



2-Bay SATA NAS RAID Server NAS-7201



User's Manual

Version 2.0

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Revision

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

Model: NAS-7201

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Table of Contents

1.	Introduction	1
1.1	Overview	1
1.2	Key Features	1
1.3	Package Contents	1
2.	Front and Rear Panel	2
2.1	Hardware Installation	4
2.2	Connection and Removing Connection	8
2.2.1	Network Connection	8
2.2.2	USB Printer & Storage Device Connection	8
2.3	Removing Connection	9
2.3.1	Removing USB Mass Storage Devices	9
2.3.2	Removing USB Printer	9
2.3.3	Removing Power connection	9
3.	Setup Wizard	10
4.	Web-based Management	13
4.1	Web Management Login	13
4.2	Quick Setup	14
4.2.1	Wizard	14
4.2.2	Add User	16
4.2.3	Add Group	17
4.2.4	Add Share	19
4.3	Users and Groups	20
4.3.1	User Management	20
4.3.2	Group Management	21
4.4	File and Print	21
4.4.1	File Server	21
4.4.2	Share Management	22
4.4.3	Printer Server	24
4.5	System	25
4.5.1	LAN Settings	25
4.5.2	Time Settings	26
4.5.3	Turn Off Server	26
4.5.4	Information	27
4.5.5	Disk Usage	27
4.5.6	Error Notification	28
4.6	Network Service	29
4.6.1	DHCP Server	29
4.6.2	Bonjour Setting	30
4.6.3	Casgle Settings	30
4.6.4	TorrentFlux	31
4.7	Maintenance	32
4.7.1	Disk Utility	32
4.7.2	RAID Setting	33
4.7.3	Firmware Upgrade	34
4.7.4	Save Configuration	35
4.7.5	Restore Configuration	36
4.7.6	Factory Reset	36
4.7.7	Software Update	37
4.8	Personal Information	37
4.8.1	Account	37
4.8.2	Logout	38
5.	Mapping a Network Drive in Windows XP	39
6.	Printer Setup in Windows XP	41
7.	Setup Casgle Service on Windows XP	44

8.	Mounting SMB Server in Mac OS X	51
9.	Mounting SMB Server in Linux	54
10.	Network Applications.....	56
10.1	Personal Data Backup	56
10.2	Network File Sharing.....	56
10.3	FTP Server	57
10.4	Printer Server	57
10.5	USB Mass Storage Device.....	58
	Appendix A What is RAID.....	59
	RAID 0 (striping)	59
	RAID 1 (mirroring).....	60
	Appendix B Specification.....	61

1.Introduction

Thank you for purchasing NAS-7201. 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-7201 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-7201. This manual shows how to set up the NAS-7201.

1.2 Key Features

- Support RAID 0, 1 and JBOD
- Provides Scalability up to 2TB (with TWO 1TB HDD)
- 2 Standard USB 2.0 Port for External USB HDD and Print Server Sharing
- Supports Windows Utility and Web Base Manage Internet
- Share Music, Pictures, Movies and Data over Network
- Supports BT Download
- Interface: 10/100/1000 Base-TX(Auto MDI/MDI-X), supports auto crossover detection
- Supports most popular OS including Windows VISTA/XP/2000, Mac OS x v10.2.1 or above, Linux.

1.3 Package Contents

NAS-7201 x 1

Power Adapter x 1

RJ-45 Cable x 1

CD Disk x 1

Quick Installation Guide x 1

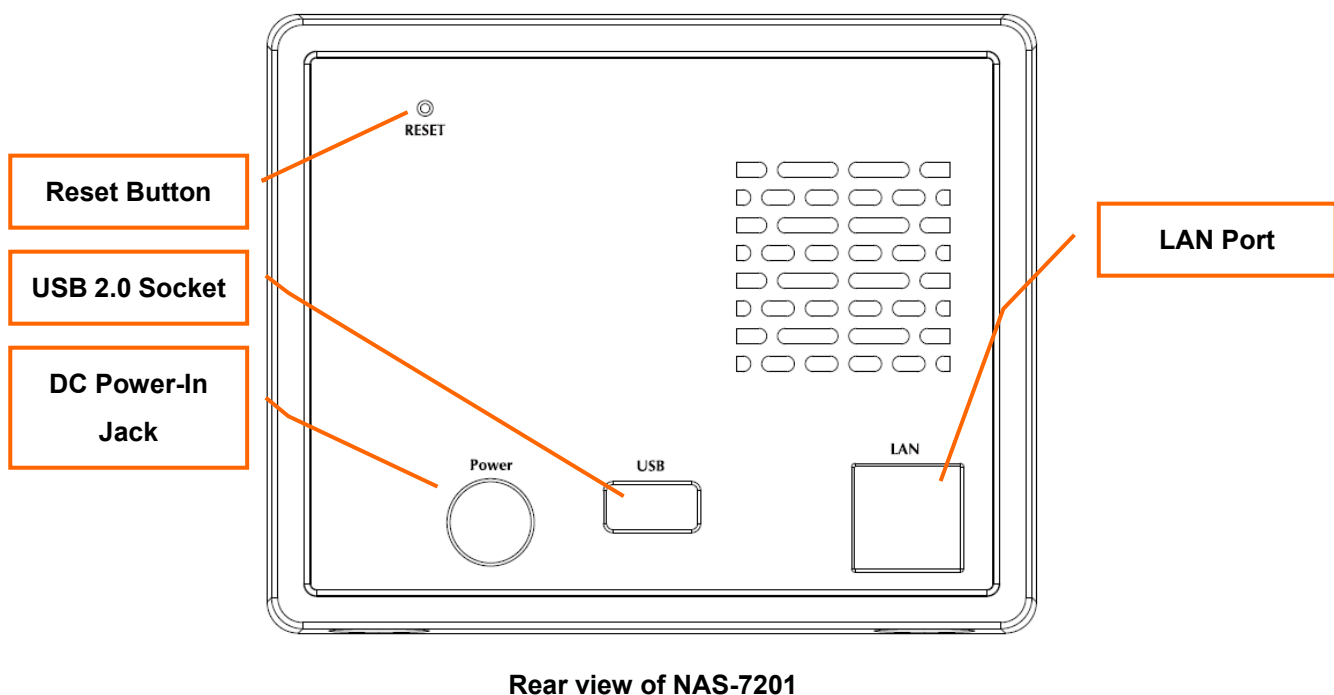
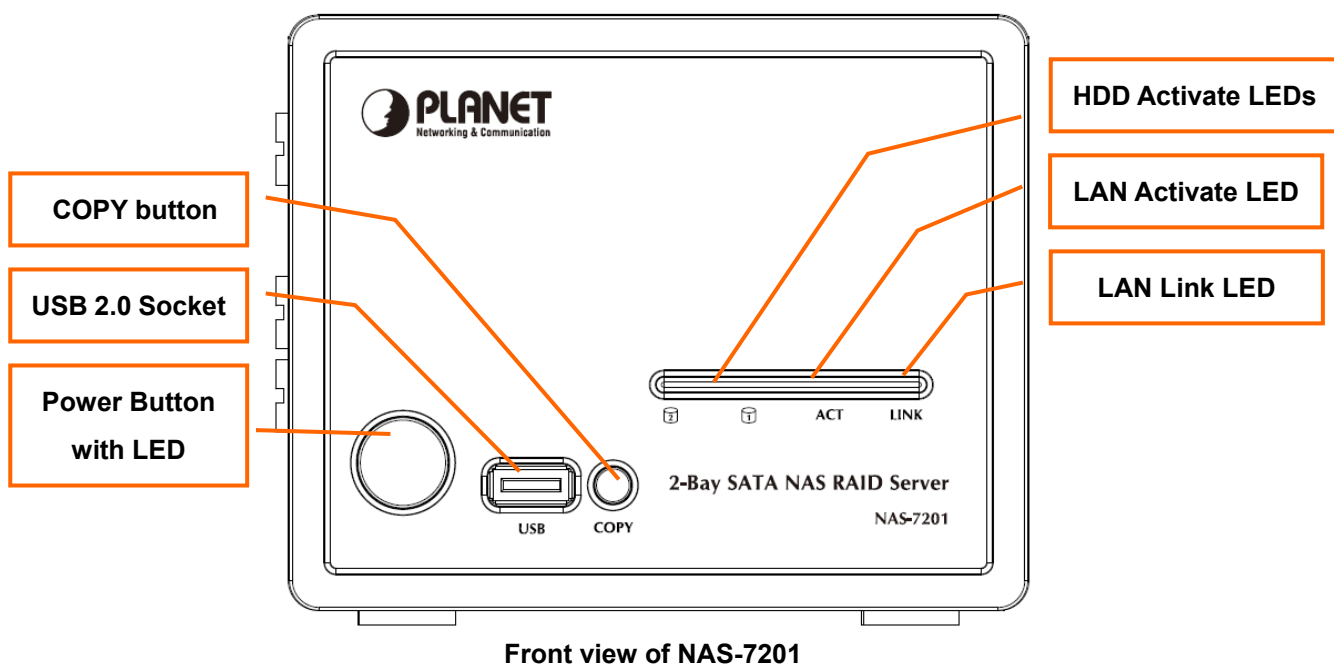
Note

-
1. 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-7201.



Button Description

1 Power	Push to turn on or off NAS-7201.
2 Copy	Copy the USB storage data onto the NAS server, please press and hold this over 3 – 5 second to active it.
3 Reset	Press 10 sec to restore factory default.

LED Indication Description

1 HDD Activate	Activity read/write status of HDD1 and HDD2.
2 LAN Activate	Activity status of Ethernet.
3 LAN Link	Link status of Ethernet.

Physical Interfaces

1 USB Socket:	Connects to USB printers and USB Storage Devices.
2 LAN Port	Connects to the Ethernet cable with RJ-45 connector.
3 DC Power-In jack:	Connects to the AC adapter.

2.1 Hardware Installation

Step 1: Remove the Front Case

Follow the figure below to release the screws and open the front case with the direction. Slightly push the front case and lift up the plastic case.

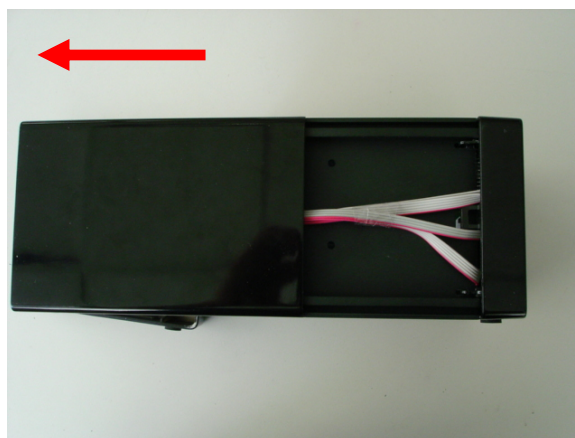


Note

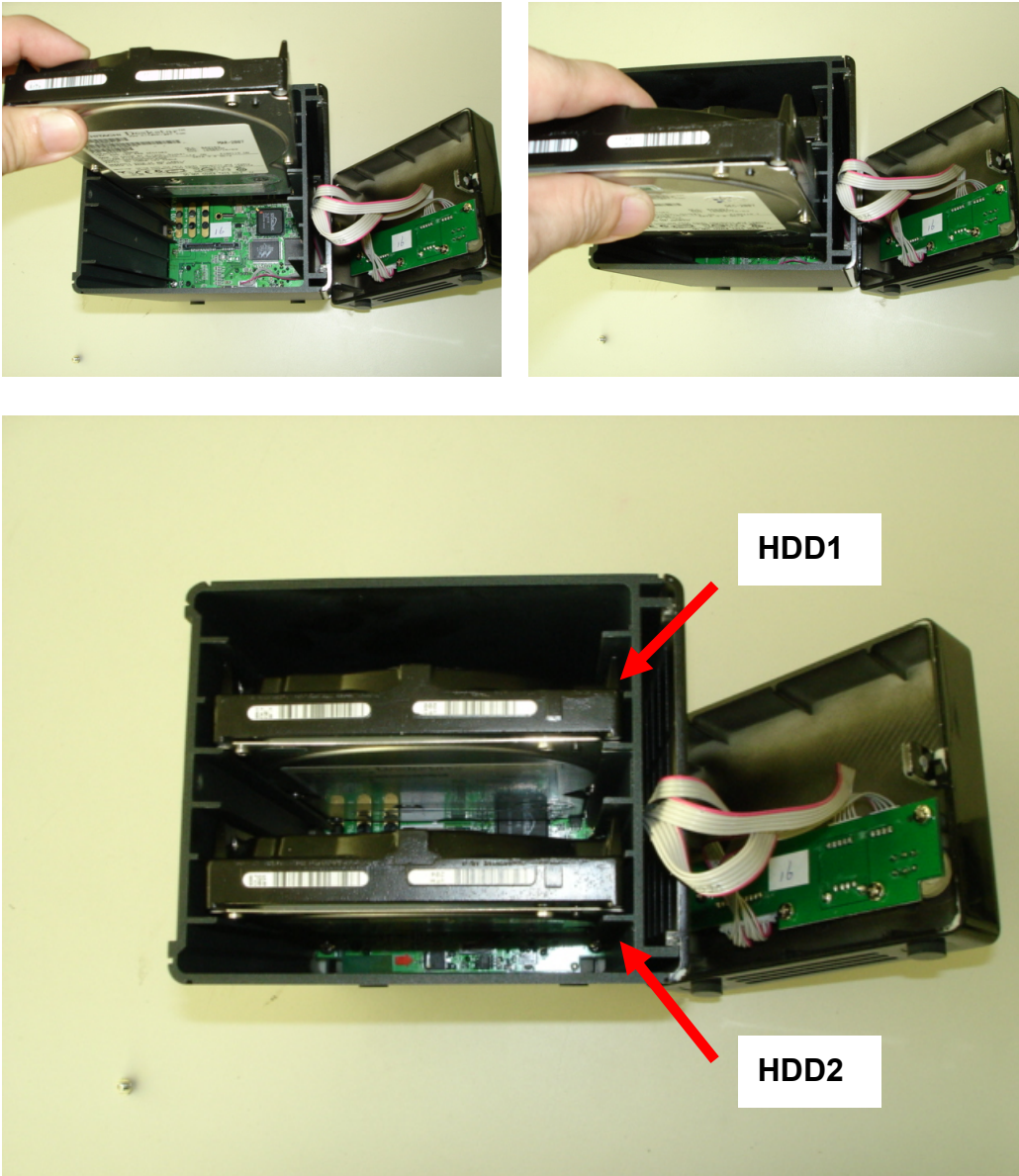
When lift up the front case, please be careful for the LED wire that connect to the front panel LED

Step 2: Pull out the side case

Also pull out the side case to locate the HDD mounting screws. This operation is optional



Step 3: Slide in the HDDs



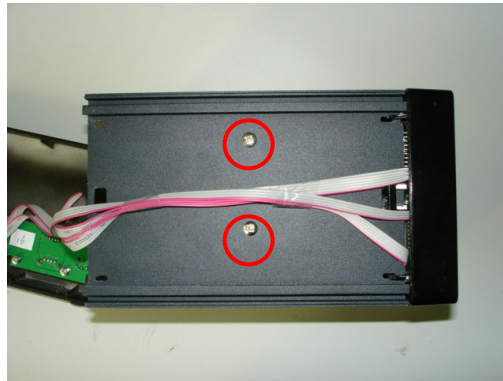
Gently slide in the SATA HDD one by one as the figure. When HDD touch the SATA connector, slightly push the HDD to make it well connected to the SATA interface of the RAID Server

Caution

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.

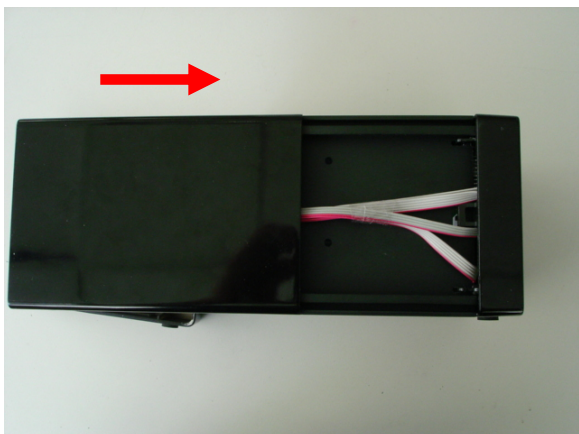
Step 4. Lock the HDD

To lock the HDD through two screws so that the HDD can well connected to the NAS server.



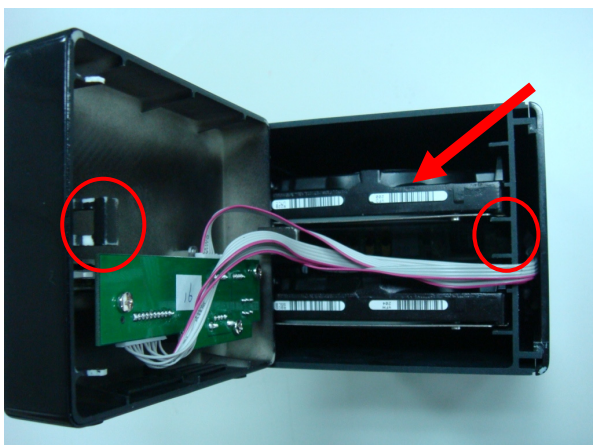
Step 5 Slide back the side case

After the HDD is installed, lock the HDD with screws and slide back the case.



Step 6 Lock the front case

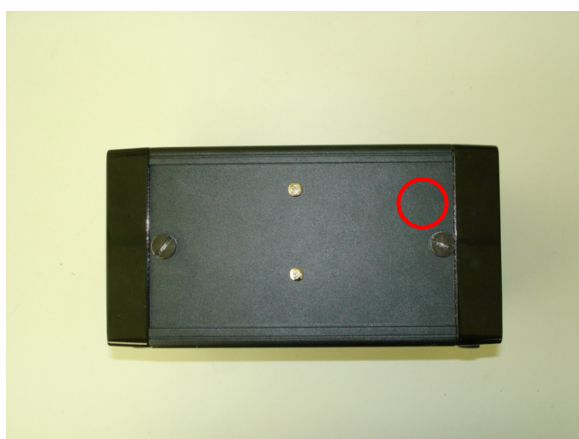
Follow the figure below to put back the front case.



Be careful for the LED wires. Please align the LED wires to the space between the two HDD and close the case gently then push with the direction

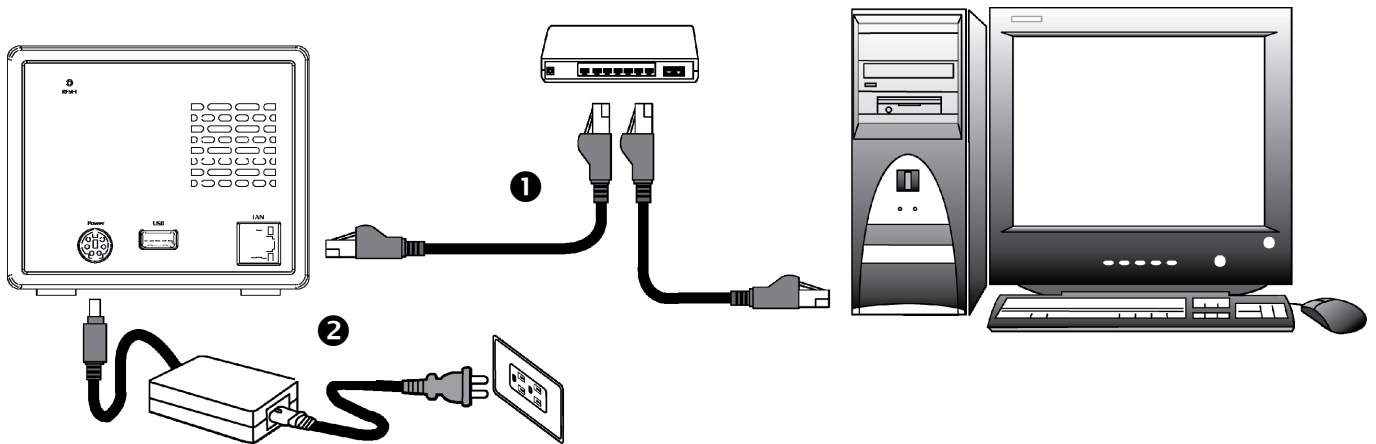


Pull the case back and follow the arrow direction to push the front case.
Lock the case with the screw.



2.2 Connection and Removing Connection

2.2.1 Network Connection

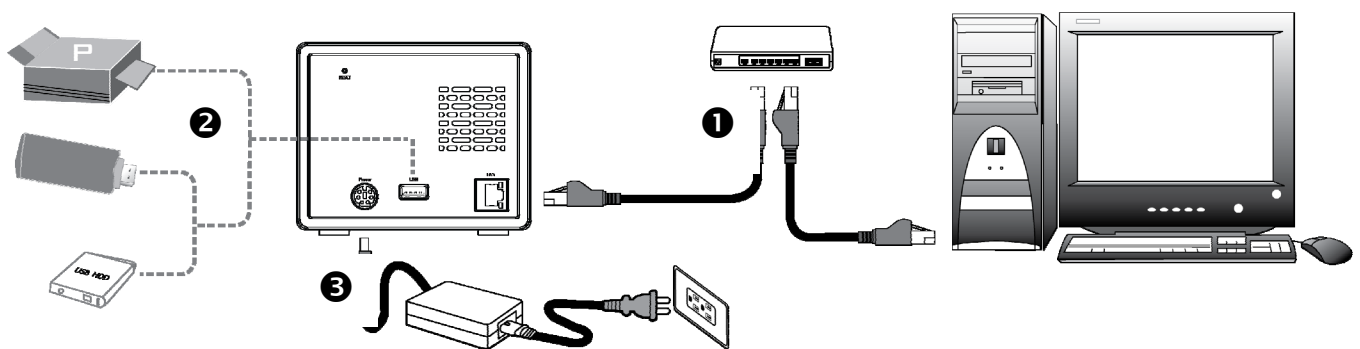


❶: Connect NAS-7201 and a Switch, Hub, Router, or a computer with a RJ-45 Ethernet cable.

❷: Connect the power supply to NAS-7201.

❸: Press the “Power button” to turn on NAS-7201. The HDD activate LED on the front cover will light up during booting-up. This device will be ready to use when the blue LED lights up steadily.

2.2.2 USB Printer & Storage Device Connection



Steps(:

Description	Connect NAS-7101 and a Switch, Hub, Router, or computer with a RJ-45 Ethernet cable.
1	Connect NAS-7201 and a Switch, Hub, Router, or computer with RJ-45 Ethernet cable.
2	Connect USB printer(s) or USB storage device(s) to this device with USB cable(s). NAS-7201 can automatically mount the USB devices connected.

- 3 Connect the power supply to NAS-7201.
- 4 Press the “Power button” to turn on NAS-7201. The HDD activate LED on the front panel will light up during booting-up. NAS-7201 will be ready to use when the blue LED lights up steadily.

2.3 Removing Connection

2.3.1 Removing USB Mass Storage Devices

NAS-7201 will auto-mount a USB Storage Device connected to it. But you need to manually unmount the USB Storage Device before disconnecting it. You can unmount a USB drive by **Control Panel > Maintenance > Disk Utility > clicking “Unmount” button**.

Device Name	Type	Mount Point	Status	Encrypt: Password/Format Type/Format	Scandisk	Umount	Health
/dev/sda	vfat	/mnt/usb1	mounted	<input type="checkbox"/> encrypt ext2 <input type="button" value="Format"/>	<input type="button" value="Scan"/>	<input type="button" value="Umount"/>	None <input type="button" value="Detail"/>
/dev/hdd	none		raid used	<input type="checkbox"/> encrypt ext2 <input type="button" value="Format"/>	<input type="button" value="Scan"/>	<input type="button" value="Umount"/>	PASSED <input type="button" value="Detail"/>
/dev/hdc	none		raid used	<input type="checkbox"/> encrypt ext2 <input type="button" value="Format"/>	<input type="button" value="Scan"/>	<input type="button" value="Umount"/>	PASSED <input type="button" value="Detail"/>

2.3.2 Removing USB Printer

You have to unmount the printer before disconnecting it. You can unmount a USB printer by **Control Panel > File and Print > Printer Server > Unchecking “Enable” box**.

Printer Server Setting

Enable ☐

Printer Name **usb1p0**

Description (optional) **HP Officejet 5600 series**

2.3.3 Removing Power connection

Press the “Power button” to turn off NAS-7201, and then remove its connections.

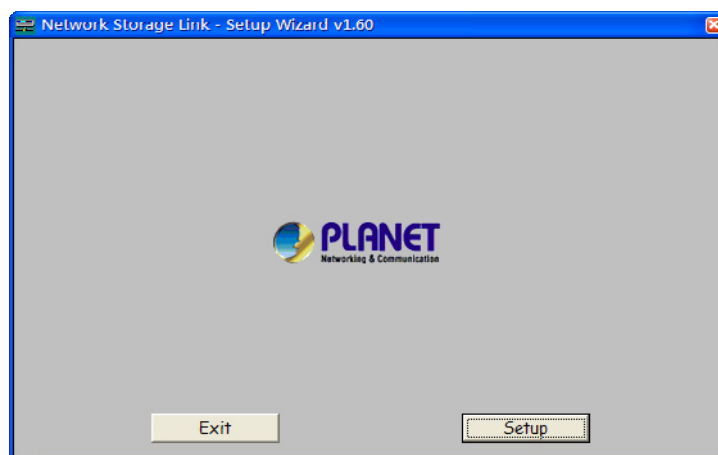
3. Setup Wizard

Insert the bundled CD into the CD-ROM drive to launch the autorun program. Once completed, a welcome menu screen will appear.

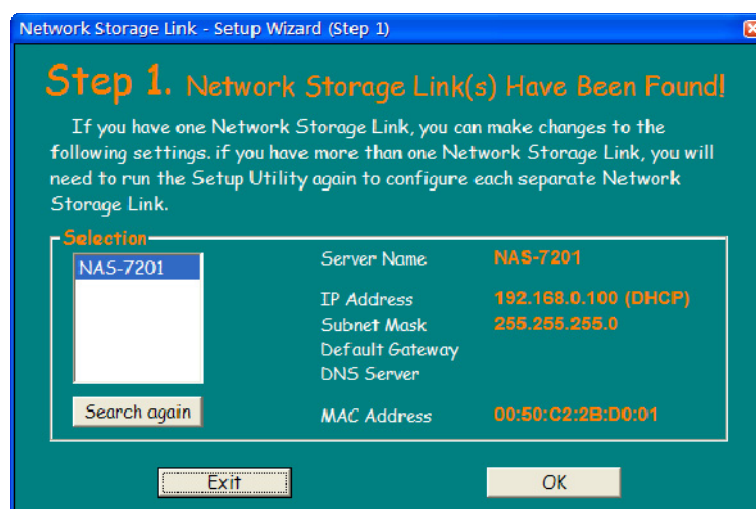
Click the "Setup Wizard" hyperlink; you will see the Setup Wizard dialog box as below. Click "Setup" to continue.

Note

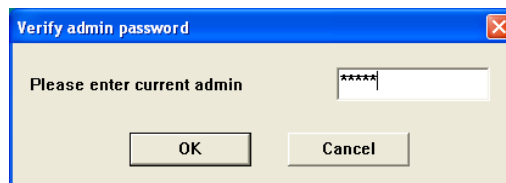
If the welcome screen does not appear, please click "Start" at the taskbar. Then, select "Run" and type "D:\Utility\setup.exe", assume D is your CD-ROM driver.



Press "Search again" button. Setup Wizard will list all network storage in your LAN environment. Please check next section. Please select your network storage and press "OK". User can setup IP address, day and time step by step.

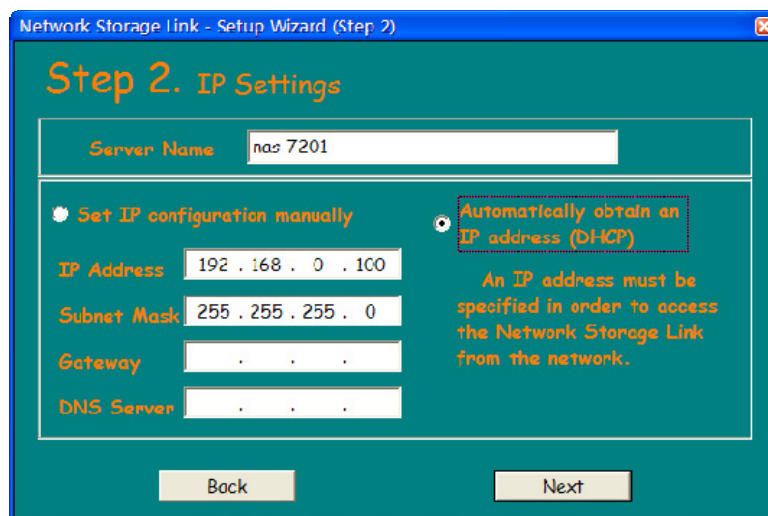


Please enter password. Default password is: **admin**. Then click “OK”.



A small dialog box titled "Verify admin password" with a close button in the top right corner. It contains the text "Please enter current admin" followed by a password input field showing six asterisks. At the bottom are "OK" and "Cancel" buttons.

You can select “Set IP configuration manually” and enter the IP settings. Or select “Automatically obtain an IP address (DHCP)” when there is a DHCP server in your network.



The "Network Storage Link - Setup Wizard (Step 2)" window has a teal background. The title bar says "Network Storage Link - Setup Wizard (Step 2)". The main heading is "Step 2. IP Settings". Below it is a "Server Name" field with "nas 7201" entered. There are two radio button options: "Set IP configuration manually" (unselected) and "Automatically obtain an IP address (DHCP)" (selected and highlighted with a red dashed box). Below the first option are fields for "IP Address" (192 . 168 . 0 . 100), "Subnet Mask" (255 . 255 . 255 . 0), "Gateway" (. . .), and "DNS Server" (. . .). To the right of the DHCP option is a note: "An IP address must be specified in order to access the Network Storage Link from the network." At the bottom are "Back" and "Next" buttons.

You may change the time zone, date and time to your network storage and press “Next” to continue.



The "Network Storage Link - Setup Wizard (Step 3)" window has a teal background. The title bar says "Network Storage Link - Setup Wizard (Step 3)". The main heading is "Step 3. Date and Time". Below it is a "Time Zone" dropdown menu showing "(GMT+08:00) Taipei". Below that is a "Date" dropdown menu showing "1/ 1/2007". Below that is a "Time" dropdown menu showing "12: 01: 51 PM". At the bottom are "Back" and "Next" buttons.

This page shows the new configurations. If it is correct, please press “Save” button and the setting information will be save to your network storage.

Network Storage Link - Setup Wizard (Step 4)

Step 4. Settings Confirmation


	Old Settings	New Settings
Server Name	NAS-7201	nas-7201
IP Address	192.168.0.100	192.168.0.100
Subnet Mask	255.255.255.0	255.255.255.0
Default Gateway		
IP Status	DHCP	DHCP
Date	2007/01/01	2007/01/01
Time	12:01:59	12:01:59

You are about to change the settings. Press “OK” to save new settings. Press “Cancel” if you want to keep current settings.

You are about to change the settings.
Press "OK" to save new settings.
Press "Cancel" if you want to keep current settings.

Click “Exit” button to close Setup Wizard.

Network Storage Link - Setup Wizard v1.60



4. Web-based Management

This chapter illustrates basic installation of NAS-7201

- Network cables. Use standard 10/100BaseT network (UTP) cables with RJ45 connectors.
- TCP/IP protocol must be installed on all PCs.

4.1 Web Management Login

Administration Interface

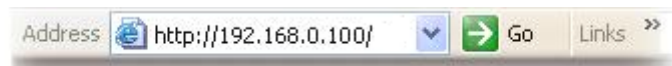
PLANET NAS Server provides GUI (Web based, Graphical User Interface) for machine management and administration.

Web configuration access

To start NAS-7201 web configuration, you must have one of these web browsers installed on computer for management

- Microsoft Internet Explorer 6.00 or higher with Java support

Default LAN interface IP address of NAS-7201 is **192.168.0.100**. You may now open your web browser, and insert <http://192.168.0.100> in the address bar of web browser to login web configuration page.



The login window of NAS-7201 will appear, Default login username/password is: **admin / admin**

A screenshot of the NAS-7201 login page. At the top, there is a blue banner with the 'PLANET' logo on the left and the text '2-Bay SATA NAS RAID Server' on the right. Below the banner, the page is mostly white. At the bottom center, there are two input fields: 'Username' and 'Password'. Below these fields is a 'Login' button.

NAS-7201 log in page

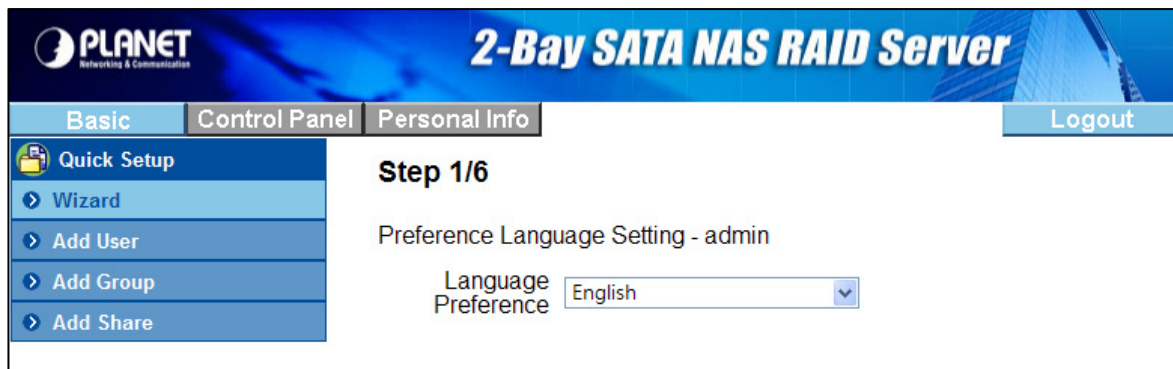
4.2 Quick Setup

4.2.1 Wizard

To setup basic configurations of NAS-7201, follow the diagram below.

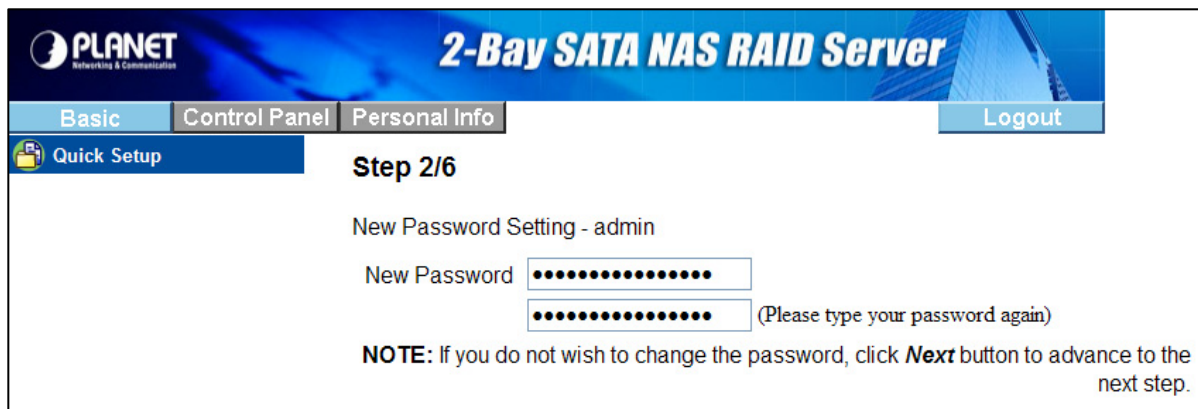
Wizard for Quick Setup of the NAS-7201, after finishing the authentication, the Main menu will display 6 parts of configuration, please click “**Wizard Setup**” to enter quick start:

Step 1 : Language Setting. Specify the language of this GUI.



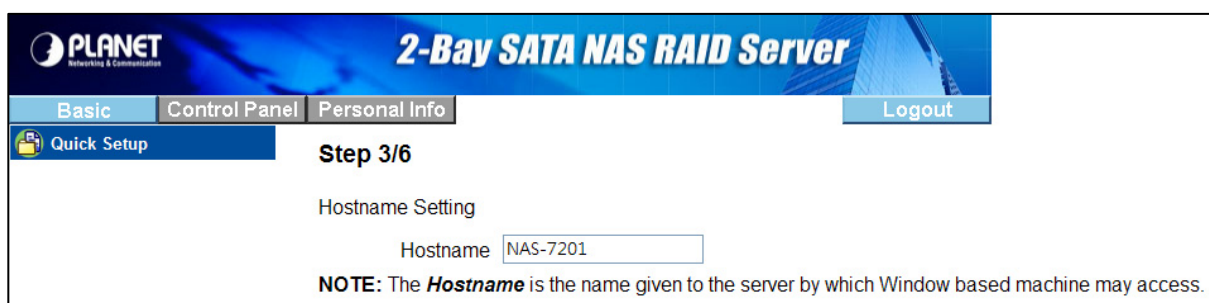
The screenshot shows the Planet 2-Bay SATA NAS RAID Server Quick Setup Wizard. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The left sidebar shows 'Quick Setup' with sub-items: 'Wizard', 'Add User', 'Add Group', and 'Add Share'. The main content area is titled 'Step 1/6' and 'Preference Language Setting - admin'. It features a 'Language Preference' dropdown menu currently set to 'English'.

Step 2 : Password Setting. Click “Next” to skip password change.



The screenshot shows the Planet 2-Bay SATA NAS RAID Server Quick Setup Wizard, Step 2/6: 'New Password Setting - admin'. It contains two password input fields, both masked with dots. A note below the fields states: 'NOTE: If you do not wish to change the password, click **Next** button to advance to the next step.'

Step 3 : Hostname Setting. This hostname can be seen in My Neighborhood.



The screenshot shows the Planet 2-Bay SATA NAS RAID Server Quick Setup Wizard, Step 3/6: 'Hostname Setting'. It features a 'Hostname' input field with the value 'NAS-7201'. A note below the field states: 'NOTE: The **Hostname** is the name given to the server by which Window based machine may access.'

Step 4 : Internet Protocol Setting. You may specify a stationary IP address/DNS server address or enable the “Obtain IP address/DNS server address automatically” checkbox, depending on your LAN configuration.

The screenshot shows the web interface for the PLANET 2-Bay SATA NAS RAID Server. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The 'Quick Setup' section is active, showing 'Step 4/6'. The 'Internet Protocol Setting' section has two main options: 'Obtain IP Address automatically' (selected) and 'Use following IP Address'. The latter option includes input fields for IP Address (192.168.0.6), Subnet Mask (255.255.255.0), and Default Gateway (192.168.0.1). The 'DNS Server' section also has two options: 'Obtain DNS Server Address automatically' (selected) and 'Use following DNS Server Address'. The latter option includes input fields for Primary (192.168.0.1), Secondary, and Others.

Step 5 : Time Setting. Adjust date, time, and time zone of your local position. Or select a NTP(Network Time Protocol) server for automatic time setting and calibration.

The screenshot shows the web interface for the PLANET 2-Bay SATA NAS RAID Server. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The 'Quick Setup' section is active, showing 'Step 5/6'. The 'Time Settings' section includes dropdown menus for Date (Month: 1, Day: 1, Year: 2007), Time (Hour: 12, Minute: 9, PM), and Time Zone ((GMT+08:00) Taipei). The 'NTP Server' section has two options: 'Default' (selected) with a dropdown menu showing 'None', and 'User Define' with an empty input field.

Step 6 : Wizard Setting Confirmation. Click complete to implement above settings.

Wizard Setting Confirmation		
	Current Settings	New Settings
UI Language	English	English
Hostname	NAS-7201	NAS-7201
IP Address	Automatic Obtain	Automatic Obtain
	IP Address	IP Address
	Subnet Mask	Subnet Mask
	Default Gateway	Default Gateway
DNS Server	Automatic Obtain	Automatic Obtain
	Primary	Primary
	Secondary	Secondary
	Others	Others
Date and Time	1/ 1/2007 0: 9 PM	9/ 9/2008 0: 9 PM
Time Zone	Taipei	Taipei

4.2.2 Add User

To add user support, select the Add User chapter for setting. Please refer to Users and Groups chapter for more detail.

Step 1 : Add User. Setup user name and password. Check “Crate Private Folder” box for creating a home directly of this user.

Step 1/3

Add User

User Name

Password

Please type your password again

Description (optional)

☐ Create Shared private Folder

Shared Private Folder Location

☐ Enable Quota of MB

Step 2 : User Management. Add/remove this user to/from an existing group.

PLANET 2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

Quick Setup

Wizard

Add User

Add Group

Add Share

Step 2/3

User Management - enm

Member

==== END LIST =====

<< Add

Remove >>

Non-member

guest-share

==== END LIST =====

<< Add

Remove >>

Step 3 : Share Permission. Set user permission of each shared directory. Select a share name from the "Access Denied" column and click "Read Only" or "Writable" to allow user access right. Select a share name from the "Access Granted" column and click "Remove" to disable user access right from this directory.

PLANET 2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

Quick Setup

Wizard

Add User

Add Group

Add Share

Step 3/3

Share Permission - enm

Access Granted

==== END LIST =====

<< Read Only

<< Writable

Remove >>

Access Denied

public

usb1

==== END LIST =====

<< Read Only

<< Writable

Remove >>

4.2.3 Add Group

To add group support, select the Add Group chapter for setting. Please refer to Users and Groups chapter for more detail.

Step 1 : Add Group. Set up group name.

PLANET 2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

Quick Setup

Wizard

Add User

Add Group

Add Share

Step 1/3

Add Group

Group Name

PLANET

Step 2 : Group Members. Set up group members. Select a user from the “Non- Members” column and click “**Add**” to categorize it into this group. Select a user from the “Members” column and click “**Remove**” to remove this user from this group.

PLANET Networking & Communication

2-Bay SATA NAS RAID Server

Basic | **Control Panel** | Personal Info | Logout

Quick Setup

- Wizard
- Add User
- Add Group
- Add Share

Step 2/3

Group Member - planet

Member	Non-member
==== END LIST =====	admin enm guest-share ==== END LIST =====

<< Add Remove >>

Step 3 : Share Permission. Set group permission of each shared directory. Select a share name from the “Access Denied” column and click “**Read Only**” or “**Writable**” to allow group access right. Select a share name from the “Access Granted” column and click “**Remove**” to disable group access right from this directory.

PLANET Networking & Communication

2-Bay SATA NAS RAID Server

Basic | **Control Panel** | Personal Info | Logout

Quick Setup

- Wizard
- Add User
- Add Group
- Add Share

Step 3/3

Share Permission - planet

Access Granted	Access Denied
==== END LIST =====	public usb1 ==== END LIST =====

<< Read Only << Writable Remove >>

4.2.4 Add Share

To add a sharing directory, select the Add Share chapter for setting. Please refer to Share Management chapter for more detail.

Step 1 : Add Share. Set up the directory name.

The screenshot shows the PLANET 2-Bay SATA NAS RAID Server web interface. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The left sidebar has 'Quick Setup' with sub-items: 'Wizard', 'Add User', 'Add Group', and 'Add Share'. The main content area is titled 'Step 1/3' and 'Add Share'. It contains three input fields: 'Share Name' with the value 'share', 'Path' with the value '/mnt/md1/share', and 'Description (Optional)' which is empty.

Step 2 : Windows, FTP access. Set user/group permission of this directory in Microsoft Network and FTP environment. Select a share name from the “Access Denied” column and click “**Read Only**” or “**Writable**” to allow user/group access right. Select a share name from the “Access Granted” column and click “**Remove**” to disable user/group access right from this directory. Check the box “**Grant access to all**” will enable writable permission of this directory to all users/groups.

The screenshot shows the PLANET 2-Bay SATA NAS RAID Server web interface, Step 2/3: Windows, FTP Access - share. The top navigation bar and left sidebar are the same as in Step 1. The main content area is titled 'Step 2/3' and 'Windows, FTP Access - share'. It features a checkbox 'Grant access to all' which is currently unchecked. Below this are two columns: 'Access Granted' and 'Access Denied'. The 'Access Granted' column contains a list box with the text '==== END LIST ====' and buttons '<< Read Only', '<< Writable', and 'Remove >>'. The 'Access Denied' column contains a list box with the text 'admin', 'enm', 'guest-share', '@guest-share', and '==== END LIST ====' and a 'Remove >>' button. At the bottom, a note states: 'The prefix "@" denotes Group Name.'

Step 3 : NFS Access. Set IP access permissions of this shared directory in Unix-like environment. Input IP Address and click “Add” to add this IP to the allowed list. Input Subnet (the start of allowed IP address before the slash; the end of allowed IP address after the slash) and click Add to add this subnet section to the allowed list. Check “Allow to All” box to enable NFS access of this directory to all users.

Planet 2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

Quick Setup

- Wizard
- Add User
- Add Group
- Add Share

Step 3/3

NFS Access - share

☐ Grant access to all

Allowable IP/Subnet

==== END LIST =====

Add Remove

IP Address Subnet

4.3 Users and Groups

4.3.1 User Management

All existing users in this system will be shown in this menu. You can create a new user by filling out the form and clicking the “**Save**” button. Select an existing user and click “**Delete User**” button to delete an existing user. Select an existing user and click “**Groups**” button to enter Group Management menu. Check “**Create Private Folder**” box for creating a home directory of this user.

Planet 2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

Users and Groups

- User Management
- Group Management
- File and Print
- System
- Network Service
- Maintenance
- Log File

User Management

Existing Users

admin
enm
guest-share
==== END LIST =====

User Name Password

Please type your password again

Description (optional)

☐ Create Shared private Folder

Shared Private Folder Location /mnt/md1

☐ Enable Quota of MB

Save Clear Form Groups Delete User

4.3.2 Group Management

All existing groups in this system will be shown in this menu. You can create a new group by filling out the form and clicking the “**Save**” button. Select an existing group and click “**Delete Group**” button to delete an existing group. You can also add or remove users from an existing group by selecting a group name and clicking the “**Members**” button.

The screenshot shows the 'Group Management' page. On the left is a sidebar with a tree view containing: Users and Groups, User Management, Group Management (selected), File and Print, System, Network Service, Maintenance, and Log File. The main content area has tabs for Basic, Control Panel, and Personal Info, with a Logout button. The title is 'Group Management'. It features a text area labeled 'Existing Groups' containing 'guest-share' and '===== END LIST ====='. Below this is a 'Group Name' input field and four buttons: Save, Clear Form, Members, and Delete Group.

4.4 File and Print

4.4.1 File Server

The administrator can use this option to add, modify or delete share folder and select whether folder can be exported via NFS to allow UNIX access only.

The screenshot shows the 'File Server Setting' page. The sidebar is similar to the previous one, but 'File and Print' is expanded, showing 'File Server' (selected), 'Share Management', and 'Printer Server'. The main content area has tabs for Basic, Control Panel, and Personal Info, with a Logout button. The title is 'File Server Setting'. It includes several settings sections: 'Character set' (dropdown menu showing 'Traditional Chinese (CP950)'), 'Windows Setting' (with 'Enable' checked, 'Workgroup' as 'WORKGROUP', and 'Description' as 'NAS-7210'), 'WINS Server (Optional)' (four empty input boxes), 'FTP Server Setting' (with 'Enable' checked, 'Enable FTP with TLS' unchecked, and 'Port Number' as '21'), 'NFS Server Setting' (with 'Enable' checked), and 'Guest Access Setting' (with 'Enable' checked, 'Enable Quota' unchecked, and 'Guest-user Quota' as an empty input box followed by 'MB'). A 'Save' button is at the bottom right.

Character Set	Select your preferred character set.
Windows Setting	<p>Check “Enable” box to enable Microsoft Network connection</p> <p>Set Workgroup name for Microsoft Clients to access. You can find this Workgroup name in My Network Places.</p> <p>Set Description name for Microsoft Clients to access. You can find this Description name in My Network Places/Entire Network/Microsoft Windows Network/“Workgroup name”/.</p> <p>Define Windows Internet Server Name IP address if necessary.</p>
FTP Server Setting	Check “Enable” box to enable FTP server function, with default port 21.
NFS Server Setting	Check “Enable” box to enable NFS server function.
Guest Access Setting	Check “Enable” box to allow users using guest-share directory.

4.4.2 Share Management

By default, NAT-7201 will automatic create a share folder named “public” on root directory, the share name and path of this folder cannot be changed by the administrator, any user logged into the NAS server has full read/write access privileges to the public folder.

The screenshot displays the web interface of a PLANET 2-Bay SATA NAS RAID Server. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and a 'Logout' button. A left sidebar contains icons for 'Users and Groups', 'File and Print', 'File Server', 'Share Management' (highlighted), 'Printer Server', 'System', 'Network Service', 'Maintenance', and 'Log File'. The main content area is titled 'Share Management' and features an 'Existing Shares' list box containing 'public' and 'share', followed by '==== END LIST ====='. Below this are input fields for 'Share Name', 'Path' (pre-filled with '/mnt/md1'), and 'Description (Optional)'. At the bottom, there are buttons for 'Windows,FTP Access', 'NFS Access', 'Save', 'Clear Form', and 'Delete Share'.

Creating Share	Fill out the “Share Name” box, and then click the “Save” button to create a new share name.
Property Change	You can modify properties of an existing share name. Select a share name in the “Existing Share” column and click “Windows, FTP Access” or “NFS Access” button to set or remove read/write permissions of the selected directory.
Delete Share	Check “Delete Share” to delete a specified share name.

Windows and FTP Access

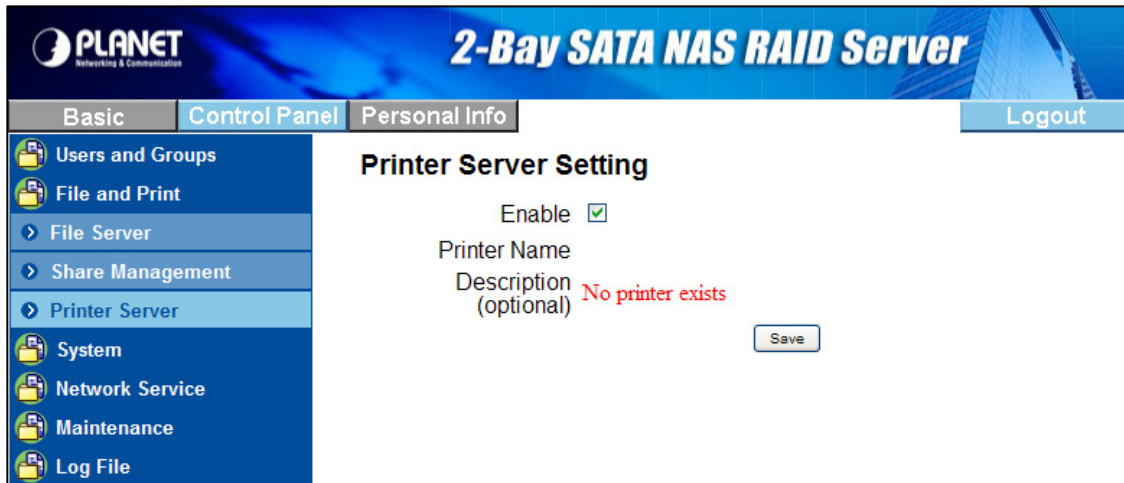
Select a share name from the “Access Denied” column and click “**Read Only**” or “**Writable**” to allow user/group access right. Select a share name from the “Access Granted” column and click “**Remove**” to disable user/group access right from this directory. Check the box “**Grant access to all**” will enable writable permission of this directory to all users/groups.

NFS Access

Set IP access permissions of this shared directory in Unix-like environment. Input IP Address and click “**Add**” to add this IP to the allowed list. Input Subnet (the start of allowed IP address before the slash; the end of allowed IP address after the slash) and click **Add** to add this subnet section to the allowed list. Check “**Grant access to all**” box to enable NFS access of this directory to all users.

4.4.3 Printer Server

The NAS-7201 supports USB printer and it can share the printer after you connect one printer into one USB port.



PLANET Networking & Communication

2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

- Users and Groups
- File and Print
 - File Server
 - Share Management
 - Printer Server
- System
- Network Service
- Maintenance
- Log File

Printer Server Setting

Enable ☒

Printer Name

Description (optional) No printer exists

Save

Check “**Enable**” box to enable Printer Server function.

Uncheck “**Enable**” box to unmount a mounted printer.



PLANET Networking & Communication

2-Bay SATA NAS RAID Server

Basic Control Panel Personal Info Logout

- Users and Groups
- File and Print
 - File Server
 - Share Management
 - Printer Server
- System
- Network Service
- Maintenance
- Log File

Printer Server Setting

Enable ☒

Printer Name usb1p0

Description (optional) HP Officejet 5600 series

Save

This device detects the connection of a USB printer automatically. Information of the printer will be shown in the description.

4.5 System

4.5.1 LAN Settings

This screen allows you to set the IP Address and related information required for TCP/IP networks.

PLANET Networking & Communications
2-Bay SATA NAS RAID Server

Basic **Control Panel** Personal Info Logout

Users and Groups
File and Print
System
LAN Settings
Time Settings
Turn Off Server
Information
Disk Usage
Error Notification
Network Service
Maintenance
Log File

LAN Settings

Hostname

IP Address Setting ☒ Obtain IP Address automatically
☐ Use following IP Address

IP Address
Subnet Mask
Default Gateway

☐ Obtain DNS Server Address automatically
☒ Use following DNS Server Address

Primary
Secondary
Others

MAC Address 00:30:4F:6B:3D:C4

Hostname Assign a name to NAS-7201 as the identification within your local area network.

Obtain IP Address Automatically NAS-7201 obtains an IP address automatically if a DHCP server is present in the local area network.

Use Following IP Address Fill in the IP address, subnet mask, and Default gateway information if they are assigned by your network administrator.

IP Address Setting

Obtain DNS Server Address Automatically NAS-7201 obtains a DNS Server address automatically if a DHCP server is present in the local area network.

Use Following DNS Server Address Fill in the DNS server addresses if they are assigned by your network administrator.

4.5.2 Time Settings

This screen allows you to set current Date, Time, and Time zone. Specify a NTP Server if you want to get date and time from Time Server.

The screenshot shows the 'Time Settings' page of the PLANET 2-Bay SATA NAS RAID Server. The interface includes a top header with the PLANET logo and the title '2-Bay SATA NAS RAID Server'. Below the header is a navigation bar with tabs: 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The 'Control Panel' tab is active. On the left side, there is a sidebar menu with options: 'Users and Groups', 'File and Print', 'System', 'LAN Settings', 'Time Settings' (highlighted), 'Turn Off Server', 'Information', 'Disk Usage', and 'Error Notification'. The main content area is titled 'Time Settings' and contains the following fields: 'Date' with sub-fields for 'Month' (9), 'Day' (9), and 'Year' (2008); 'Time' with sub-fields for 'Hour' (12), 'Minute' (52), and 'PM'; 'Time Zone' set to '(GMT+08:00) Taipei'; and 'NTP Server' with radio buttons for 'Default' (selected) and 'User Define', and a dropdown menu set to 'None'. At the bottom right of the form are two buttons: 'Save' and 'Update Time'.

Date & Time Click this option to set time and date manually

Time Zone Set the time difference from Greenwich Mean Time in the area where the device is installed.

NTP Server Select default or type the host name or IP address or domain name of the NTP server in User Define box.

4.5.3 Turn Off Server

This screen let you can be safe shutdown or restart the NAS system.

The screenshot shows the 'Turn Off Server' page of the PLANET 2-Bay SATA NAS RAID Server. The interface is similar to the previous screenshot, with the 'Control Panel' tab active and the 'Turn Off Server' option highlighted in the sidebar menu. The main content area is titled 'Turn Off Server' and contains the following text: 'To restart the server, click the Restart button.' and 'To turn off the server, click the Turn off button.' At the bottom right of the form are two buttons: 'Restart' and 'Turn off'.

4.5.4 Information

This screen display system information

The screenshot shows the PLANET 2-Bay SATA NAS RAID Server web interface. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The left sidebar lists 'Users and Groups', 'File and Print', 'System', 'LAN Settings', 'Time Settings', 'Turn Off Server', 'Information' (highlighted), 'Disk Usage', and 'Error Notification'. The main content area is titled 'System Information' and displays the following details:

Product Name	NAS-7201
Firmware Version	2.6.3-n.20080320
Product Vendor	PLANET Technology Corporation
IP Address	192.168.0.100

4.5.5 Disk Usage

This screen display each HDD usage (total disk size, used disk size) and user's quota information.

The screenshot shows the PLANET 2-Bay SATA NAS RAID Server web interface with the 'Disk Usage' page selected. The left sidebar is the same as in the previous screenshot, with 'Disk Usage' highlighted. The main content area is titled 'Disk Usage' and includes the text 'Last Checked: 1/1/2007 13:02:10'. Below this, there is a dropdown menu labeled 'Please select statistics information:' with 'Summary' selected. A table displays disk usage statistics for two disks:

Disk Name	Capacity	Used	Free	Disk Usage (%)
/dev/md	299696MB	723MB	298972MB	0%
/dev/sda	243MB	232MB	11MB	95%

Below the table is a 'Refresh' button.

4.5.6 Error Notification

This screen allow you to set up the system monitor service that will automatically notified the administrator through email or windows alerter messages service if the system error

The screenshot shows the PLANET 2-Bay SATA NAS RAID Server web interface. The top navigation bar includes 'Basic', 'Control Panel', and 'Personal Info' tabs, with a 'Logout' button on the right. A left sidebar contains a tree view with categories like 'Users and Groups', 'File and Print', 'System', 'LAN Settings', 'Time Settings', 'Turn Off Server', 'Information', 'Disk Usage', 'Error Notification' (highlighted), 'Network Service', 'Maintenance', and 'Log File'. The main content area is titled 'Error Notification Setting' and contains three sections: 'Monitoring Services Setting' with checkboxes for 'Disk Usage', 'Windows File Sharing Server', 'FTP Server', and 'DHCP Server'; 'Check Interval' with an 'Interval' dropdown set to 'Hourly'; 'Email Notification Setting' with an 'Enable' checkbox, a 'Send Test Email' button, and a text field for 'Error Handling Mail Server'; and 'Pop-Up Notification Setting' with an 'Enable' checkbox, a 'Send Test Pop-Up' button, and a text field for 'Error Handling Pop-Up Machine Name'. Each of these text fields has three empty input boxes below it.

Monitoring Service Setting	Disk Usage	If the disk usage reaches 90%, the system will inform the administrator.
	Windows File Sharing Server	If the SAMBA task goes wrong, the system will inform the administrator.
	FTP Server	If the FTP Server task goes wrong, the system will inform the administrator.
	DHCP Server	If the DHCP Server task goes wrong, the system will inform the administrator.

Check Interval You can select hourly or daily inform interval.

Email Notification Setting	Enable	Check this box to enable notification via email.
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	Error Handling Mail Server	Specify a SMTP server for this device.
	Error Handling Email Address	Specify administrator email address.
Pop-up Notification Setting	Enable	Check this box to enable notification via Windows pop-up messages.
	Error Handling Pop-up Machines	Specify the IP address of administrator's PC.

4.6 Network Service

4.6.1 DHCP Server

If there is no DHCP server present, this device will automatically turn on its DHCP server function.

Enable Server	Use this to Enable/Disable the DHCP Server. If you already have a DHCP Sever, do not enable this feature.
Subnet Mask	Enter the same Network Mask (Subnet Mask) used by PCs on your LAN.
Default Gateway	If your LAN has a Router or Gateway, enter its IP Address here. Otherwise, leave this blank.

Primary / Secondary DNS IP Address of the first and second DNS Server.

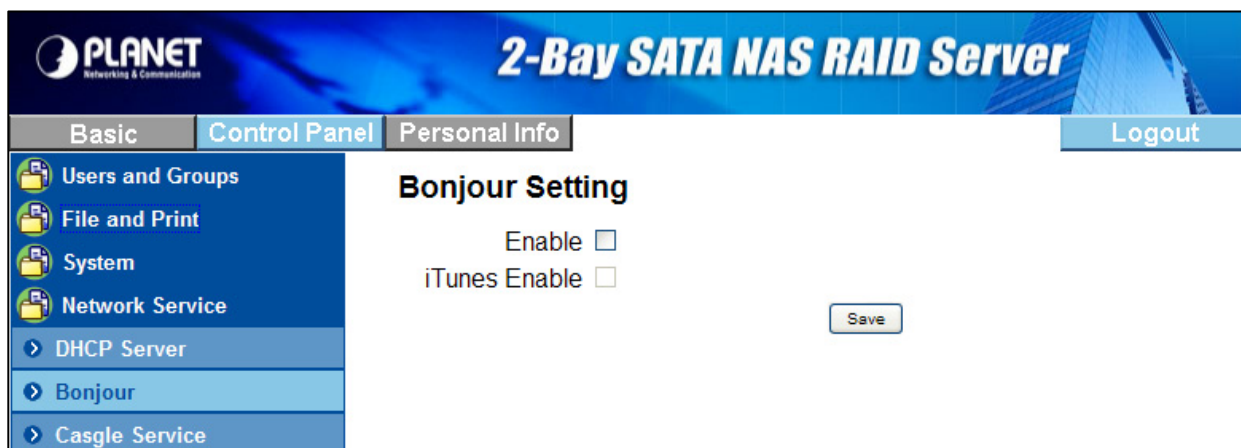
Start Address Enter the beginning of the range of IP Addresses to be allocated by the DHCP Server.

Finish Address Enter the last address of range of IP Addresses to be allocated by the DHCP Server.

Maximum Lease Time IP Address of the maximum lease times

4.6.2 Bonjour Setting

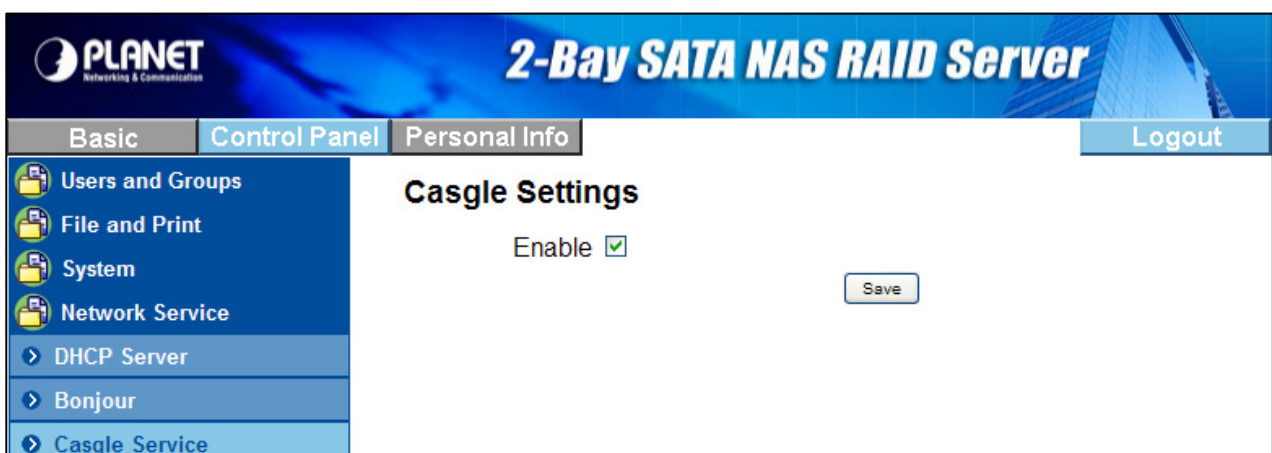
If enabled, then the user can listen music that stored in the NAS via iTunes client.



The screenshot shows the PLANET 2-Bay SATA NAS RAID Server Control Panel. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The left sidebar lists 'Users and Groups', 'File and Print', 'System', 'Network Service', 'DHCP Server', 'Bonjour', and 'Casgle Service'. The main content area is titled 'Bonjour Setting' and contains two checkboxes: 'Enable' and 'iTunes Enable', both of which are currently unchecked. A 'Save' button is located at the bottom right of the settings area.

4.6.3 Casgle Settings

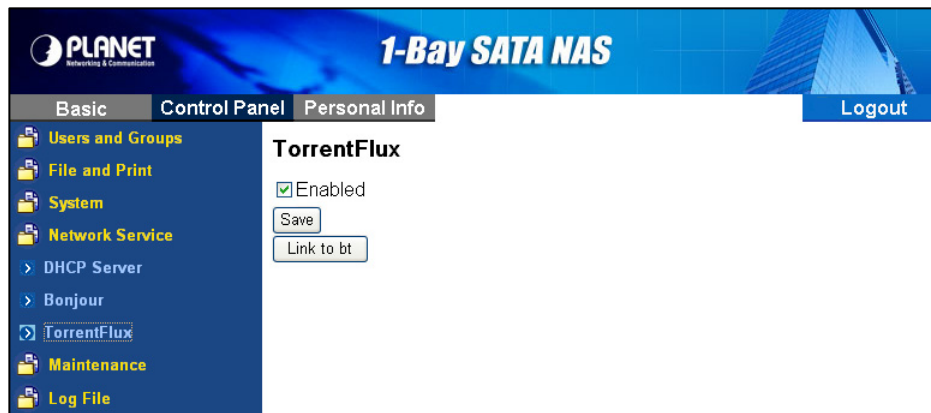
If enabled this Casgle service, user can enjoy all of this content from local network anytime you want, instead of waiting for downloads that take hours. With **Casgle's iManageTM** service, user does not need to search for content and manually retrieve the episodes anymore. Just let the **Casgle Service** do it all for user



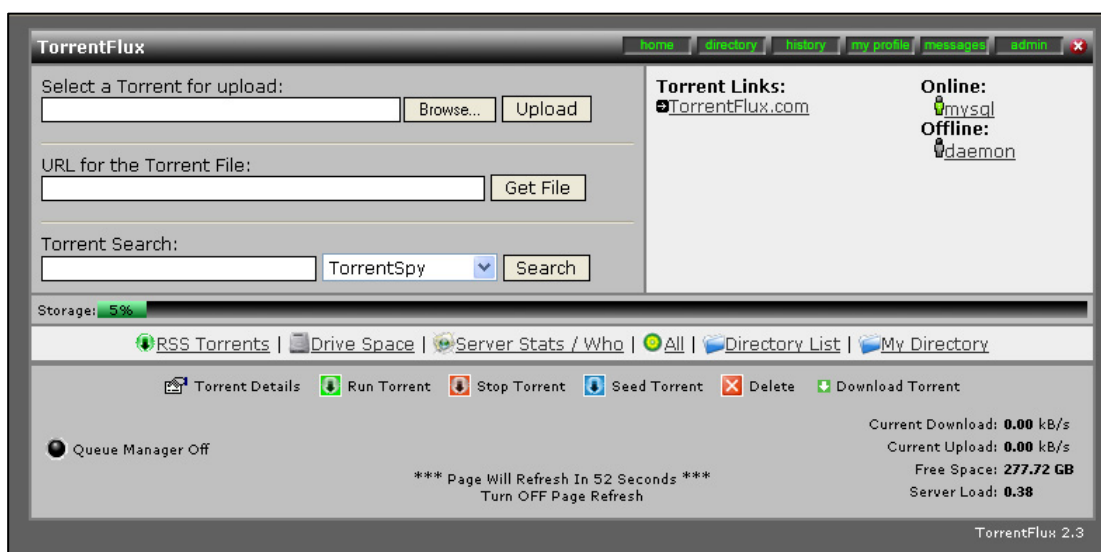
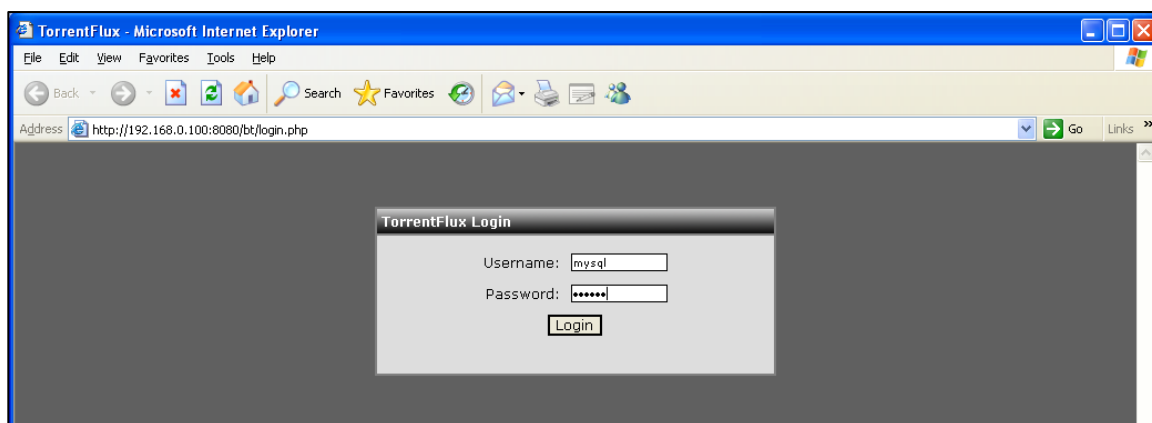
The screenshot shows the PLANET 2-Bay SATA NAS RAID Server Control Panel. The top navigation bar includes 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. The left sidebar lists 'Users and Groups', 'File and Print', 'System', 'Network Service', 'DHCP Server', 'Bonjour', and 'Casgle Service'. The main content area is titled 'Casgle Settings' and contains one checkbox: 'Enable', which is currently checked. A 'Save' button is located at the bottom right of the settings area.

4.6.4 TorrentFlux

TorrentFlux is an open source bit torrent client. Check “**Enabled**” box to perform TorrentFlux. Click “**Save**” button to save check box status. Click “**Link to bt**” button to open TorrentFlux in another browser window. Visit <http://www.torrentflux.com/> for more information of this program.



The login window of TorrentFlux will appear, Default login username/password is : **mysql / 123456**




Select a Torrent for upload	Specify the torrent file with which you need download files. You can upload it from local PC.
URL for the Torrent File	Specify the torrent file with which you need download files. You can upload it from provide one HTTP/FTP URL for it.
Torrent Search	<ol style="list-style-type: none"> 1. Enter the keywords you wish to search for in the text field labeled Torrent Search. 2. Select the torrent search engine you wish to use from the dropdown list next to the text box. 3. Click the Search button.
Torrent Details	View the detailed information of the task.
Run Torrent	Start to run the selected task.
Stop Torrent	Stop the selected task.
Seed Torrent	Download finish
Delete	Delete selected tasks.

4.7 Maintenance

4.7.1 Disk Utility

Disk Utility shows device name, type of file system, volume mounted, and disk mount status of the HDD installed in this device. For a newly attached HDD, formatting is required before any further operation.


2-Bay SATA NAS RAID Server

Basic
Control Panel
Personal Info
Logout

Users and Groups
File and Print
System
Network Service
Maintenance

Disk Utility
RAID Setting
Firmware Upgrade
Save Configuration
Restore Configuration
Factory Reset
Software Update
Log File

Disk Utility

Device Name	Type	Mount Point	Status	Encrypt>Password/Format Type/Format	Scandisk	Umount	Health
/dev/sda	vfat	/mnt/usb1	mounted	<input type="checkbox"/> encrypt ext2 Format	Scan	Umount	None Detail
/dev/hdd	none		raid used	<input type="checkbox"/> encrypt ext2 Format	Scan	Umount	PASSED Detail
/dev/hdc	none		raid used	<input type="checkbox"/> encrypt ext2 Format	Scan	Umount	PASSED Detail

Refresh

Disk spin down time: Minute
Save

Format Button	Press this button to format a specific HDD. It supports EXT3, and FAT32 file system. Check the encrypt box to allow password protection over the HDD.
Scan Button	Press this button to check disk integrity.
Unmount button	This device will automatically mount a USB Storage Device connected to it. But you need to manually unmount the USB Storage Device before disconnecting it.
Detail Button	If the HDD supports S.M.A.R.T, it will report its health status.
Disk Spin Down Time	Specify the HDD spin down time if there is no access to this device for some while.

4.7.2 RAID Setting

This screen allows you to maintain the disks in this NAS server.

Disk Mode - Disk mode select: Linear, Raid 0 and Raid 1. Any data on the disk will be lost if change disk model.

The screenshot shows the RAID Setting interface of a PLANET 2-Bay SATA NAS RAID Server. The interface has a top navigation bar with 'Basic', 'Control Panel', 'Personal Info', and 'Logout'. A left sidebar contains a menu with options: Users and Groups, File and Print, System, Network Service, Maintenance, Disk Utility, RAID Setting (highlighted), Firmware Upgrade, Save Configuration, Restore Configuration, Factory Reset, Software Update, and Log File.

The main content area is titled 'RAID Setting' and displays the following information:

- Raid level: RAID 1
- File system: EXT3
- Raid Size: 292 GB
- Raid Used: 128 MB

Below this information is a button labeled 'Remove raid system'.

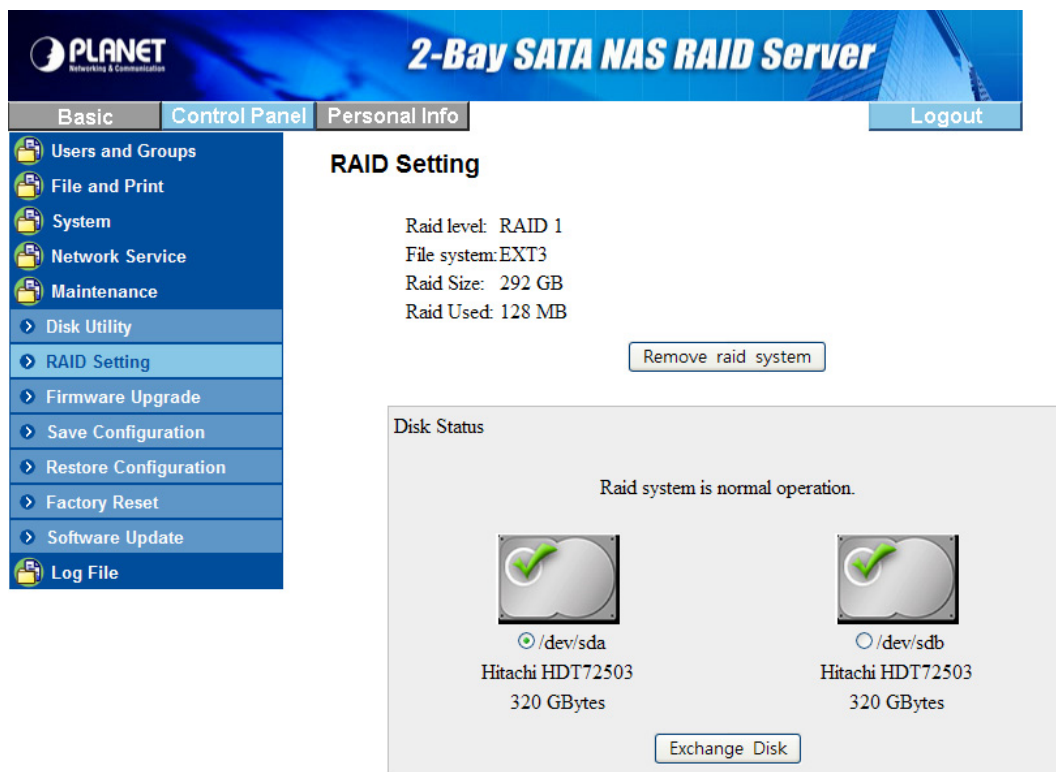
The 'Disk Status' section shows the RAID system is in normal operation. It displays two disks, both with green checkmarks indicating they are healthy:

- Left disk: `/dev/sda`, Hitachi HDT72503, 320 GBytes.
- Right disk: `/dev/sdb`, Hitachi HDT72503, 320 GBytes.

At the bottom of the Disk Status section is a button labeled 'Exchange Disk'.

RAID Level	<p>This indicates the current working mode of Internal Disks. It can be one following modes:</p> <ul style="list-style-type: none"> ● Linear (JBOD/LVM) Disk 1 and Disk 2 are bound into one logical volume. Total capacity is equal to the capacity of the existing drive(s). To work in this configuration, at least one drive must exist. If this configuration is selected with only one drive installed, the second drive will be configured to extend the capacity of the logical volume when it is installed. ● Mirroring (Raid 1) Disk 1 is mirrored into Disk 2. Total capacity is equal to the capacity of smaller drive. To select this mode, both drives must exist. ● Striping (Raid 0) Disk 1 and Disk 2 are striped into one logical volume. Total capacity is equal to two times the smaller capacity of the two drives. To select this mode, both drives must exist.
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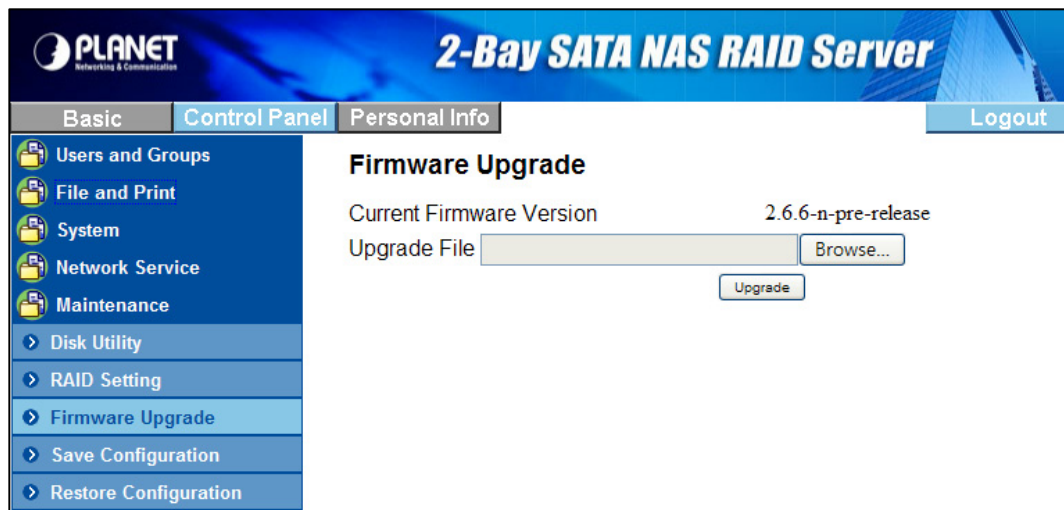
File System	<p>This indicates the file system access mode of Internal Disks. It can be one following modes:</p> <ul style="list-style-type: none"> ● EXT2 The space in ext2 is split up in blocks, and organized into block groups, analogous to cylinder groups in the Unix File System. This is done to reduce external fragmentation and minimize the number of disk seeks when reading a large amount of consecutive data. ● EXT3 The ext3 file system is also a valid ext2 file system. This has allowed well-tested and mature file system maintenance utilities for maintaining and repairing ext2 file systems to also be used with ext3 without major changes.
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4.7.3 Firmware Upgrade

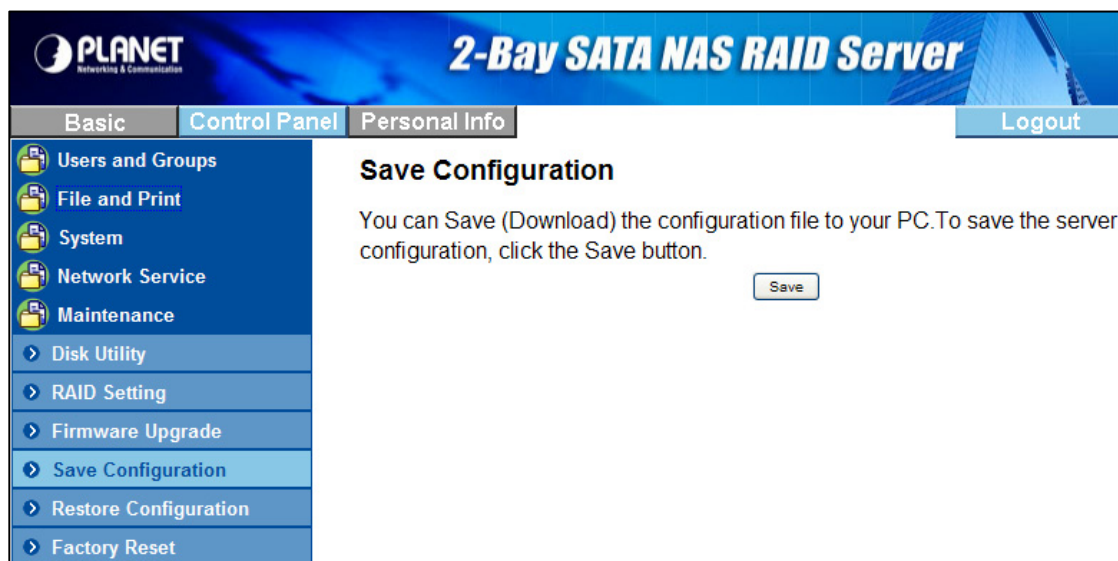
You can perform firmware upgrade with this function by selecting a firmware upgrade file and then clicking the

“Start Upgrade” button. When the upgrade is in progress, all network connection will be stopped. This device will automatically reboot after the upgrade is completed.



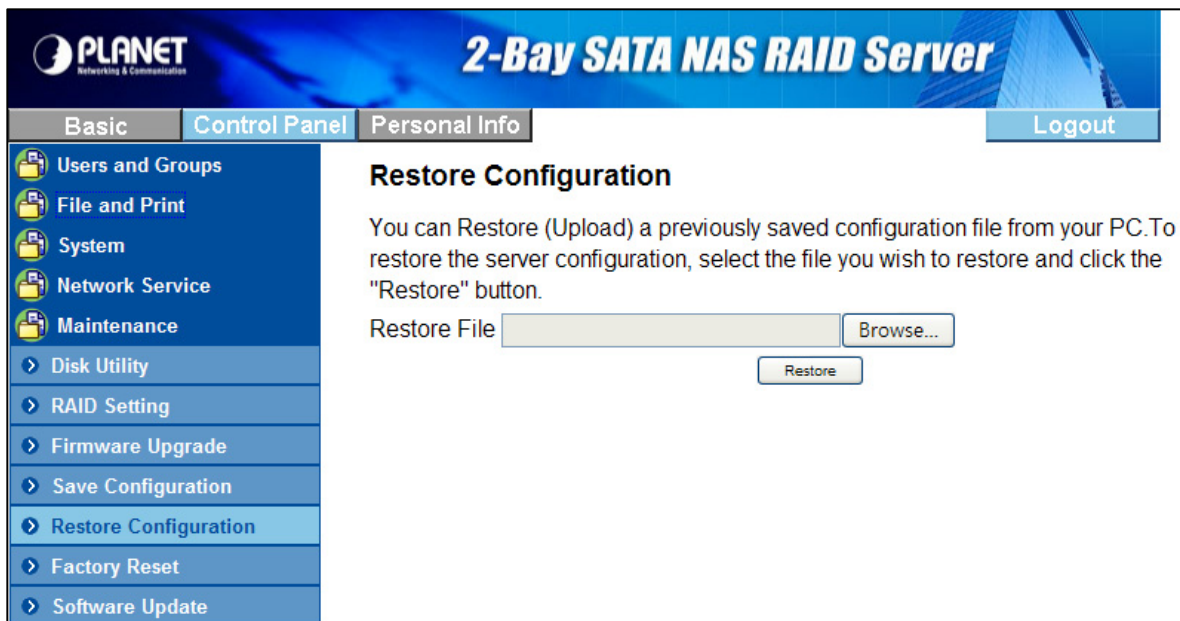
4.7.4 Save Configuration

This device can save its current configuration to a local file. The default file name is “config.tar”.



4.7.5 Restore Configuration

You can restore system configuration from a previously saved config file saved by “Save Configuration” function. Specify a config file and then click the “**Restore**” button to restore previous settings.



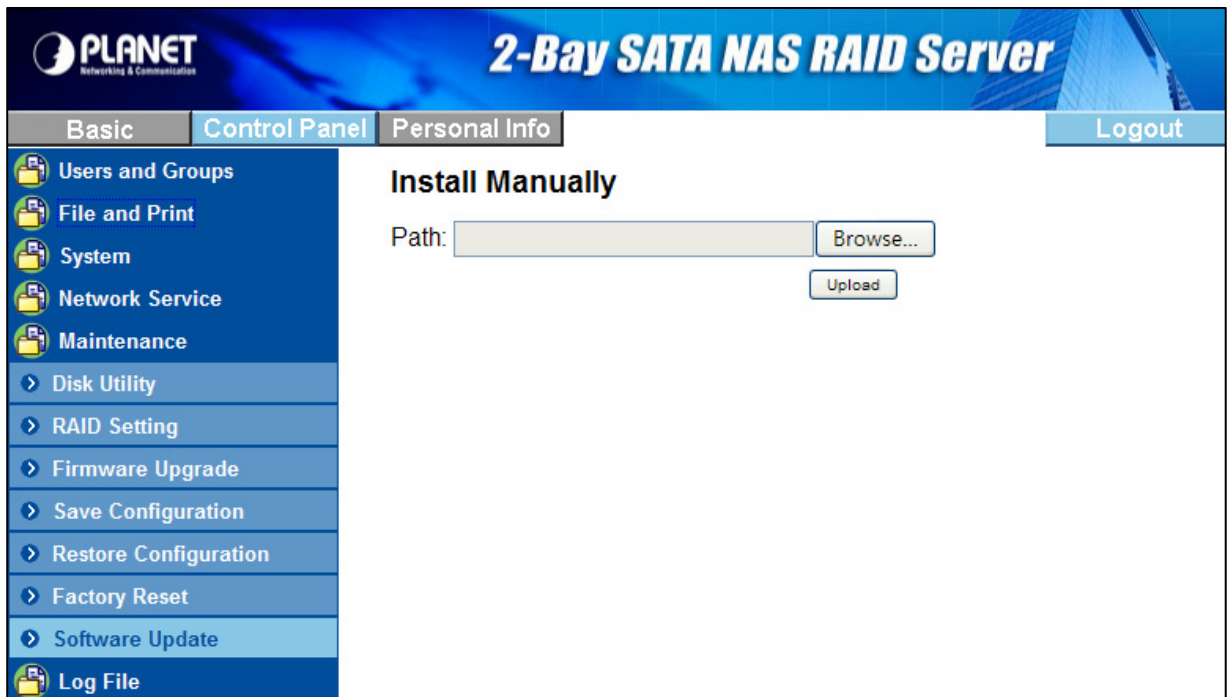
4.7.6 Factory Reset

“Factory Reset” resets all configurations to factory defaults. All users, networking, and other configurations will be lost once the “**Factory Reset**” button is pressed.



4.7.7 Software Update

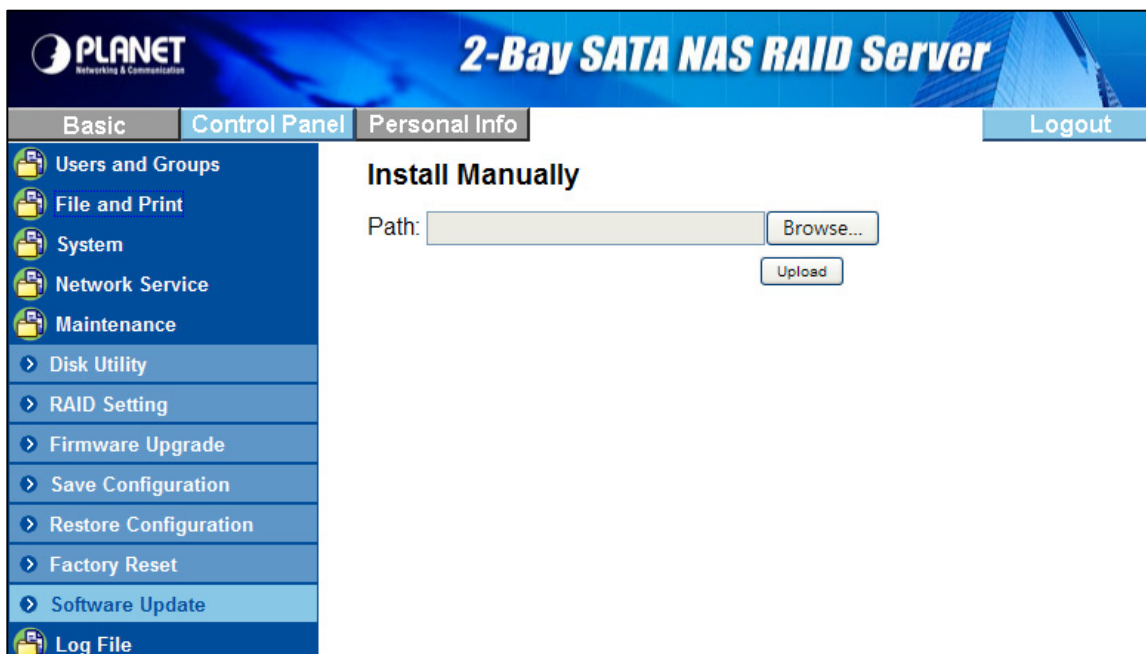
Select an installation module and click “**Upload**” button to install it on this device, For example the Torrentflux utility.



4.8 Personal Information

4.8.1 Account

Account is the only section in “Personal Information”. You could change the password of user ‘admin’ and the language of the GUI. Besides, share list, system disk quota and the percentage of disk used will be shown as well.



4.8.2 Logout

Click Logout to logout off this device.

**2-Bay SATA NAS RAID Server**

Basic

Control Panel

Personal Info

Logout

 Personal Information

System Information

Product Name	NAS-7201
Firmware Version	2.6.3-n.20080320
Product Vendor	PLANET Technology Corporation
IP Address	192.168.0.100

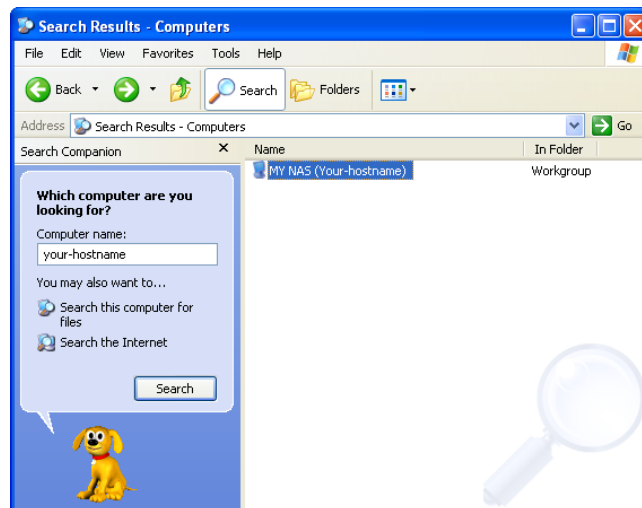
5. Mapping a Network Drive in Windows XP

After mapping a specific folder as a Network Drive, you can access it easily in **My Computer**.

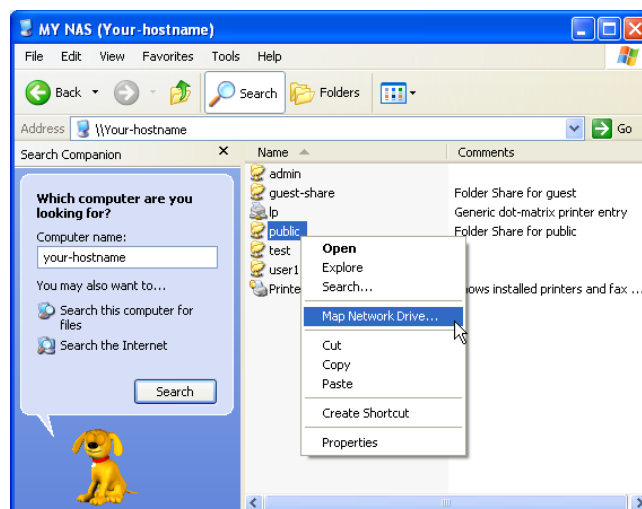
We will show you an example of this operation in Windows XP. For other operation systems, please refer to the manuals of their respective manufacturers.

A USB external drive connected to this device will be seen as **\\your-hostname\usb1** or **\\your-hostname\usb2** in Windows Explorer. You can also map it with the following steps.

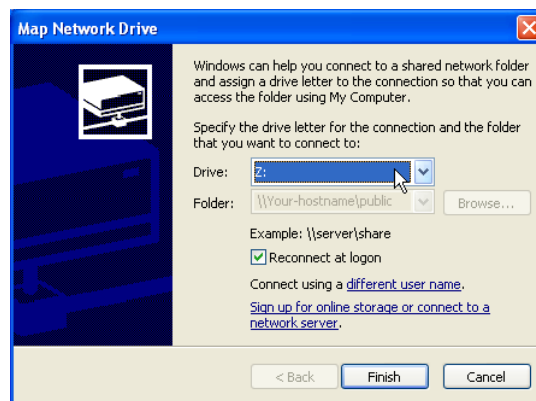
1. Click **Start** button in Windows taskbar => Click **Search** => Click **Computer or people** => Click **A computer on the network** and a new window will appear.
2. Input the hostname of this device in the Computer Name column, which you set previously in Control Panel > System > LAN Settings > Hostname chapter; or you can also input the description of this device, which you set previously in Control Panel > File and Print > File Server > Windows Setting > Description. Click the Search button, and you will find search results in the right column.



3. Double click on the computer icon. You can also access this device directly by inputting **\\your-hostname** in the URL bar of an Explorer window.
4. Right click on the folder you want to map and select **Map Network Drive**.



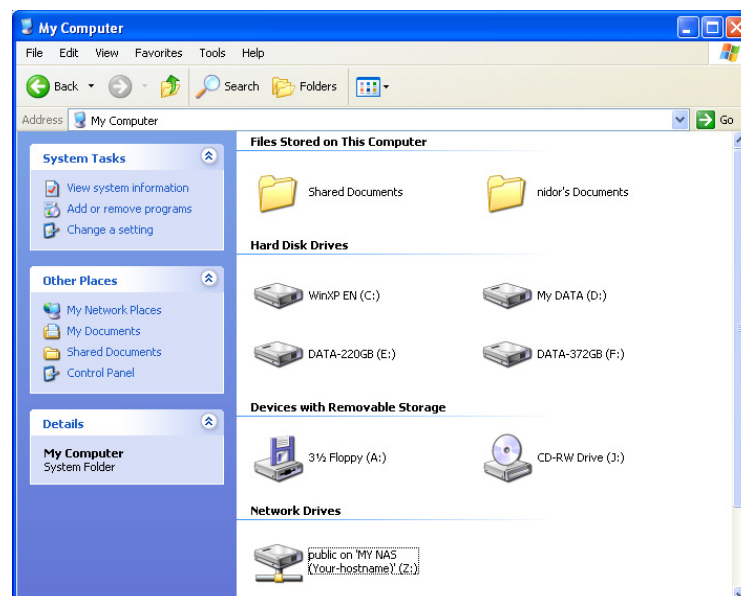
5. A Map Network Drive dialogue box will be shown. Specify a drive letter for the folder chosen and click **Finish** button to complete mapping.



6. A “Connect to Your-Hostname” dialogue box will be shown. Input a username and its password your previously set in **Control Panel > File and Print > Windows and FTP Access**. You can enable automatic login process in the future by checking the “remember my password” box. You will need to input the username and its password again each time you tried to access this network drive if the “remember my password” box is left unchecked.



7. The selected folder will now be shown in **My Computer**. You can then access it like a local hard drive.

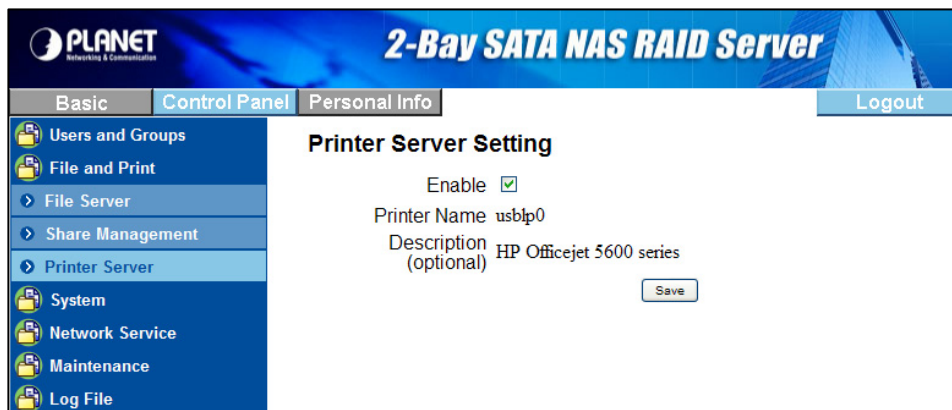


6. Printer Setup in Windows XP

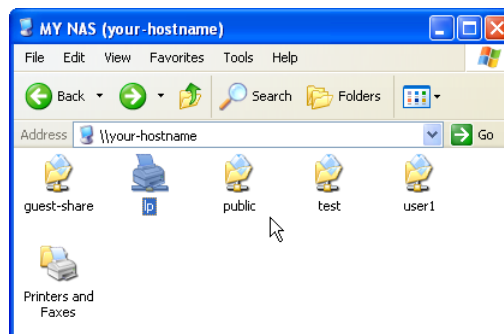
You can enable access of a network printer to members in the same LAN environment. We will show you an example of this operation in Windows XP. For other operation systems, please refer to their manuals of respective manufacturers.

Take the installation of EPSON AcuLaser C1100 printer as an example.

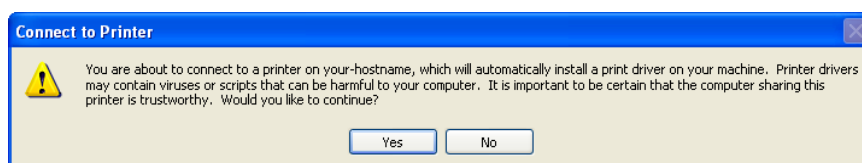
1. Connect the USB printer to NAS-7201 with the printer's USB cable directly. The printer will be automatically detected by NAS-7201.



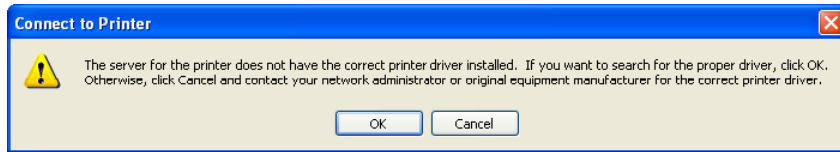
2. Input "\\your-hostname" (default arinas) in the URL bar of an Explorer window. Double click on the "lp" icon.



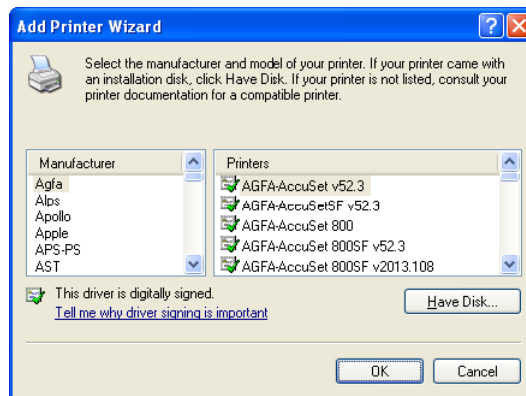
3. A dialogue box will pop up. Click **Yes** to continue.



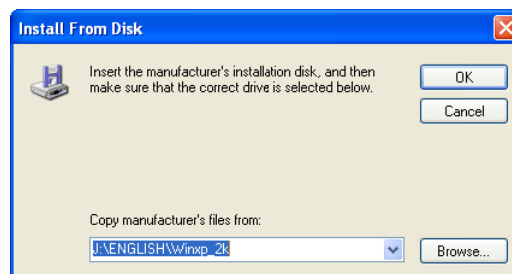
- Another dialogue box will pop up. Click **OK** to continue.



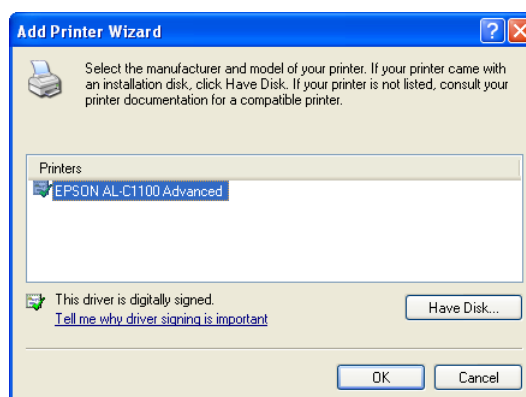
- In the Add Printer Wizard window, select the manufacturer and printer model corresponding to the printer connected. If the manufacturer of the specific model of your printer is not available in the list, click on the "**Have Disk...**" button to install its driver from the driver disk provided by the manufacturer.



- Insert the driver disk into your local computer. Click the "**Browse...**" button to select the corresponding INF file in the driver disk. Click **OK** to proceed on installation.



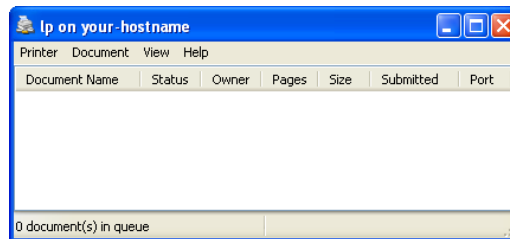
- Click **OK** to proceed on installation.



8. A “Connecting to lp on your-hostname” dialogue box will pop up during the installation process. The installation process may take several minutes to complete, please wait.

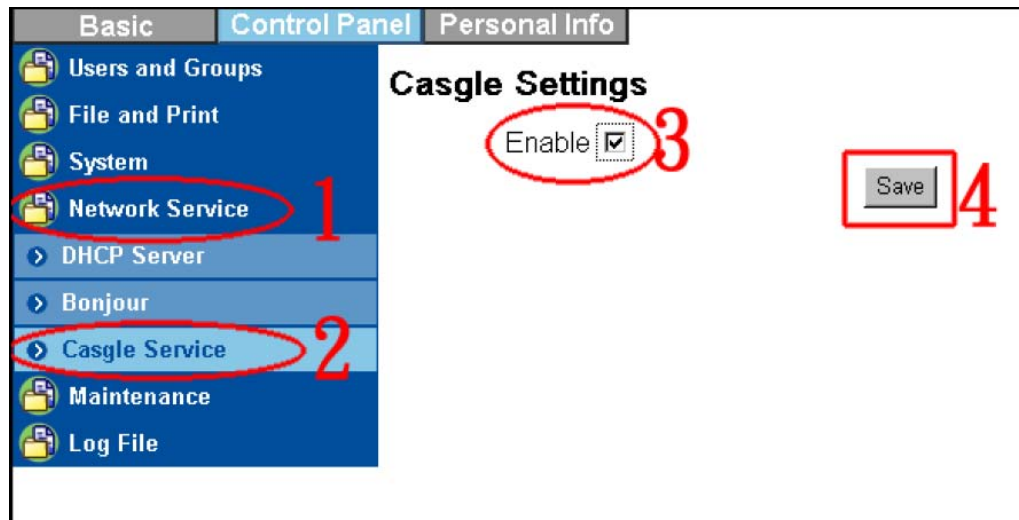


9. When the installation process is complete, a “lp on your-hostname” window will be shown. Now you can print documents using the printer installed. Each member in the LAN will have to complete above installation before using this printer.



7. Setup Casgle Service on Windows XP

By default, the **Casgle Service** is already turned on. It will start retrieving quite a few interesting default programs for user. User can enable or disable the service by accessing your device's web management interface.



The **Casgle Service** configuration can be found under:

Control Panel → Network Service → **Casgle Settings**

Select or deselect the check box beside the **Enable** option and press the **SAVE** button to enable/disable the service. Please wait a few minutes after enabling the service before trying to access the content.

Accessing the Content (MS Windows)

Casgle Service provides a MS Windows native and intuitive method of enjoying the content with a software application that resides in the public folder.

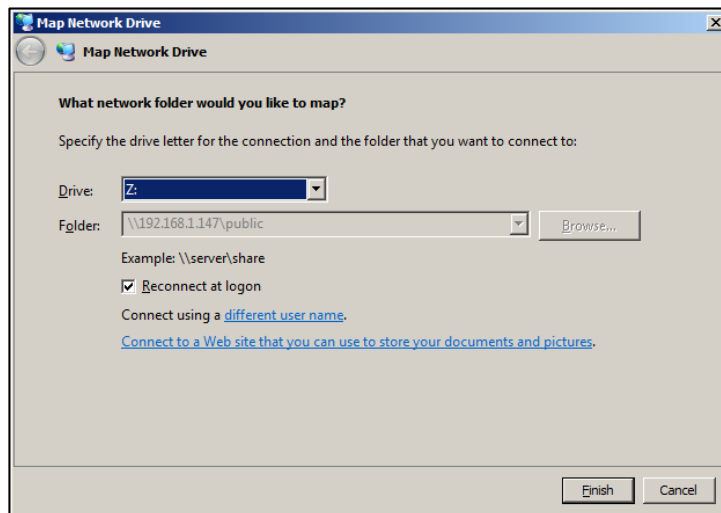
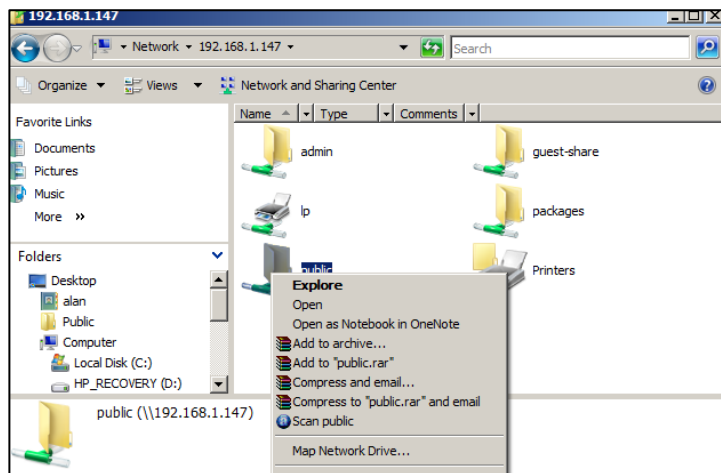
In order to access the native MS Windows interface, you must first mount the network share as a network drive and install VLC Video Player available at: <http://www.videolan.org>.

Mounting Network Drive :

First access the NAS device to gain a list of the shares available on the device by typing in the following into 'My Computer' address bar.

\\<NAS device's IP address>\

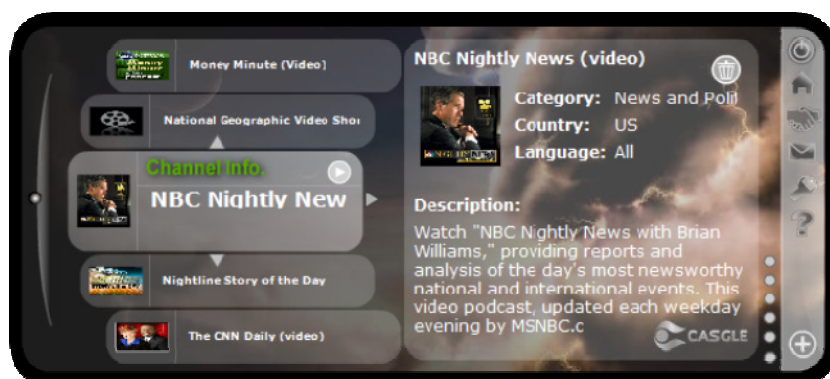
Right click on the public folder, select the Map Network Drive option on the drop down menu.



Simply select a drive name (Z: is shown in the example).

After you select the Finish/Done/OK button, a file explorer window will open with the content of the Z: drive listed.

Double click CasglePlayer.exe. It will start the MS Windows native content viewer. If you can not find this software, please make sure you have let the NAS-7201 connect to Internet already. This software will be auto download when NAS-7201 connects to Internet.

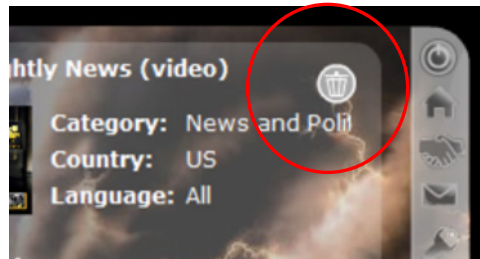


Changing Your Subscription (MS Windows)

Using the Casgle Player Application, you can also make modifications to your subscriptions.

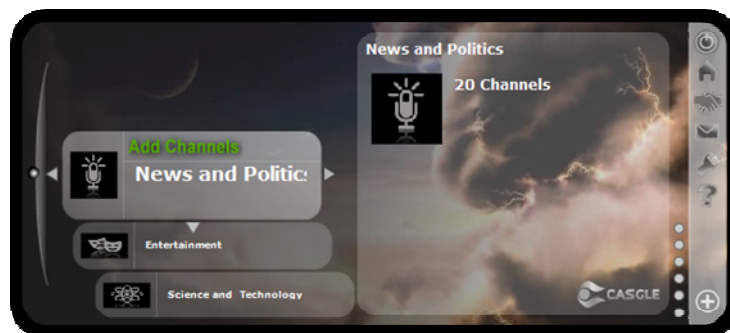
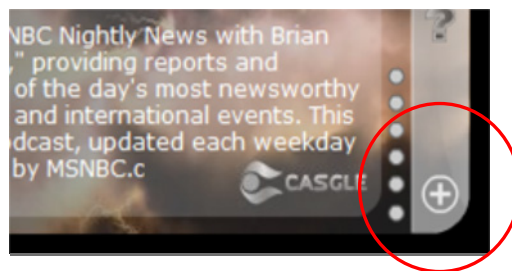
Unsubscribing a Channel :

At the Channel Info Level, simply scroll down to the channel that you no longer want. On the Channel Description Panel by simply clicking on the Trashcan icon you will alert the Casgle Service that the particular channel is no longer wanted.

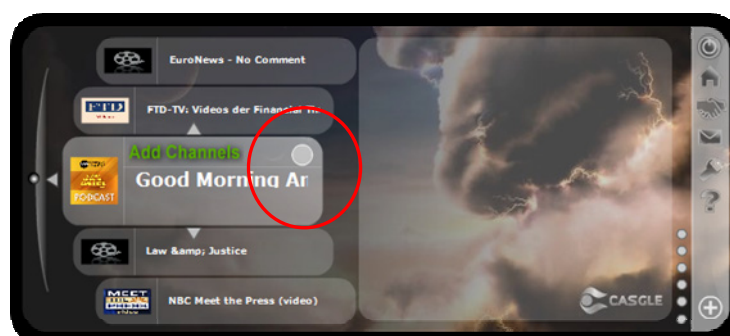


Subscribing a new channel :

At the Channel Info Level, selecting the PLUS icon on the lower right hand side of the application will bring up the channel category list



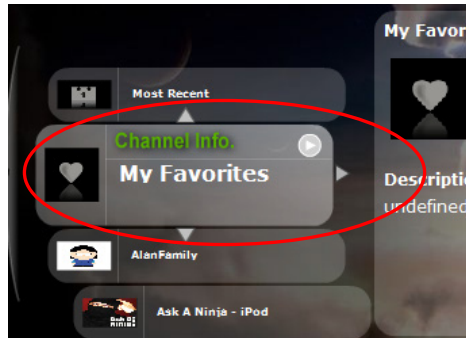
Scroll to the desired channel category and click on the right arrow. This will bring up the individual channel list.



If the channel is available for subscription, there will be an empty circle on the upper right of the channel name. Simply click on it & it will change to a check mark, which indicates that the subscription has taken place.

My Favorites Channel (MS Windows)

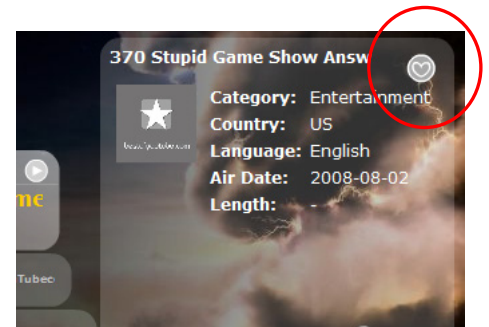
The Casgle Player provides a personalized channel called 'My Favorites' , which is the second channel on the Channel list.



To Add an Episode to the Favorite Channel :

Enter the episode list of a channel by moving the desired channel to the center and selecting the right arrow.

Move the desired episode to focus. On the upper right corner of the description panel, a heart icon will appear if the episode can be added to your My Favorites channel.



Accessing the Content (Cross Platform)

The content will reside in your device's *Public* folder.

Microsoft Windows (2000, XP, Vista) :

you can access the root of the content by typing:

\\<your device's IP address>\public

into your Internet Explorer's address field or My Computer window.

Note: you may get prompted for username/password for authentication. Please see your NAS manual for more details.

Apple Mac :

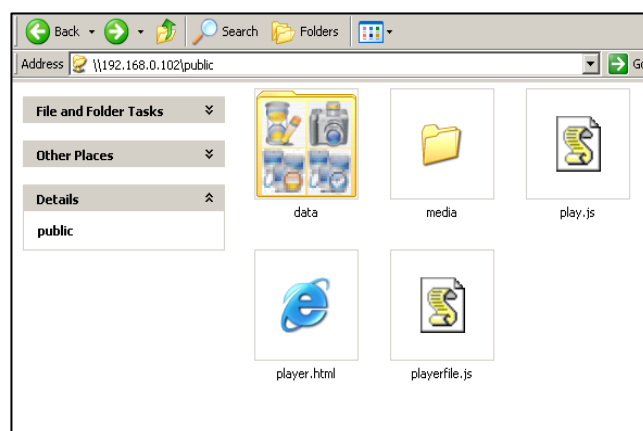
Please mount the NAS device to your file system and access the *public* folder by using the following command at the command window:

mount_smbfs //username@iP address/public ./myshare

Where workgroup, username, password are defined through the NAS web user interface. myshare is a directory that you create.

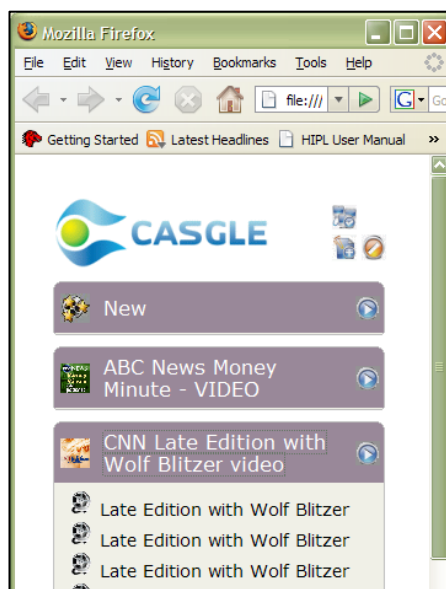
Viewer :

In the public folder, you will find the following files:

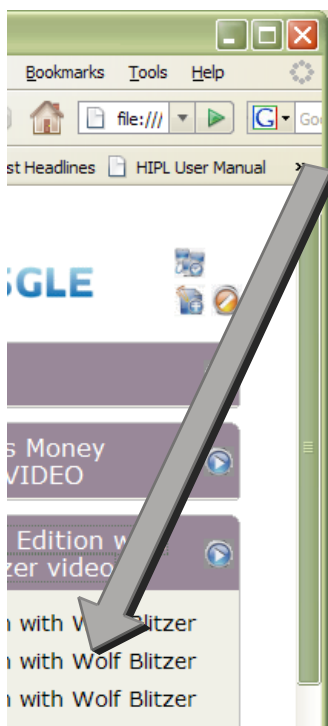



By opening the *player.html* file using a web browser such as Internet Explorer or Firefox/Mozilla, you will be shown a list of programs that you currently subscribe to. When you expand each program you will see the current list of episodes that are available.

The viewer is illustrated right:




Enjoying Your Dynamic Content :



Using the viewer, you can enjoy individual episodes by expanding the program and selecting each episode directly.* Or, you can enjoy all the episodes within the program by selecting the *play*  icon right next to the program name.

In the viewer, *Casgle* provides special sections for you to better enjoy your content. The NEW section contains all the episodes that have been downloaded within the last 24 hours, so that you do not need to spend time searching for newly refreshed content in each program.

It will also indicate which episodes are ready to be enjoyed and which ones are not. Episode names in *italics* indicate those which are not yet ready for viewing.

When the  icon appears besides the episode's name, it indicates that the particular episode has been partially downloaded only. *Casgle Service* will resume the download at a later on time.

Also, please associate the file extension correctly to insure the smooth operation of the player. The association can be done in Microsoft Windows using Explorer's pull down menu:

Tools → Folder Option → File Types


Associate m3u, m4v, wmv, mp3, mp4, and other media file extensions to the appropriate helper program(s).

Note

The viewer will launch the helper programs that you have set up to view the episodes. If you have difficulty in viewing the files, please check the end of this guide for some recommended programs for content playback.

Changing Your Subscription (Cross Platform)

Not only does *Casgle* come packed with default programming, it also allows you to add more programs as you expand the definitions of your interest areas.

By selecting the *subscription*  icon located on the upper right hand corner of the player viewer, a new browser window (or browser tab) will open with program categories that are available for you.

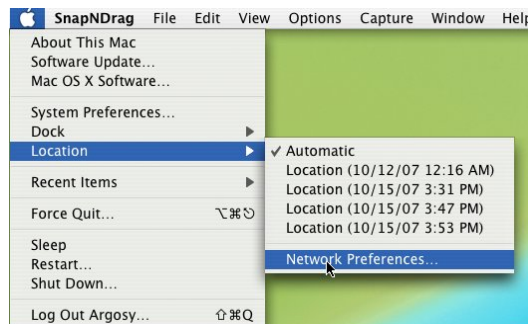
By selecting the Category name, the subscription window will expand to individual programs for your choosing.

By selecting the check box beside the program name, you will be able to subscribe to these respective programs. This subscription service is free and the content has been professionally qualified and screened by *Casgle* before being made available. Please note that after initiating your subscription it may take some time before availability of content is reflected. This will vary with the download speed of your Internet Service Provider (ISP) and the download settings of the original content providers.

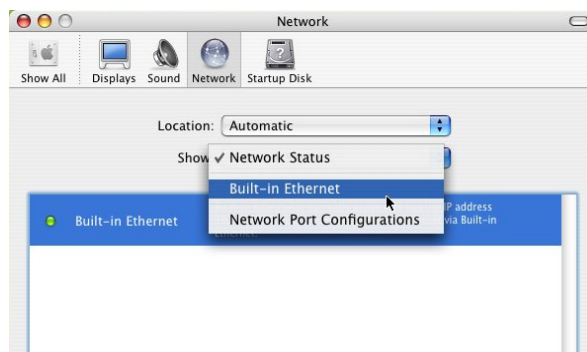
8. Mounting SMB Server in Mac OS X

First, you have to make sure that local Mac and NAS-7201 are in the same LAN environment. Then you can connect to NAS-7201 using SMB protocol, by inputting a URL starts with “**smb://**”.

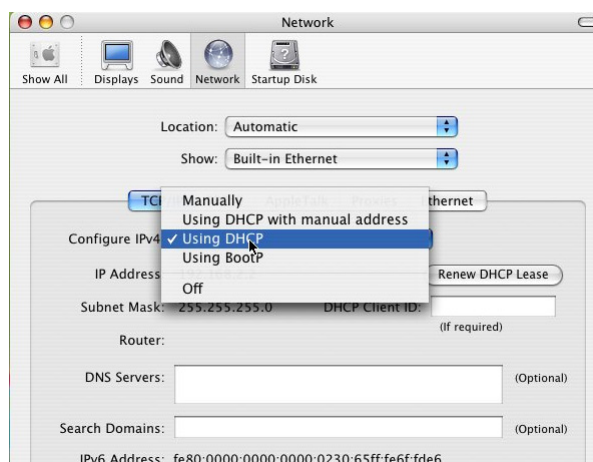
1. Click on the **Apple Menu**, and select **Location -> Network Preferences**.



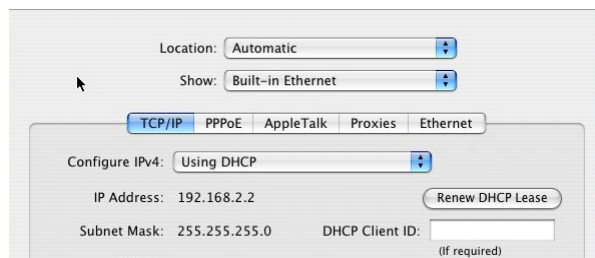
2. A Network window will show. Select **Built-in Ethernet** in the **Show:** pop-up menu.



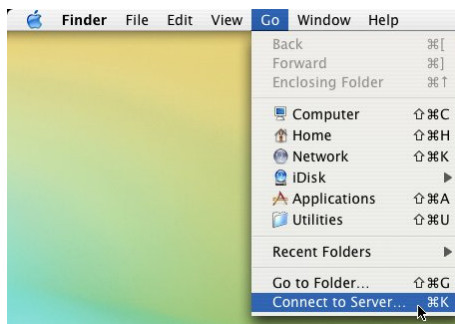
3. Select **Using DHCP** in the **Configure IPv4** pop-up menu.



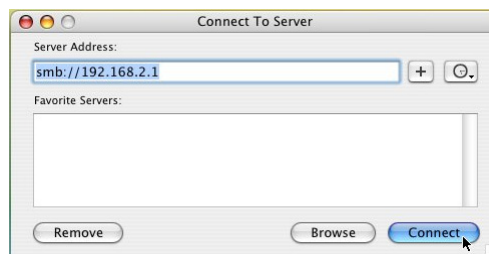
4. The private IP address acquired from the DHCP server is now displayed in this window. You can find the IP Addresses of this Mac and of this device are within the same LAN environment.



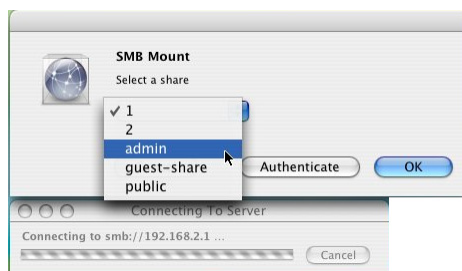
5. Select **Go -> Connect to Server** in the menu bar.



6. The “Connect To Server” window will be shown. Input **smb://NAS-IP**, and then click **Connect**.



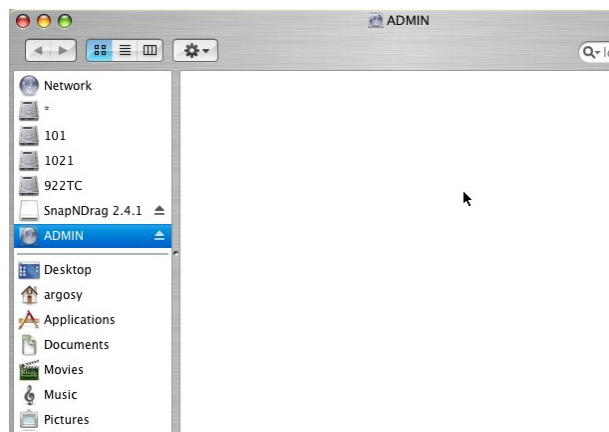
7. A “Connecting to smb://NAS-IP” progress bar will be shown first, followed by the “SMB Mount” window. Select a folder (ex: **admin**) in the “Select a share” pop-up menu and then click OK.



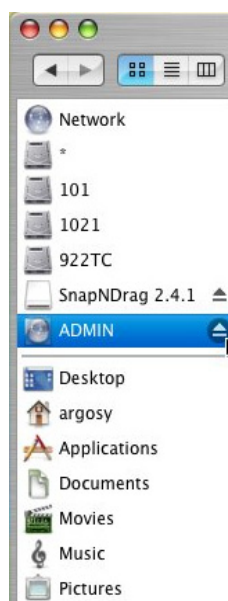
8. Input Username and Password in the “SMB/CIFS Filesystem Authentication” window, and then click **OK**.



9. If the connection succeeded, you can see the NAS icon in the left column.



10. Click the symbol by the right side of the NAS icon to unmount this device.



9. Mounting SMB Server in Linux

The following operation is performed in Fedora command line environment. The IP address of this device is set to 192.168.0.100 (its default value). Actual scenario of application may vary from case to case.

1. Using the **smbclient** command to check the content of the NAS-7201.
2. Input **smbclient -L 192.168.0.100 -U admin** after the prompt. The system will prompt you with "Password:". Input **admin** (the default password for user **admin**) to get a list of directories within the NAS-7201.

```
[root@localhost misc]# smbclient -L 192.168.0.100
Password:
session setup failed: NT_STATUS_LOGON_FAILURE
[root@localhost misc]# smbclient -L 192.168.0.100
Password:
Domain=[PLANET] OS=[Unix] Server=[Samba 3.0.20]

  Sharename      Type            Comment
  -----
  admin          Disk
  public         Disk           Folder Share for public
  guest-share    Disk           Folder Share for guest
  usb1          Disk           usb disk
  IPC$           IPC            IPC Service
  ADMIN$         IPC            IPC Service
  lp            Printer        Generic dot-matrix printer entry
Domain=[PLANET] OS=[Unix] Server=[Samba 3.0.20]

  Server          Comment
  -----
  Workgroup        Master
  WORKGROUP        ARINAS
[root@localhost misc]#
```

3. Create a folder as the mount point for the NAS-7201.

Input **mkdir /mnt/admin** after the prompt for mounting of the shared directory "admin".

```
[root@localhost ~]# mkdir /mnt/admin
```

Input **mkdir /mnt/usb1** after the prompt for mounting of the USB external drive.

```
[root@localhost ~]# mkdir /mnt/usb1
```

4. Mount the NAS-7201 with **mount** command.

Fedora 5 and later: Input **mount -t cifs -o username=admin //192.168.0.100/ /mnt/admin/** after the prompt to mount the shared directory.

```
[root@localhost ~]# mount -t cifs -o username=admin //192.168.0.100/ /mnt/admin/
Password:
[root@localhost ~]#
```

Input **mount -t cifs -o username=admin //192.168.0.100/ /mnt/usb1/** after the prompt to mount the USB external drive.

```
[root@localhost ~]# mount -t cifs -o username=admin //192.168.0.100/usb1 /mnt/usb1/  
Password:  
[root@localhost ~]#
```

Fedora 4 and earlier: Input **mount -t smbfs -o username=admin //192.168.0.100/ /mnt/admin/** after the prompt.

After the input of the **mount** command, the system will prompt you with “**Password:**”. Input the corresponding password of the user.

5. Unmount a directory mounted.

Input **umount /mnt/admin/** to unmount the shared directory.

```
[root@localhost ~]# umount /mnt/admin/  
[root@localhost ~]#
```

Input **umount /mnt/usb1/** to unmount the USB external drive.

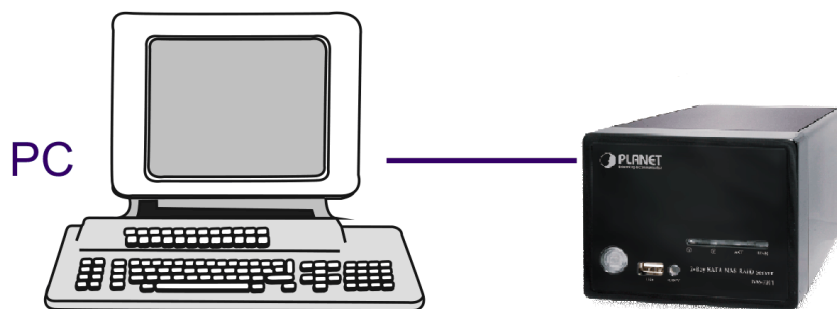
```
[root@localhost ~]# umount /mnt/usb1/  
[root@localhost ~]#
```

10. Network Applications

10.1 Personal Data Backup

For a single user, you can use NAS-7201 as an external hard drive to store your data via Ethernet connection.

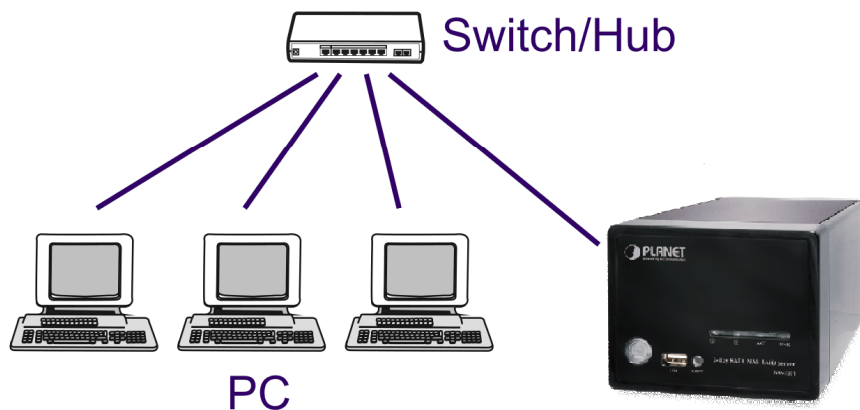
Personal Backup



10.2 Network File Sharing

With NAS-7201, a group of people in a LAN environment can share and store files over Ethernet connection. NAS-7201 could work with 10/100/1000 Base-T Ethernet environment.

Files Sharing / Remote Data Backup

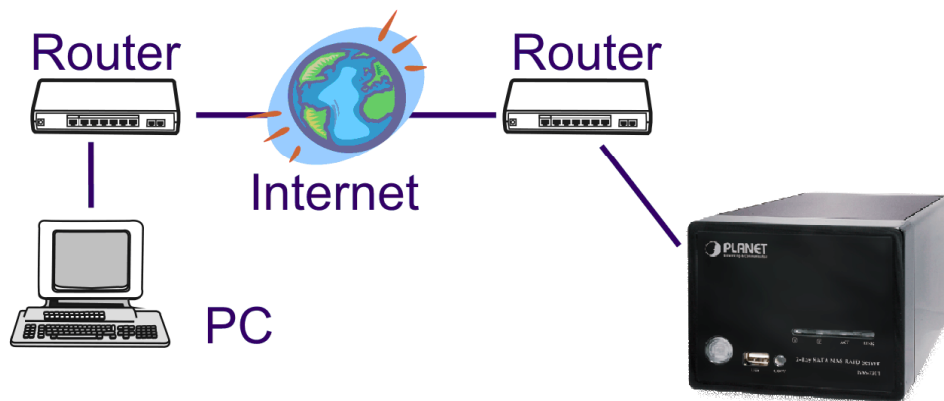


10.3 FTP Server

NAS-7201 features FTP function. You can access the FTP via a web browser or a FTP client.

1. If you are in the same LAN of NAS-7201, simply input **"ftp://your-account @your-hostname_or_IP address/"** in your browser's URL bar and press Enter key; or open a connection by **your-hostname** (or its **IP address**) with a FTP client. Login with a set of username and password you set previously to get access to NAS-7201.
2. If you are accessing NAS-7201 over Internet connection, the router of NAS-7201 will have to set a NAT mapping on port 21 for FTP protocol. In the URL bar of your browser, input **"ftp:// your-account@router-hostname_or_router-public-IP"** instead. It is recommended to have a static IP address for the router of the FTP server to enable stable connections.

FTP Server

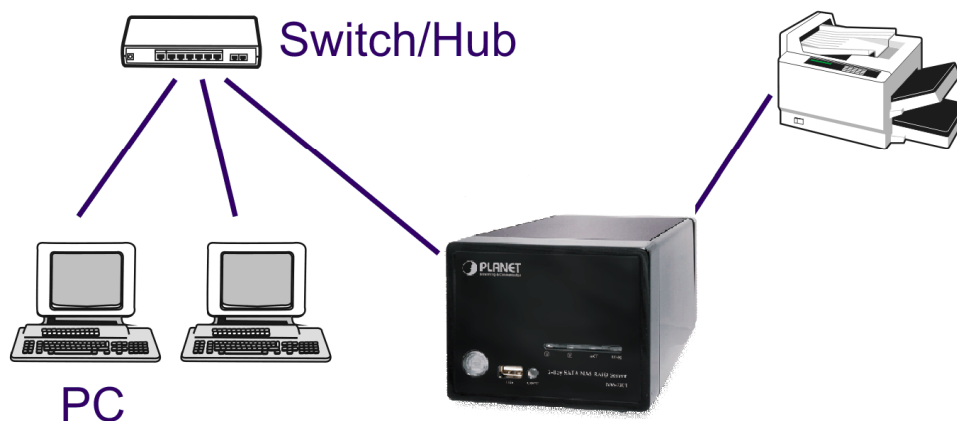


10.4 Printer Server

Connect a USB printer to NAS-7201 and share this printer to members in the same LAN.

Note: GDI Interface printers are not supported.

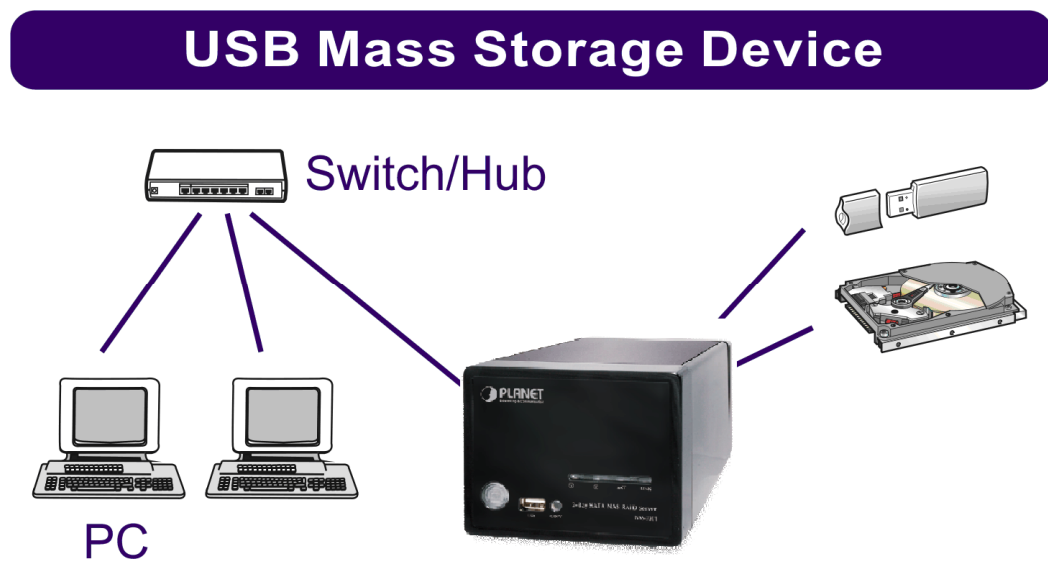
Printer Server



10.5 USB Mass Storage Device

Connect your USB Mass Storage Device to NAS-7201. The two USB ports can supply up to 350mA of current in total. If you would like to connect a USB external HDD to one of the USB host ports, it is recommended to apply external power to the USB HDD.

NAS-7201 will automatically mount a USB Mass Storage Device connected to it. A USB external drive connected to NAS-7201 will be seen as `\\your-hostname\usb1` or `\\your-hostname\usb2` in Windows Explorer. But you need to manually unmount the USB Mass Storage Device before disconnecting it. You can unmount a USB drive by **Control Panel > Maintenance > Disk Utility > clicking “Umount” button**.



APPENDIX A WHAT IS RAID

The acronym RAID stands for Redundant Array of Independent Drives, a method to combine a number of small, inexpensive drives into an array which offers more functionality than a single large disk with comparable capacity, while simultaneously taking advantage of the individual disks to increase the efficiency of the system. In other words, during the writing process, data is split into segments and stored on multiple disks; likewise, during the reading process, data is retrieved simultaneously from multiple disks in order to increase the access speed of the array.

RAID can also be configured to use part of the disk capacity for mirroring or redundant data, thus preserving the integrity of the system in case one of the disks in the array fails.

NAS-3200 supports the RAID 0 and RAID 1 volumes, described below:

RAID level	Functionality
RAID 0	Offers Striping, a process where multiple disks are combined to form one virtual large disk, but without safety measures.
RAID 1	Half of the disks are used for backup purposes; the content of disk A is mirrored to disk B to assure data integrity. The available storage space is only one half of total physical disk capacity.

Each of the RAID configurations offers a different disk capacity and level of safety. When making your choice, consider the following:

1. The bigger the available space, the fewer safeguards the system has.
2. For any RAID array, the capacity of the array is determined by the smallest hard disk. E.g., for a RAID 1 array created with one 20 GB and one 30 GB hard disks, the total available capacity is defined based on the 20 GB hard disk. Therefore you should always choose to use hard disks with identical size to create a RAID array.

RAID 0 (striping)

In a RAID 0 array, data is split and stored in different locations, but without fault tolerance. The server treats the array as one big disk, with a size of almost all individual disks combined. The parallel access to multiple disks allows for faster read and write, making the array faster than individual disks. Because of that, this configuration is ideal for applications where large amounts of streaming data have to be efficiently transferred while assuring good quality, e.g. in a recording.

RAID 0 offers no mirroring or redundancy options. If one disk in the array fails, the entire array is inoperable.

RAID 0 is not fault-tolerant.

RAID 1 (mirroring)

A RAID 1 array consists of at least two disks that duplicate the storage of data; data is always written to all disks. This system is rather fault-tolerance and is often used in environments with multiple users where safety is of great importance, but more expensive than other solutions, since the actual storage capacity is only 1 disk. RAID 1 is often used in environments with multiple users where safety is of great importance.

Note:

1. NAS-7201 only supports creating a RAID 1 volume with 2 disks.
2. Even though RAID greatly increases the level of safety in your system, you should still make it a habit to back up data periodically. If you accidentally erase data, even a RAID array cannot restore it. RAID can only compensate for the failure of one disk, that is, if two disks fail simultaneously, data loss is inevitable.

APPENDIX B SPECIFICATION

Product	2-Bay SATA NAS RAID Server
Model	NAS-7201
Hardware	
Processor	STORLINK SL3516
Memory	128MB
Hard Disk	One 3.5", SATA I/II interface
System Configuration	Windows Base utility, Web Browser
RAID Level	RAID 0, 1 and JBOD
Indication LED	Power, HDD 1/2 Act, LAN, LAN Act
LAN Port	1 x 10/100/1000Mbps RJ-45
USB Connector	2 x USB 1.1/2.0 Compatible (Type A)
Network Protocol Supported	TCP/IP, HTTP, FTP, P2P, SMB
Network Clients Supported	Windows, Mac OS, Linux/Unix
Power Supply	External Switch Power, 5V DC, 4.2A / 12V DC 3A
Dimension	58mm(W) x 122mm(H) x 197mm(D)
Weight	Approximate 726g (net weight)
Operating Environment	Temperature: 10~50 degree C Humidity: 10~95 %
Storage Environment	Temperature: -10~70 degree C Humidity: 0~95 %
Safety Approvals	CE, FCC Class A

EC Declaration of Conformity

For the following equipment:

*Type of Product : 2-Bay SATA NAS RAID Server
*Model Number : NAS-7201

* Produced by:

Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address : 11F, No. 96, Min Chuan Road, Hsin Tien,
Taipei, Taiwan, R.O.C.

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC, 92/31/EEC, 93/68/EEC).

For the evaluation regarding the Electromagnetic Compatibility, the following standards were applied:

EN 55022	(2006, Class B)
CISPR 22	(2005, Class B)
EN 61000-3-2	(2000 + A2: 2005)
EN 61000-3-3	(1995+A1: 2001 + A2: 2005)
EN 55024	(1998+A1: 2001+A2: 2003)
IEC 61000-4-2	(1995 + A1: 1998 + A2: 2000)
IEC 61000-4-3	(2002+A1: 2002)
IEC 61000-4-4	(2004)
IEC 61000-4-5	(1995 + A1: 2000)
IEC 61000-4-6	(2003+A1: 2004)
IEC 61000-4-8	(1993 + A1: 2000)
IEC 61000-4-11	(2004)

Responsible for marking this declaration if the:

☒ Manufacturer ☐ Authorized representative established within the EU

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: **11F, No.96, Min Chuan Road, Hsin Tien, Taipei, Taiwan, R.O.C**

Person responsible for making this declaration

Name, Surname **John Sung**

Position / Title : **Product Manager**

Taiwan
Place

30 Sept, 2008
Date


Legal Signature

PLANET TECHNOLOGY CORPORATION

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