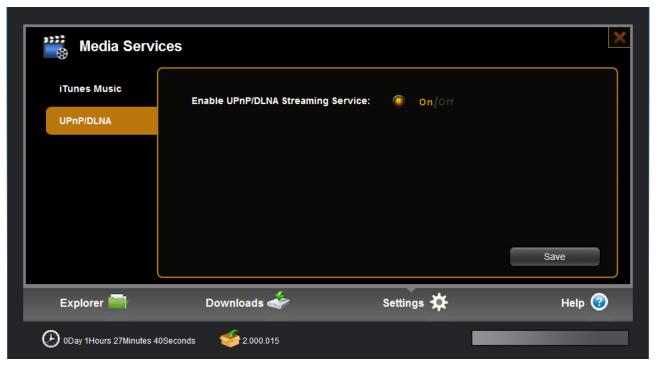
#### 6.5.7.1 ITunes Music

ITunes service allows user play NAS music library at iTunes client.



#### 6.5.7.2 UPnP/DLNA

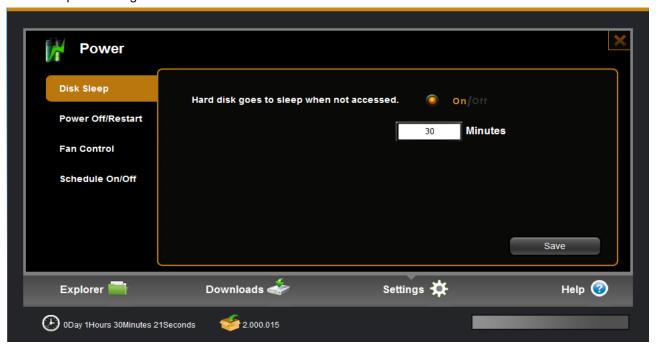
DLNA allow NAS streaming media (movie/photo/music) to client player, like windows media player, net TV, network Media Player, Play station 3, Xbox 360 and other DLNA compatible devices.



### 6.6 Power

### 6.6.1 Disk Sleep

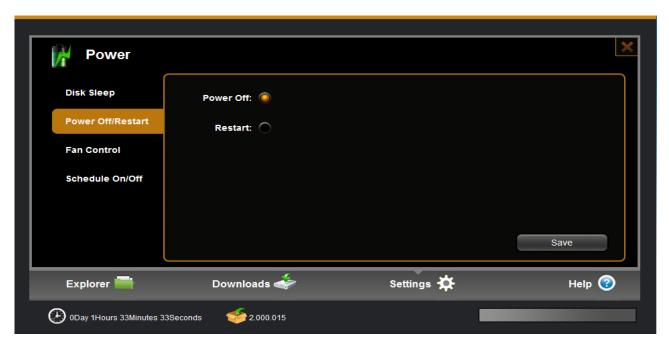
This setting is used to let system go to sleep mode after no access setting time. In sleep mode, the hard disk will go to sleep and the fan will be shut off. When there are access requirement from user, the system will leave sleep mode to general mode.



#### 6.6.2 POWER Off / Restart

To power off the device, select "power off" option and click "confirm" button and system will power off and Status LED will flicker then off.

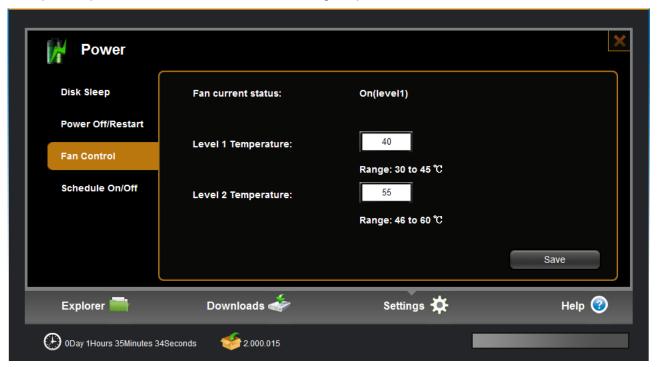
To restart the device, select "restart" option and click "confirm" button to do, Status LED will flicker then be on when restart is finished. Web page turns to the new page for login.



#### 6.6.3 Fan Control

Some model have built in fan, the system always check the hard disk temperature, if the temperature is equal or higher than the setting limitation. The fan will work when the temperature is exceeding the limitation, otherwise it will be off.

Fan open temperature: it is used to set the fan working temperature threshold.



| Item                   | Action  |  |
|------------------------|---|--|
| Level 1<br>Temperature | When the disk temperature is higher than the temperature of level1 setting and lower than the temperature of the level2 setting, the fan will |  |

run at low speed.

| Level 2     | When the disk temperature is higher than the temperature of level2 |
|-------------|--|
| Temperature | setting, the fan will run at high speed.                           |
|             |  |

### 6.6.4 Schedule On/Off

You can create schedule to guide NAS shutdown or power time.





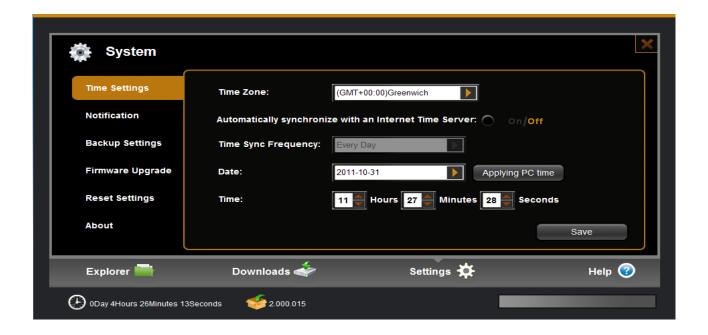
| Status        | Make sure it is on state, thus your setting is effective.  |
|---------------|--|
| Туре          | If you check Power On, means that you set the time will guide NAS boot; If you check Power Off, means that you set the time will guide NAS shutdown. |
| Period / Time | The two options will guide NAS shutdown or power time.   |

## 6.7 System

### 6.7.1 Time Settings

The time of the device can be set automatically, over the Internet using NTP (Network Time Protocol) server or by hand setting.

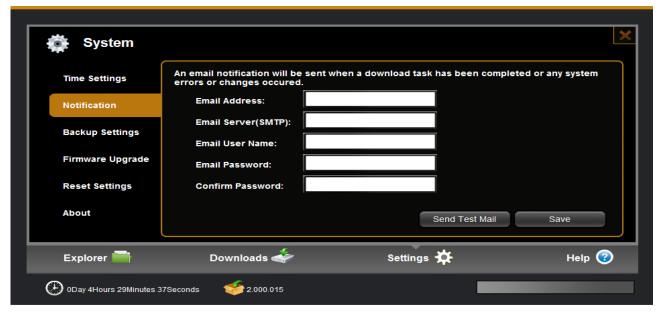
Depending on the location, select the time zone from the drop-down list. If the time is set over the internet enable Internet Sync, enter time sync frency (NTP update frequency). It will become effective after press confirm button.



### 6.7.2 Notification Settings

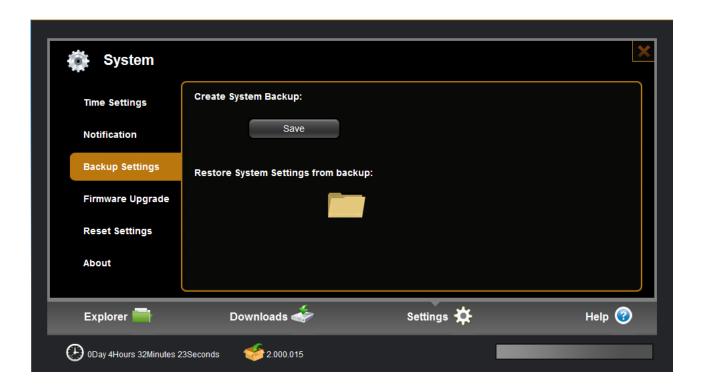
Setting of email notification: in case of application of email notification service, it's required to fill in the email address, email server, user name and email password, confirm the password and press "confirm" button to execute this setting.

The email specified by user can receive the prompt message and completed download task of device.



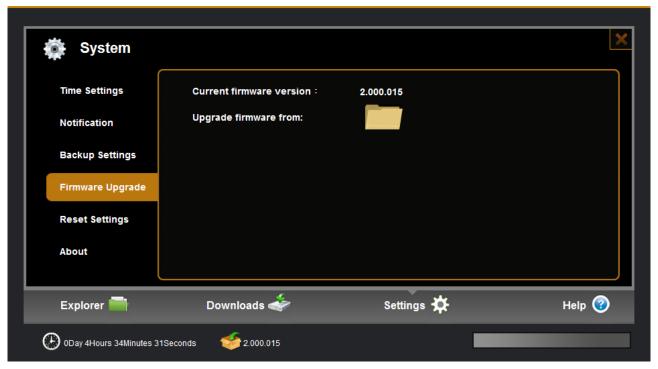
### 6.7.3 Backup Settings

Backup settings are used to save the current setting parameters of the Device system. Also you can restore the setting from the saved setting file.



### 6.7.4 Firmware Upgrade

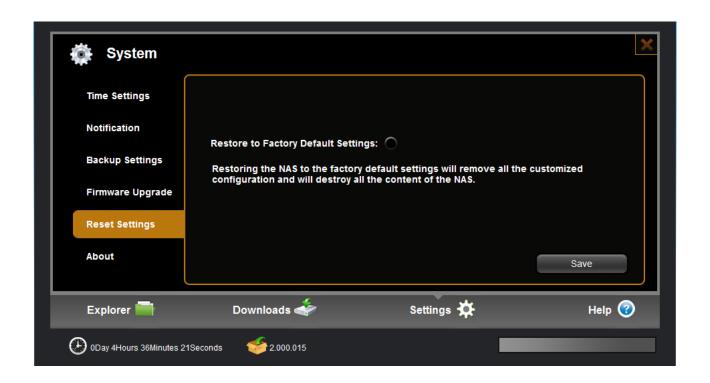
This feature is used to update device firmware.



**Step 1.** Download the latest version of firmware from the device manufacturer website. Click the folder icon to locate the downloaded firmware.

**Step 2**.Click "confirm" button to begin upgrading. After upgrading the system will reboot and you can check firmware version at the bottom of main UI.

### 6.7.5 Reset Settings



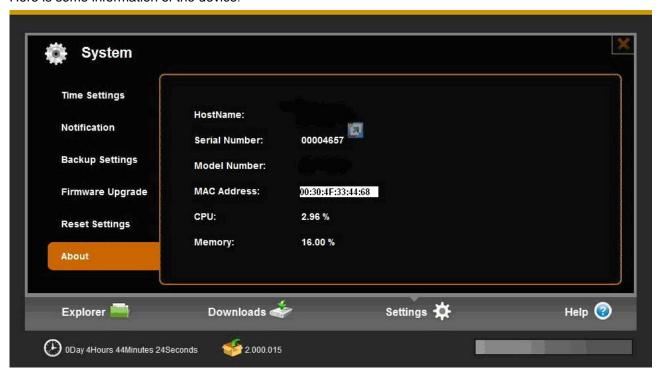
| Item                          | Action   |
|-------------------------------|--|
| Restore to<br>Factory Default | Restoring the NAS to the factory default settings will remove all the customized configuration and will destroy all the content of the NAS |



The feature only restores the device default settings for all functions. The current downloading tasks are not affected by this operation. After the device is restored to default configuration, the IP address is 192.168.0.100.

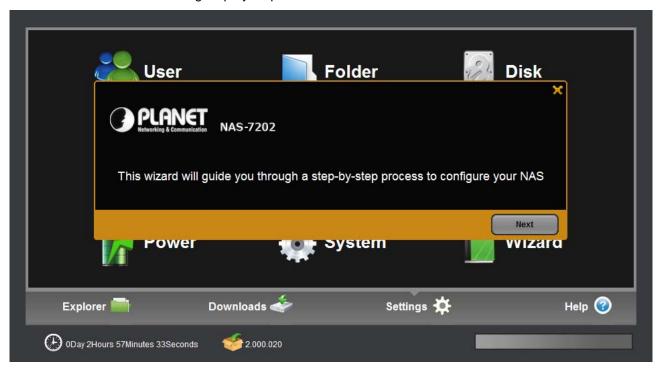
### **6.7.6 About**

Here is some information of the device.



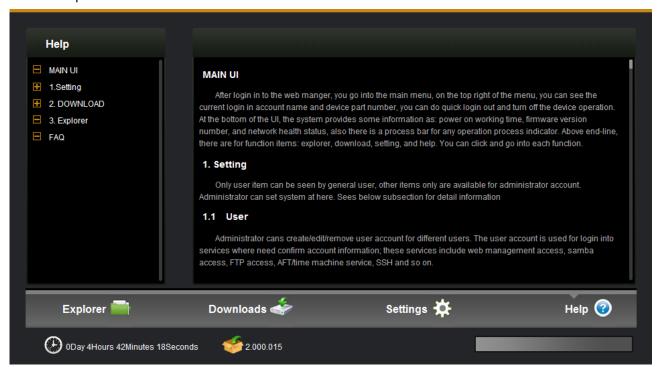
### 6.8 Wizard

Here is a wizard for basic setting step by step.



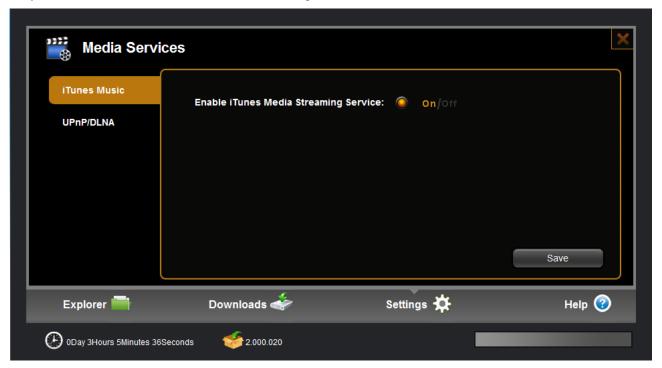
## 7. Help

Here is Help information of the device.

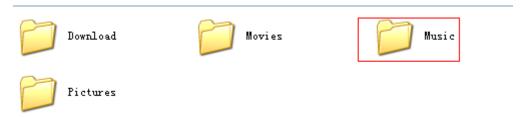


## **Appendix A: iTunes service**

Step1. Enable the iTunes service in the web management



**Step2.** Copy several songs to built-in disk by samba or FTP, which are recommended put into "music" inside of "share".



**Step3.** Then open iTunes in your computer. It will search network share devices automatically, you can find device name at the left list, pitch on the device to open music playlist.



### File types supported by iTunes server

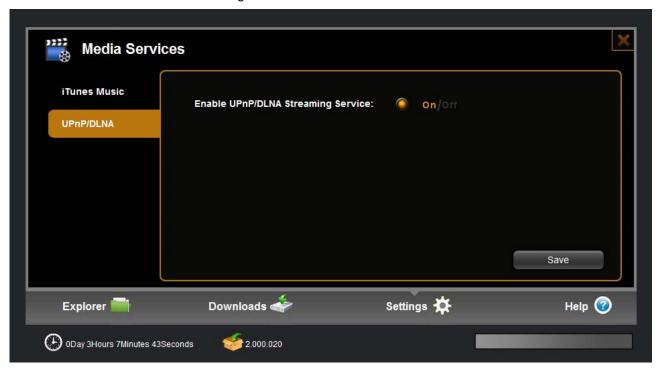
- \*.mp3
- \*.m4a
- \*.wav
- \*.aiff

### **♣** Note

- (1) Newly increased media files to device maybe need restart of iTunes service, and then iTunes client can recognize them.
- (2) Not only on Mac but also on PC, this function can be applied properly.

## **Appendix B: DLNA service**

Enable DLNA service in the web management.



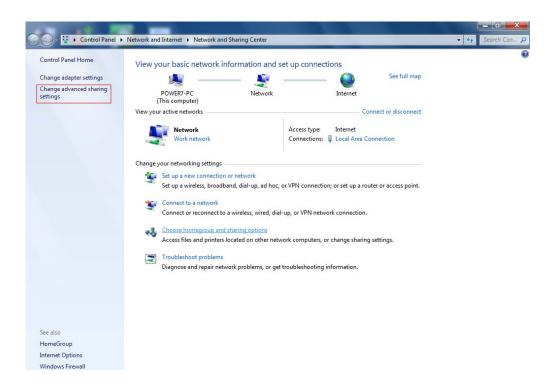
#### **Application on PC**

Operation procedure:

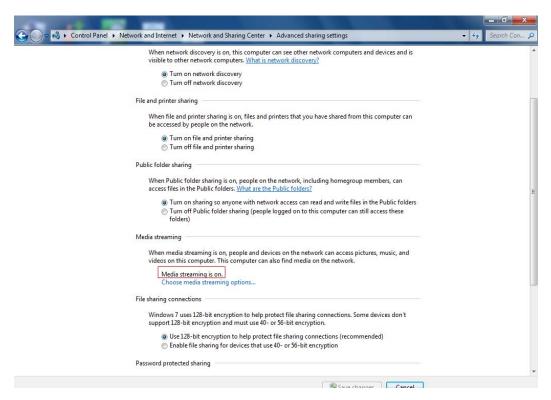
Please make sure client PC has been set to a shared network.(In Windows 7 for example)
 Click the lower right corner on the toolbar of PC monitor "network" icon, click the option "Open Network and Sharing Center".



Click the option "Change advanced sharing settings" on the left side of the interface.



Open "Media streaming" that you can find media on the network.



2. Add media files folders to the shared.

Access device by Samba / FTP (section 3, section 4), and copy multimedia files to "Music", "Movies", "Pictures" fodder under the "share" directory.

### **Media Types Supported by DLNA**

| Shared Audios | Shared Videos | Shared Photos |
|---------------|---------------|---------------|
| Audio Files   | Video Files   | Image Files   |
| MP3           | AVI           | JPEG          |
| WMA           | DIVX          | PNG           |
| WAV           | M2TS          | TIFF          |
| MP4           | MKV           | BMP           |
| M4A           | MOV           | GIF           |
| AAC           | MP4           |               |
| AC3           | NPG           |               |
| AIFF          | TS            |               |
|               | VOB           |               |
|               | WMV           |               |

3. Open Windows Media Player 11 (Windows Vista / Windows 7), click the device name on the left, and you will see media files stored in the device. Then you can select the desired one to play.



DLNA service can also support other DLNA-compatible devices, such as Media Player, Play station 3, Xbox 360.

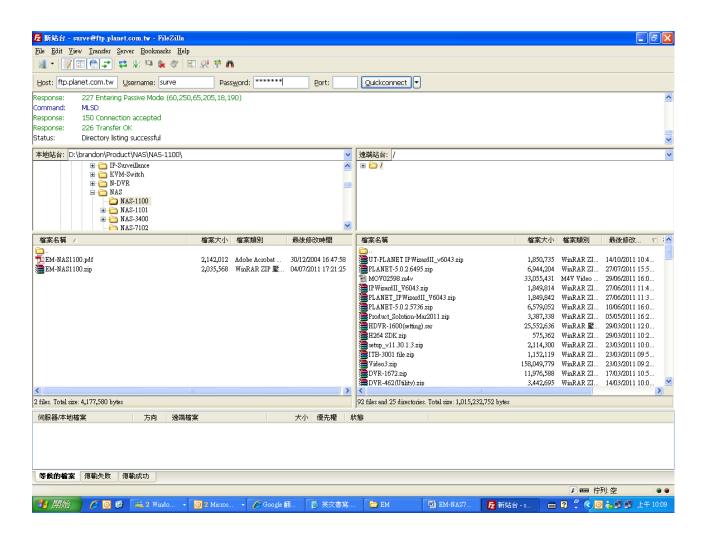
## **Appendix C: Access on PC**

#### Accessing device with FTP client tool

1. Please install FTP client software like Filezilla Client.

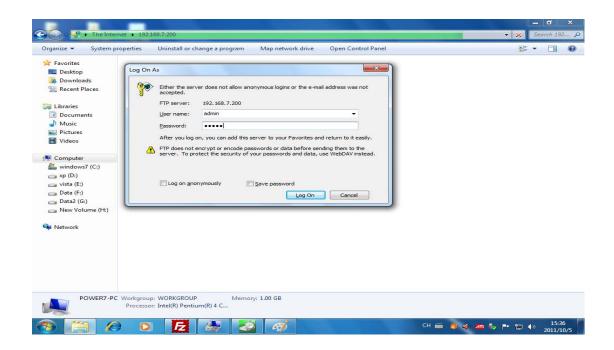


2. Double click the icon on desktop to open, and then enter the host name as "ftp:// xx.xx.xx".(IP address) or "ftp://device name", user name, and password to login, shown as below.

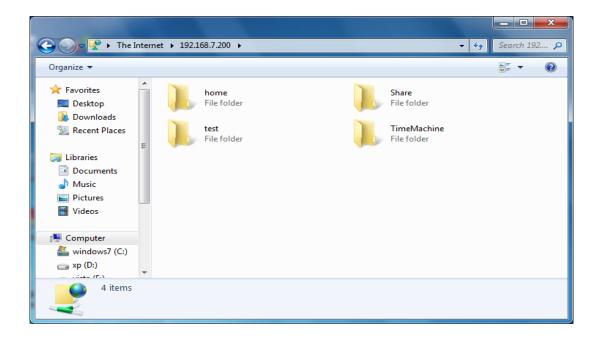


#### Accessing device without tool

1. Type "ftp:// xx.xx.xx " (e.g. ftp://192.168.7.200) in "my computer" or browser.



2. Then enter user name and password to login. (For more detail please see 6.1.1)



**♣** Note

When access the device through above two methods, if Chinese characters show messy code, please try to change the encoded mode for UTF-8 in the browser or FTP terminal software.

# **Appendix D: Functional Specifications**

| Hardware Specification     |   |
|----------------------------|---|
| Supported HDD              | Two 3.5", SATA I/II interface   |
| LAN Connector              | One RJ-45 Interface (10/100/1000Mbps)                                 |
| USB Connector              | 2 x USB 2.0 Compatible (Type A)                                       |
| USB Connectivity           | External Storage and Network Printer Server                           |
| Transport Protocol         | TCP/IP, NTP, SMTP, DDNS   |
| File Protocols             | WebDAV, SMB/CIFS, FTP, NFS, AFP (Apple Talk) / Time Machine, SSH      |
| Multimedia Server          | iTunes/ DLNA / UPnP AV Server   |
| Client OS                  | Windows 7/Vista/XP, Mac OS 10.5 and above, Linux Kernel 2.6 and above |
| System Configuration       | Windows/Mac Base utility, Web Browser                                 |
| Supported Concurrent Users | 32  |
| Max. User Account          | 12  |
| Backup                     | USB One-touch Backup  |
| Operating                  | Temperature: 5 ~ 40 Degree C  |
|                            | Humidity: 5 ~ 90% (non-condensing)                                    |
| Storage                    | Temperature: 0 ~ 60 Degree C  |
|                            | Humidity: 5 ~ 90% (non-condensing)                                    |
| Dimension (W x D x H)      | 220 x 126 x 78.2mm  |
| Weight                     | 730g (without HD)   |
| Power Adapter              | 12V / 3A  |
| Regulatory                 | FCC, CE   |