

# Synology® DS-101j Disk Station

## User's Guide



( Document #: SDS2.0-050915\_enu )  
Based on DS2.0 Ver. 2.0240

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Synology Inc. reserves the right to revise this publication and to make changes in the content hereof without the obligation to notify any person of such revision or changes.

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## Safety Warnings and Instructions

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Please read this safety warnings and instructions carefully before use, and keep it well for your future reference.

-  1. Be sure to read and follow all warning notices and instructions.
-  2. Do not place Synology DS-101j Disk Station in direct sunlight or near chemicals. Make sure that the environment does not experience abrupt changes in temperature or humidity.
-  3. Before cleaning, please unplug the power cord first. Wipe Synology DS-101j Disk Station with wet paper towels. Do not use chemical or aerosol cleaners to clean it.



- 4. Do not put Synology DS-101j Disk Station close to any liquid.




- 5. Do not put Synology DS-101j Disk Station on a cart, table, or desk, which is not stable to avoid it's falling off.








- 6. Do keep Synology DS-101j Disk Station stand erect. Do not lay it down horizontally.



-  7. There are slots on the side covers for ventilation. To make sure Synology DS-101j Disk Station is operating under normal condition, please do not block or cover those slots to avoid its being overheat.



-  8. The operation temperature is from 50°F to 90°F (10°C to 35°C). Care must be taken to allow sufficient air circulation or space between units.
-  9. The connections and equipment that supply power to Synology DS-101j Disk Station should be capable of operating safely with the maximum power requirements of DS-101j Disk Station. In case of a power overload, the supply circuits and supply wiring should not become hazardous.
-  10. The power cord must plug in to the right supply voltage, i.e. 110VAC for North America and 230VAC for Europe. Make sure that the supplied AC voltage is correct and stable.
-  11. Do not allow anything to rest on the power cord and do not locate the product where anyone can walk on the power cord.
-  12. Do not service the product by yourself. Opening or removing covers can expose you to dangerous high voltage points or other risks. Refer all service to qualified service personnel.

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## About this User's Guide

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This User's Guide covers the Synology DS-101j Disk Station's hardware, installation, operation and troubleshooting, etc. Each chapter provides detailed information and helps you acquire clear concepts of the operation of the Synology DS-101j Disk Station. Enjoy your use of Synology DS-101j Disk Station!

### Organization of This User's Guide

#### **Chapter 1, Get to Know your DS-101j Disk Station**

Describes the features of Synology DS-101j Disk Station in detail.

#### **Chapter 2, Get to Know the Hardware**

Explains the LEDs and port functions on the front and back panels.

#### **Chapter 3, Install your DS-101j Disk Station**

Explains steps to set up DS-101j Disk Station, and offers tips on accessing DS-101j Disk Station.

#### **Chapter 4, Manage your DS-101j Disk Station**

Describes the default functions and advanced features on the Web management Graphic User Interface (GUI) of DS-101j Disk Station.

#### **Chapter 5, Use Data Replicator**

Explains steps to install Data Replicator, and how to use it.

#### **Chapter 6, Troubleshooting**

Provides solutions to common installation and operation problems.

#### **Appendix A, Suggested Periphery**

A table containing suggested HDD information.

#### **Appendix B, Technical Support**

Illustrates the methods to obtain technical support.



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## Chapter 1 Get to Know your DS-101j Disk Station

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### 1.1 Introduction

#### **Congratulations on your purchase of Synology DS-101j Disk Station!**

Synology DS-101j Disk Station is a 6-in-1 server specially designed for SOHO, home users, and workgroups. Integrating a file server, backup server, and printer server, Synology DS-101j Disk Station provides file storing and sharing, automatic file backup, and USB printer sharing to meet SOHO and home users' demands. It also performs as a FTP server so that you can upload and download data via the Internet.

Synology DS-101j Disk Station is a file server. With Synology DS-101j Disk Station, you can not only store files on it, but also share files throughout the network. You can store data such as documents, art works, spreadsheets, presentation slides, mails, photos, recorded videos, and music files on DS-101j Disk Station, and then share them with your co-workers or home members. There are also three USB 2.0 ports on Synology DS-101j Disk Station which you can use to connect Synology DS-101j Disk Station to a USB Hard Disk Drive (HDD) to expand your storage capacity. You can also use them to copy data from various digital devices, such as USB memory or digital cameras. The most convenient feature is that it's PC-free. You don't even need to turn on your computer, and you can use your digital device right after you copy the data to DS-101j Disk Station.

The Synology DS-101j Disk Station is also a backup server. With Synology Data Replicator, the DS-101j Disk Station can backup files automatically. To avoid losing files, you can also backup the data from DS-101j Disk Station to other USB hard drives. The Synology DS-101j Disk Station provides this free utility to PC clients connected to it. For people like designers, doctors, architects, accountants, and sales or higher executives, it's very important to have your files backed up. However, this may not always be easy to do due to the time it takes. Therefore, let the Synology DS-101j Disk Station help you. It offers a real time or automatic file backup function. It's your complete backup solution.

The Synology DS-101j Disk Station is also a print server. With the facility to share a USB printer, you can save time, money, and space because the shared USB printer will support all the office or home users. The only thing you have to do is to connect the printer to the Synology DS-101j Disk Station, and everyone throughout the network can print out files via the DS-101j Disk Station.

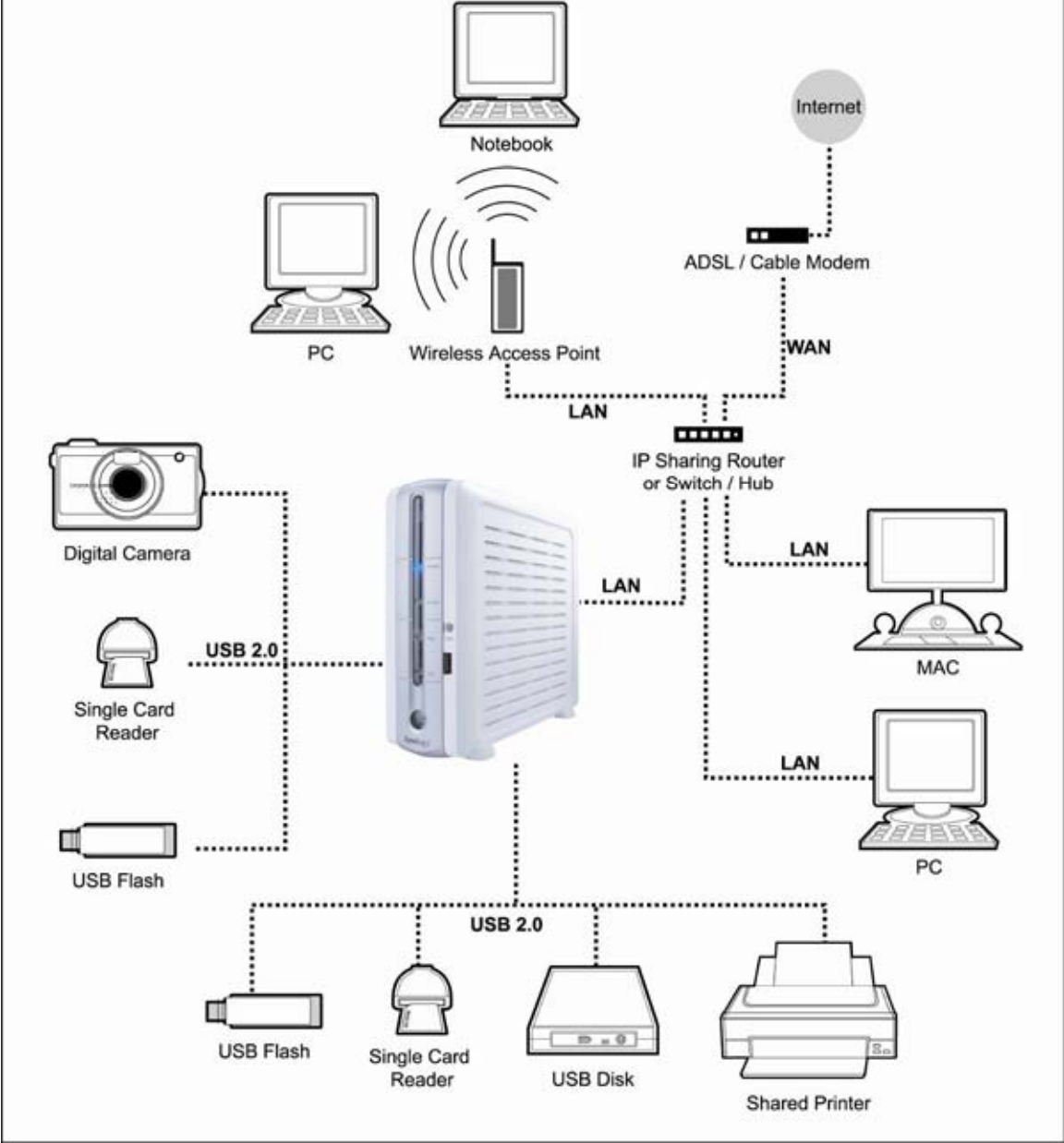
In addition, the Synology DS-101j Disk Station also offers an FTP service. You can use the FTP service to upload and download files directly from the Web management Graphic User Interface (GUI) of the Synology DS-101j Disk Station. Through the FTP service, you can share all kinds of data with your friends on the Internet. For business people, you don't need to carry the data you need with you, but use FTP to put it on the Internet, and you can open it anywhere through the Internet.

Besides the existing functions of DS-101j Series, the Synology DS-101j offers superior functions called Synology Photo Station and Synology Web Station. The Synology Photo Station serves as a powerful and convenient photo browser. By uploading photos to the default share on Synology DS-101j Disk Station, you can browse the photos and share them on the network because the system will generate the photos automatically into the online album. The new DS-101j Disk Station also serves as a simple static web server. With Synology Web Station, SOHO can build a web site for sales and marketing. Customers can then connect and browse your business web through Internet. Home users can build family web site to share family members' life as well. Synology Web Station gives you a completely self-owned easiness and fun.

The Synology DS-101j Disk Station will definitely be an extremely useful tool for the SOHO or home user like you. With the Synology DS-101j Disk Station, it will be convenient to store, share, backup, and print files. It is easy to install and operate, and noise free while in use. The Synology DS-101j Disk Station offers you maximum performance for minimum cost. You are surely already reaping the benefits of Synology DS-101j Disk Station.

# DS-101j Disk Station

NAS Barebone System



### 1.2 Get Started

Before use, please read this User’s Guide thoroughly and use the DS-101j Disk Station only in accordance with the instructions in the User’s Guide. Also keep this User’s Guide in a secure place where it can be referred to easily.

### Packing List

Before you begin, please open the box and make check off the package contents to verify that you have received the items below.



**Warning: HDD is not included. Please prepare a 3 1/2” HDD by yourself and adjust the jumper to “Master” position.**

1. DS-101j Disk Station



2. DS Resource CD



3. 2M RJ-45 cable



4. AC power adapter



5. AC power cord



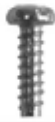
6. DS-101j Disk Station Quick Installation Guide



7. HDD Installation Assembling Kit



x 2



x 4



x 2



x 4



x 2

### 1.3 Install HDD

1. Prepare a 3 1/2 " IDE HDD which is brand new or never been formatted by DS-101j Disk Station, and adjust the jumper to "Master" position.
2. Screw up the two HDD holding brackets on both sides of the HDD.



3. Take off the side cover with USB COPY button, being careful to keep the cable connected to the main board.



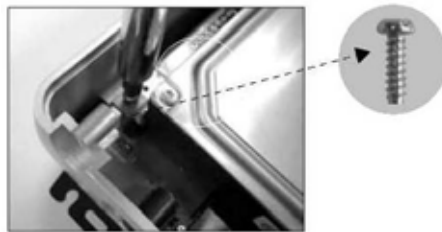
4. Put the USB cable underneath the HDD cable. This is to eliminate electromagnetic waves.



5. Connect the power plug and IDE HDD cable to the HDD.



6. Attach the HDD brackets to the main board using 4 screws provided.



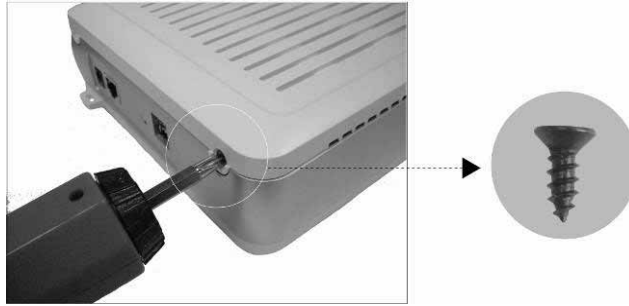
7. Attach the aluminum foil sticker between the hard disk and LAN port as described in the picture. This can also help to eliminate electromagnetic waves.



8. Adjust the IDE HDD cable and close the side cover.



9. Tighten the last two screws on the back of the side cover to finish the HDD installation.



**Warning: Please do not have AC adapter connected to the power when installing the HDD during above steps.**

10. Connect the AC adapter and the LAN cable to the DS-101j. Press the power button, and the POWER LED will flash while processing a self-test for about 40 seconds. You will hear a beep sound after the DS-101j completes the self-test, and then the POWER LED becomes still.



**Warning: Do not lay the DS-101j Disk Station horizontally or block the ventilation slots on the covers.**

## **1.4 Synology DS-101j Disk Station Applications**

With keen innovation and state-of-the-art design technology, DS-101j Disk Station is an ideal NAS device for the following applications.

### **Small Office and Home Office**

Small business users, such as accountants, art designers, dentists, lawyers, and real-estate brokers often store years of valuable client information on their Windows or Mac PC hard drives without doing any backup or redundancy. However, chances are that all the business data might be lost someday causing great trouble. The Synology DS-101j Disk Station allows Windows and Macintosh clients to store, share, backup and print files for your multiple demands.

Due to the limited budget of small office/home office (SOHO) and home users, it is hard to choose a server at an affordable cost yet with high performance and expandability. SOHO users might also consider factors such as being easy to install and manage, reliable, noiseless, scalable, and able to serve as a print server, with direct input provided. Here Synology are happy to tell you that with the DS-101j Disk Station, you have a product that embraces all these benefits.

For those SOHO and home users, the Synology DS-101j Disk Station is a cost effective and complete solution to their server requirements. Even if small business and home offices have already had an expensive server installed, when the server storage is full, the low cost Synology DS-101j Disk Station is still an ideal and quick solution for storage expansion.

### **Educational Market**

Students in small classes can use the DS-101j Disk Station to store, share, exchange, backup, and print files in school at a very low cost. Schools can use the Synology DS-101j Disk Station to enrich their facilities without a huge investment.

### **Home User**

The increasing use of residential broadband and digital multimedia in music, videos and still images has contributed to the growing need of large-capacity storage systems.

To enrich your digital life at home, you may use the DS-101j Disk Station to store thousands of MP3 music files. Family members can then share and backup their MP3 music files and play them on their own PC all day long through a home network. Moreover you can also share digital photos and still images (image files) with friends and



family.

The Synology DS-101j Disk Station is easy to install, configure, and operate for home users.

It's a DHCP-enabled device. When it's connected to an IP sharing Router, it will search for and acquire an IP address automatically.

There is a copy switch on the front panel. You just need to press this to save pictures, videos, image files and data onto DS-101j Disk Station from a USB device. It's quick and easy.

### **ISP**

With a fixed IP address, an ISP service provider can use the Synology DS-101j Disk Station to pre-load video, image, and multimedia files from an ISP service center to the user during their free time, thus reducing the network transmission loads at busy times.

### **Private Backup for Business People**

The Synology DS-101j Disk Station relieves the headaches of having to backup your notebook and desktop. The Free Data Replicator software provides constant backup of Windows PC and Notebook files. Notebook files are backed up to local drives while disconnected from the network. Then they are automatically saved to the DS-101j Disk Station when the notebook is reconnected to the network.

### **Portable Storage**

Because it's small and lightweight, the DS-101j Disk Station is a portable device allowing users to bring or move their data center to their customer's site for business presentations, data storage, data sharing and printer sharing.

## 1.5 Synology DS-101j Disk Station Advantages

### **6-in-1 Server**

The Synology DS-101j Disk Station is a 6-in-1 server. A file server for file storing and file sharing; a backup server which can back up files automatically for Windows clients with the installation of the free Data Replicator software; and a printer server to share USB printer throughout the network. In addition, it can perform as a FTP server to provide high-speed data transfer, a static web server, and a photo browser.

### **Low Cost**

Synology DS-101j Disk Station is a truly low cost 6-in-1 server. With the standalone Linux based embedded system, there is no license fee required for the Operation System. Through its web-based management user interface on the client side, there is no need for a console to manage DS-101j Disk Station.

### **Easy to Install**

There are no complicated setup requirements and it is extremely easy to use. All you have to do is just plug in the power, connect it with the RJ-45 gigabit Ethernet cable, turn on the Synology DS-101j Disk Station, and you are just four mouse clicks away from using DS-101j Disk Station.

The DS-101j Disk Station can serve as a file server, backup server and print server as soon as you have finished the installation.

### **Easy to Use**

The intuitive web-based GUI with a friendly human interface and online help makes management easy.

### **Powerful Server Management Software**

Synology system software makes the Synology DS-101j Disk Station a powerful 6-in-1 server for users to manage.

- Supports Microsoft Network / CIFS and Apple Macintosh Network / AFP / AppleTalk, TCP / IP, FTP protocols
- Interoperable: Supports both Windows 98 / Me / NT 4.0 / 2000 / XP / Windows Server 2003 and Mac OS 7.x, 8.x, 9.x, 10.x
- Share level security support
- Event Notification

- Automatic file backup for Windows clients with installation of Synology Data Replicator
- Easy to use Web-based Synology management UI and user friendly Web-based help
- Network Time Protocol (NTP) Support
- HDD sleep mode support High performance and high throughput for data storage

### **Noise Free**

With a fan-less design, the Synology DS-101j Disk Station provides users with a quiet and noise-free office environment.

### **USB 2.0 Support**

There are three USB 2.0 ports available to use. Simply plug in a USB disk to the Synology DS-101j Disk Station and you can have the additional storage you need with no system downtime. In addition, the external USB disk can be used as the data backup device to the system.

### **Direct input from Digital Camera/Flash drives**

It is easy to share your company's party video and photos with your colleagues. Simply connect your digital video recorder to the Synology DS-101j Disk Station, press the COPY button on the front panel, and your recorded video will be automatically uploaded to a safe and shareable folder.

## **1.6 Limitations**

1. DS-101j supports up to 1 USB printer with a USB hub or without.
2. DS-101j supports up to 3 USB disks without a USB hub, and multiple card readers.
3. USBCopy function only supports USB disks under 4GB capacity.
4. Some digital cameras are defined as a USB still image device, such as Canon's, and the DS-101j will support USB Copy function only (No USB share function support).
5. Please refer to "Recommendation" before connecting a USB device.
6. For Mac users, DS-101j supports only USB shared printers with PostScript.

## **1.7 Software Features**

### **Network Transport Protocols:**

TCP/IP

AppleTalk

### **Network File Protocols:**

Microsoft Networks CIFS

Apple File Protocol AFP 3.0

### **Client Support:**

Microsoft Windows 98 / ME / NT 4.0 / 2000 / XP / Windows Server 2003

Apple Macintosh OS 7.x, 8.x, 9.x, 10.x

### **Network Setting:**

One-Click setup

Manual Configuration

DHCP auto IP assignment

### **System Management:**

Assistant utility (automatic searching for all systems on the network)

Web-based Management

### **Internet Services:**

Network Time Protocol (NTP)

File Transfer Protocol (FTP)

### **Security:**

Account/Group/Share Support

Share Level Security Support

Web access control support

### **System Configuration:**

Maximum Accounts: Up to 128 users

Maximum Groups: Up to 64 groups

Maximum Shares: Up to 100 shares

Up to 32 concurrent connections

### **Automatic File Backup for Windows client:**

With Synology Data Replicator installed on client system

### **Language Localization:**

UI Language Support: English, French, German, Japanese, Korean, Italian, Spanish, Portuguese, Russian, and Chinese

### **Complete Backup Solutions:**

Data on Windows PC backed up onto Disk Station

Data on USB devices (less than 4GB) backed up onto Disk Station

Data on Disk Station backed up onto USB disks

## 1.8 Hardware Specifications

### **Processor:**

Intel IXP420BB

### **Memory:**

32MB SDRAM

2MB Flash

### **IDE Port:**

1 X IDE Port for HDD

### **Network Connection:**

RJ-45 10/100Mbps Ethernet

### **USB Support:**

USB 2.0 support

Up to 480Mbps (High Speed Mode) or 12Mbps (Full Speed Mode) for data transmission

1 X USB printer supported (For Mac users, DS-101j supports only USB printers with PostScript.)

Up to 3 X USB disks supported

USB copy button on the front panel

### **Fanless Design:**

Noise free

### **HDD Sleep Mode Support:**

To reduce system power and noise

### **Optional HDD:**

The standard system is shipped without HDD

Support: 120GB/160GB/250GB/300GB/400GB capacities

### **Agency Certifications:**

FCC Class B, CE, BSMI, C-Tick

### **Electrical & Environmental Requirements:**

Line voltage: 100V to 240V AC

Frequency: 50Hz to 60Hz, single phase

Maximum continuous power: 40 W (Standby: 11.4 W; Working: 12.12 W; Sleeping: 6.12 W)

Operating temperature: 50 to 95° F (10 to 35° C)

Storage temperature: -40 to 185° F (-10 to 70° C)

Relative humidity: 5% to 95% RH, non-condensing

Maximum operating altitude: 10,000 feet

### **Size & Weight:**

Size: 18.1cm×21.2cm×6.0cm

Weight: 0.5 kg (without HDD)

## Chapter 2 Install your DS-101j Disk Station

### 2.1 Synology DS-101j Disk Station External Components

#### Front Panel

##### A. LED meanings

###### **POWER LED –**

The POWER LED light will blink when turning on and shutting down the DS-101j Disk Station. It will remain lit up while the machine is powered on.

###### **STATUS LED –**

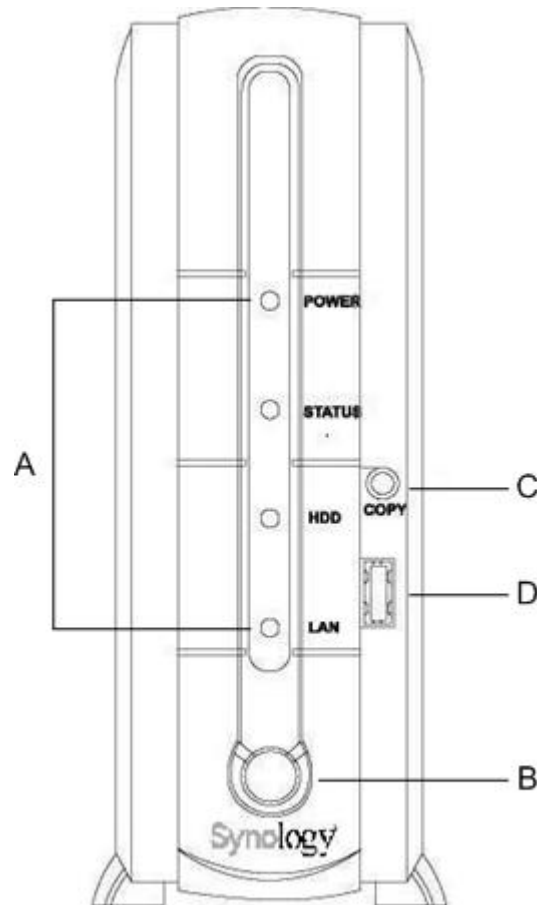
The STATUS LED shows the internal hard drive's status. When the internal hard drive is below 85% of its capacity, the STATUS LED will light up in green; when the drive exceeds 85% but has not yet reached 95% of its capacity, the STATUS LED will light up in orange; when the drive exceeds 95% of its capacity, the STATUS LED will blink in orange.

###### **HDD LED –**

The HDD LED lights up when the internal hard drive is working or operating. Periodically, the HDD LED will blink. The frequency depends on the internal hard drive's activity.

###### **LAN LED –**

The LAN LED lights up when the LAN cable plugs in. The LAN LED blinks periodically, indicating that the network is working.



##### B. Power button

The Power button is used to turn the machine on or off. It will take approximately 30 seconds to a full minute to turn on DS-101j Disk Station. To turn the machine off, press the Power button and hold for 4 seconds until the Power LED begins blinking and you can hear a beep. Then the shutdown process will complete in 30 seconds.

**C. USB COPY button with LED –**

The USB COPY button will light up when you plug in a USB device. Press this button and it will copy the data from the connected USB device to the DS-101j Disk Station’s internal HDD.

**D. USB ports –**

The DS-101j Disk Station offers three USB ports for adding external hard drives, USB printers, or other USB devices. One USB port is on the front panel, and other two are on the back panel.

**A. RESET button –**

Pressing the RESET button can restore IP, DNS, and passwords for the “admin” and “guest” accounts.

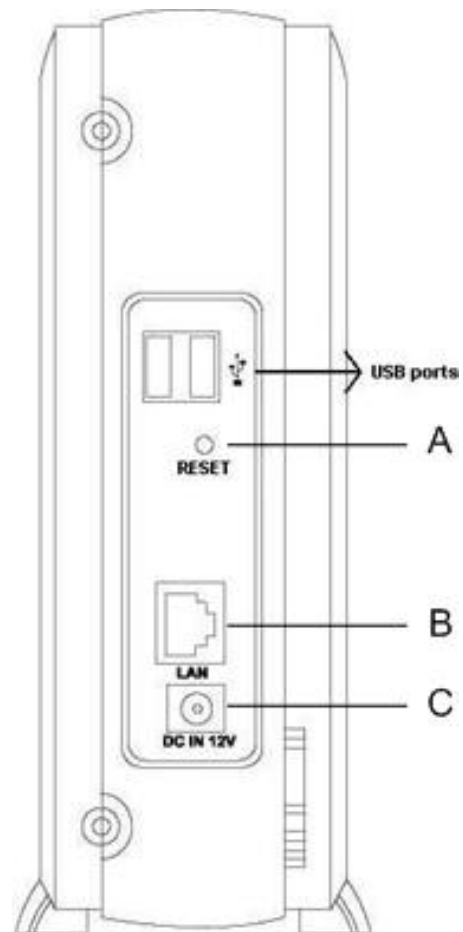
**B. LAN Port**

The LAN port is where you plug the 2M RJ-45 LAN cable in.

**C. DC IN 12V Port**

The DC IN 12V port is where you plug the AC power adaptor.

**Back Panel**





## 2.2 Table of LED Descriptions

The table can help you get to how DS-101j Disk Station is working by LED status.

LED Indication	Color	Status	Description
Power	Blue	Blinking	1. During System boot up 2. During System shutdown
		Solid Light	M/B is ready
		Light off	Power off
Status	Green/Orange	Solid green Light	HDD capacity is not yet 85%
		Solid orange light	1. HDD capacity between 85% - 95% 2. New or non-DS HDD
		Blinking orange light	1. HDD capacity is over 95% 2. HDD isn't in normal Condition 3. While restoring factory default 4. Bad disk format
		Rotating 5 sec. solid orange light & 5 sec. blinking orange light	No HDD
		Light off	During system boot up
HDD	Green	Blinking	Read/write activities
		Light off	No read/write
LAN	Green	Solid Light	While connected to LAN cable
		Blinking	While transferring data
		Light off	Disconnected

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## Chapter 3 Install your DS-101j Disk Station

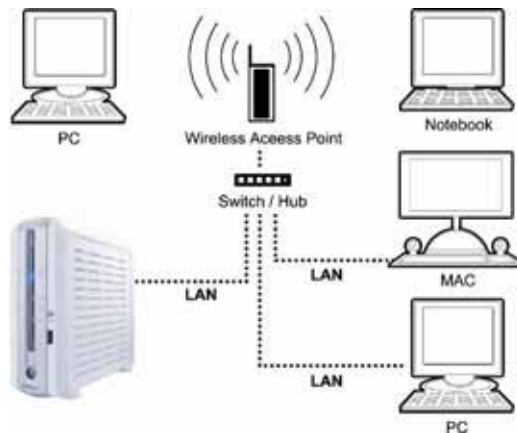
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### 3.1. DS-101j Disk Station Quick Installation

Step 1. Please check the following conditions for connecting DS-101j on the network.

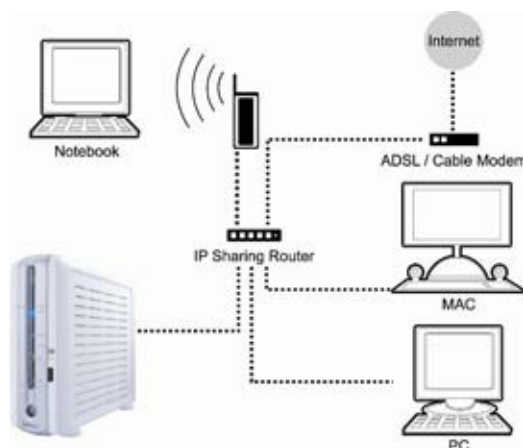
#### Condition 1, Office Network:

1. Connect the AC power adapter to the DS-101j Disk station, and plug the AC power cord into a power outlet.
2. Plug the RJ-45 LAN cable into the DS-101j Disk Station, and connect the other side of the LAN cable to your switch/hub/router.
3. Press the Power button to start the DS-101j Disk Station.



#### Condition 2, Home Network with IP Sharing:

1. Connect the AC power adapter to the DS-101j Disk station, and plug the AC power cord into a power outlet.
2. Plug the RJ-45 LAN cable into the DS-101j Disk Station, and connect the other side of the LAN cable to your switch/hub/router.
3. Press the Power button to start the DS-101j Disk Station.



**Condition 3, Home Network without IP Sharing:**

1. Connect the AC power adapter to the DS-101j Disk station, and plug the AC power cord into a power outlet.
2. Without IP sharing, you need to install a router to set up the network first.
3. Plug the RJ-45 LAN cable into the DS-101j Disk Station, and connect the other side of the LAN cable to your switch/hub/router. (Please refer to the schematic as the above.)
4. Press the Power button to start DS-101j Disk Station.

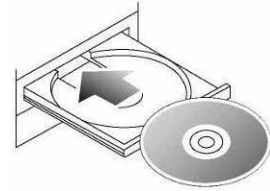
**Condition 4, Direct Connection:**

1. Connect the AC power adapter to the DS-101j Disk station, and plug the AC power cord into a power outlet.
2. Plug the RJ-45 LAN cable into the DS-101j Disk Station, and connect the other side of the LAN cable to your PC/notebook.
3. Press the Power button to start DS-101j Disk Station.



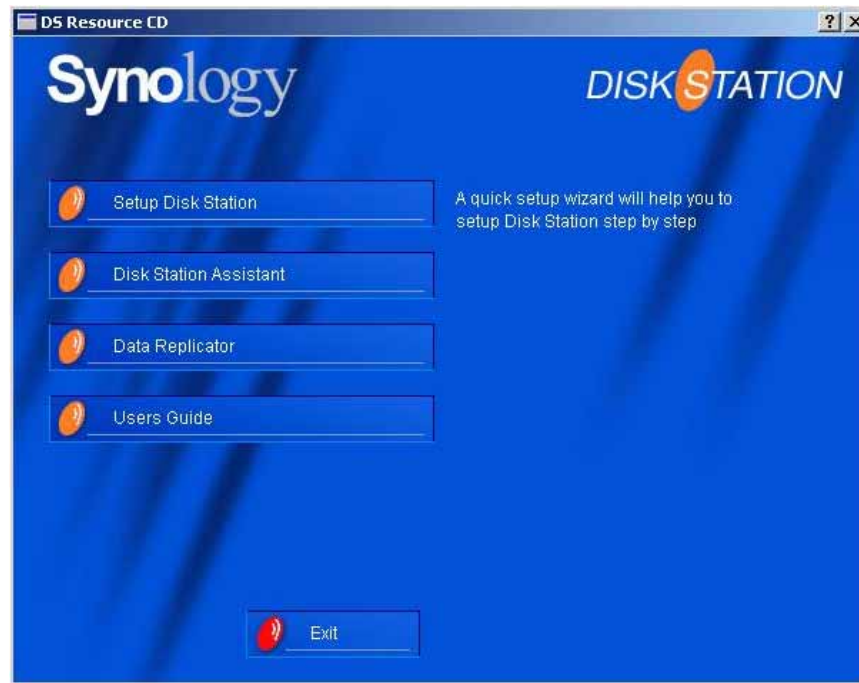
## Step 2. Run the setup utility – DSAssistant

1. Insert the DS Resource CD into your PC's CD-ROM drive.

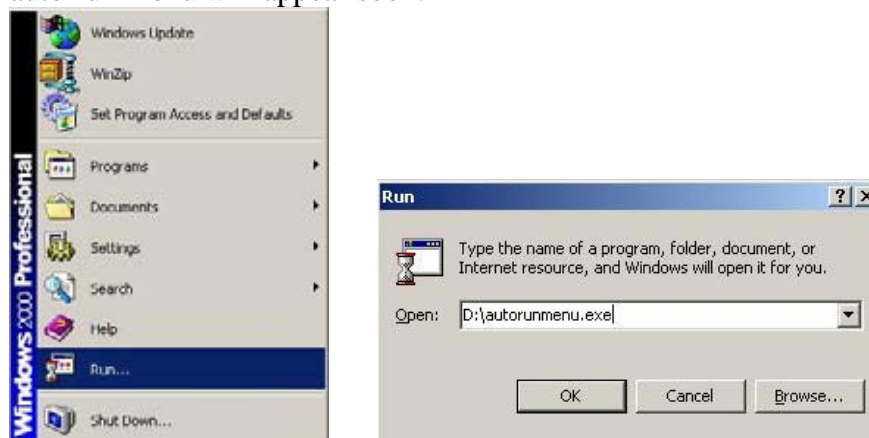


2-A Windows users:

1) An auto-run menu should appear after a few seconds.



2) If the auto-run menu does not appear, click Start button on the bottom left of the screen, and select Run. Enter D:\autorunmenu.exe (where D is the letter of your CD-ROM drive) into the Open window and click OK. The auto-run menu will appear soon.



3) After the above is done, refer to 4 to continue.

2-B Mac users:



**Warning: DS-101jj Disk Station does not support installing on Mac OS 9.**

- 1) Double click on the icon of CD-ROM.
- 2) Double click on the icon to open it and select the operation system you use.



- 3) Double click on *DSAssistant* icon to run the program.



- 4) After the above is done, refer to 3 to continue.

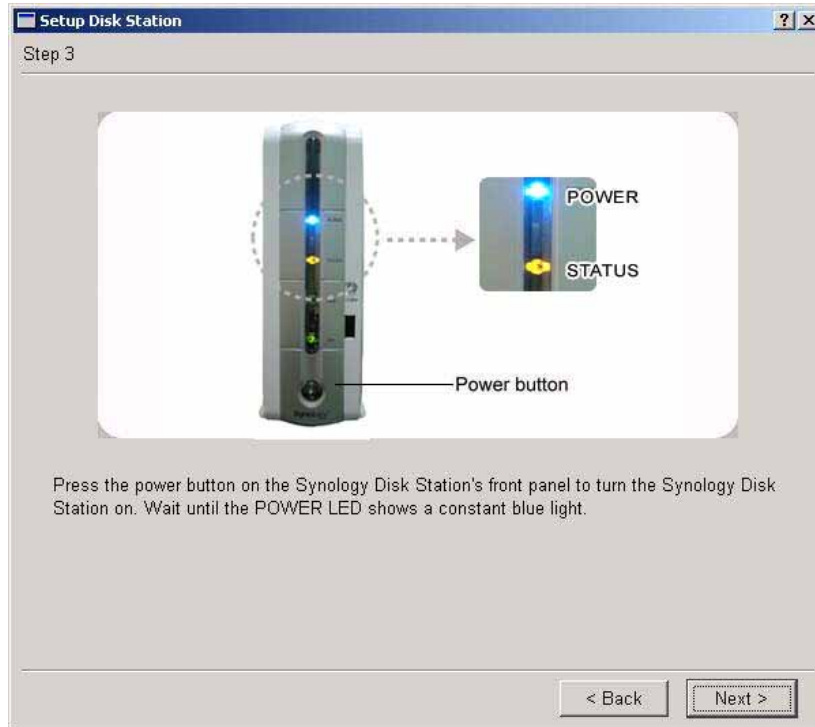
3. The setup of the DS-101j Disk Station is performed using the following steps: Please perform the following steps to complete the setup of the DS-101j Disk Station. Connect the AC power adapter to the DS-101j Disk Station, and plug the AC power cord into a power outlet. Click Next to continue.



4. Plug the RJ-45 LAN cable into the DS-101j Disk Station, and connect the other side of the LAN cable to your switch/hub/router or PC/notebook. Click Next to continue.



5. Press the power button on the DS-101j Disk Station's front panel to turn the DS-101j Disk Station on. Wait until the POWER LED becomes solid in blue light. Click Next to run DSAssistant.



6. DSAssistant will help you to finish the setup simply in a few clicks. If you want to set up more than one DS-101j Disk Station please set them up one by one.
7. DSAssistant will scan the network and list the system that is not configured yet. Click *Yes* to configure the system when the prompt dialogue pops up.
8. If you click *No*, then double-click the un-configured system and set it up.
9. Click Browse to input the path of the installation file (patch file). You may get the installation file from the DS Resource CD in the retail box, or from the Synology website.

10. Choose to set up the Disk Station step by step by yourself, or to complete the system configurations automatically using One-Click Setup. The wizard will then automatically assign a DHCP IP for the system.

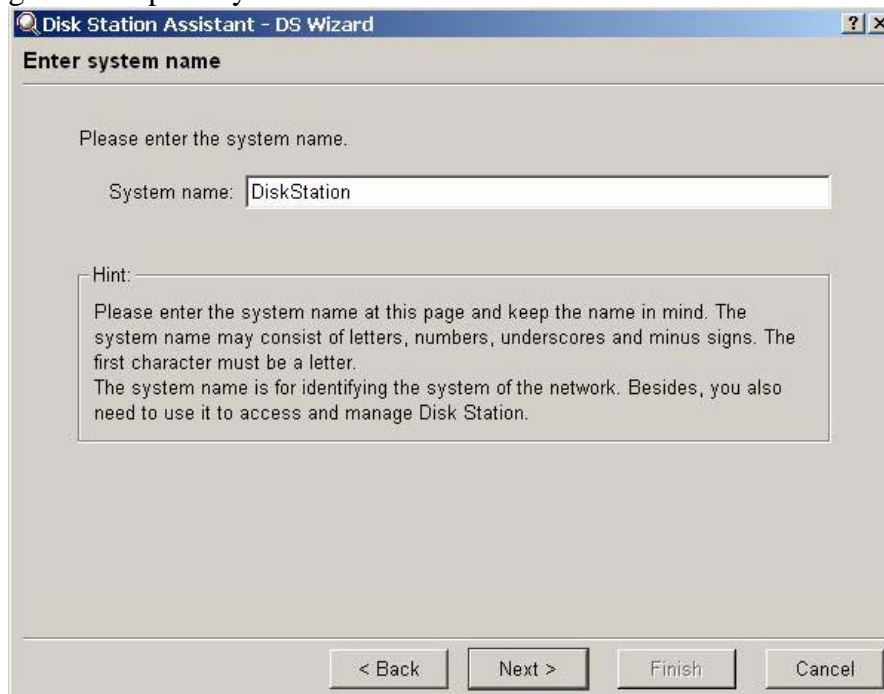


11. If you chose One-Click Setup, please refer to Step 17 to continue.

12. Enter a System name.

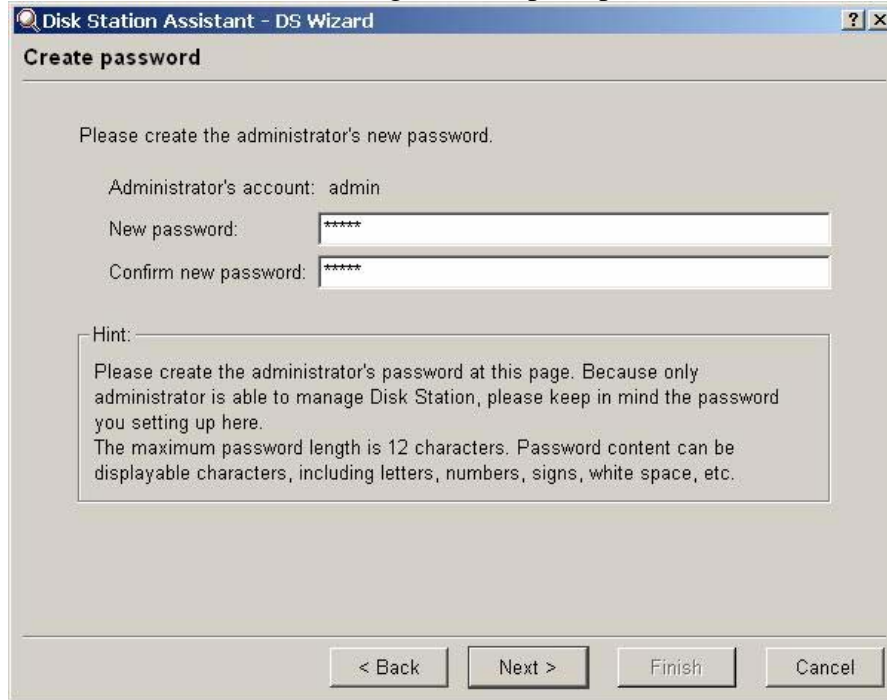
The default system name is DiskStation.

Enter a new system name if you want to change the default one, and click *Next* to go on. Keep the system name in mind for later use.





13. Enter the administrator's password (set the password by yourself) and re-enter to confirm it; then click Next to go on. Keep the password in mind for later use.



The screenshot shows the 'Create password' window of the Disk Station Assistant. The title bar reads 'Disk Station Assistant - DS Wizard'. The main heading is 'Create password'. Below the heading, it says 'Please create the administrator's new password.' The 'Administrator's account' is listed as 'admin'. There are two input fields: 'New password:' and 'Confirm new password:', both containing six asterisks. A 'Hint' box contains the following text: 'Please create the administrator's password at this page. Because only administrator is able to manage Disk Station, please keep in mind the password you setting up here. The maximum password length is 12 characters. Password content can be displayable characters, including letters, numbers, signs, white space, etc.' At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

14. Now, select the network setting. You can get it automatically or you can set the IP manually. Then click Next to go on.



The screenshot shows the 'Setup network' window of the Disk Station Assistant. The title bar reads 'Disk Station Assistant - DS Wizard'. The main heading is 'Setup network'. Below the heading, it says 'Please enter the network settings.' There are two radio button options: 'Get network configuration automatically (DHCP) (recommended)' which is selected, and 'Use manual configuration'. Below these are four input fields: 'IP address:', 'Subnet mask:', 'Default gateway:', and 'DNS server:'. A 'Hint' box contains the following text: 'The suggested network settings is provided for Disk Station based on your current network settings. Please follow our suggestions if you don't want to enter your network settings manually.' At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

15. Please select the time zone of your location. Then enter the date and time of the system. Then click **Next** to continue.

**Disk Station Assistant - DS Wizard**

**Setup time**

Please select your time zone

(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi

Please enter system time

Date: 2004/11/29

Time: 13:52:52

Hint:

Please enter the time zone and date/time of the system at this page.

< Back    Next >    Finish    Cancel

16. Check the settings again and if they are correct, click **Finish**.

**Disk Station Assistant - DS Wizard**

**Configuration report**

The following configurations will be applied:

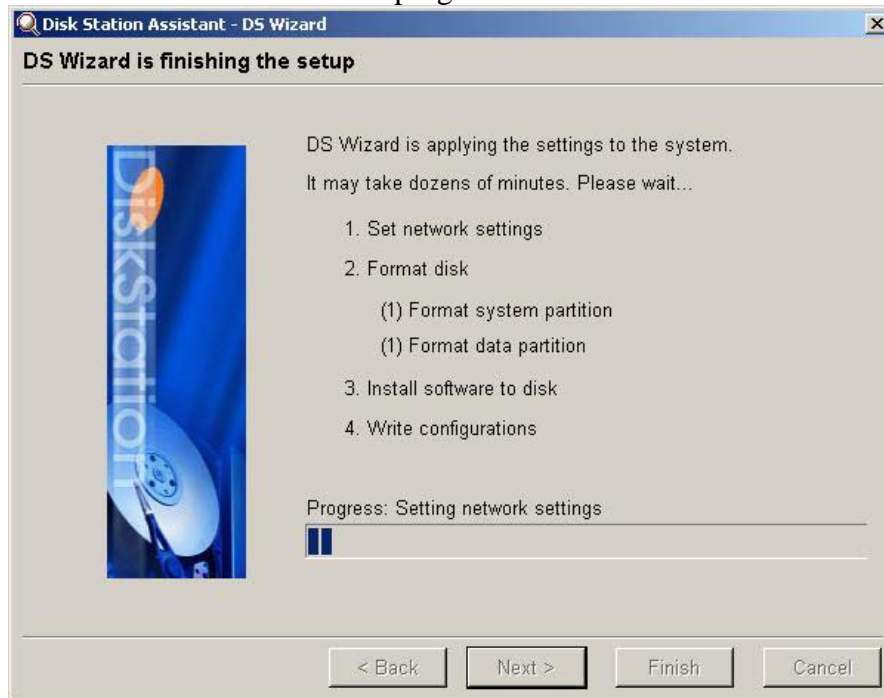
Item	Value
Install file::	//synostorage/DiskStation/Image_XP425_Rele...
Administrator's password:	***
System name:	DiskStation
DHCP:	Enabled
Time zone:	(UTC+08:00) Taipei

Hint:

Here is the summary of all settings what would be applied to the system. If any setting is not suitable, please go back to the previous page to change it.

< Back    Next >    Finish    Cancel

17. Refer to the window to check progress.



18. While the HDD is being formatted, the POWER LED will start blinking again. Please wait until the POWER LED shows a constant blue light, and the STATUS LED a constant green light.

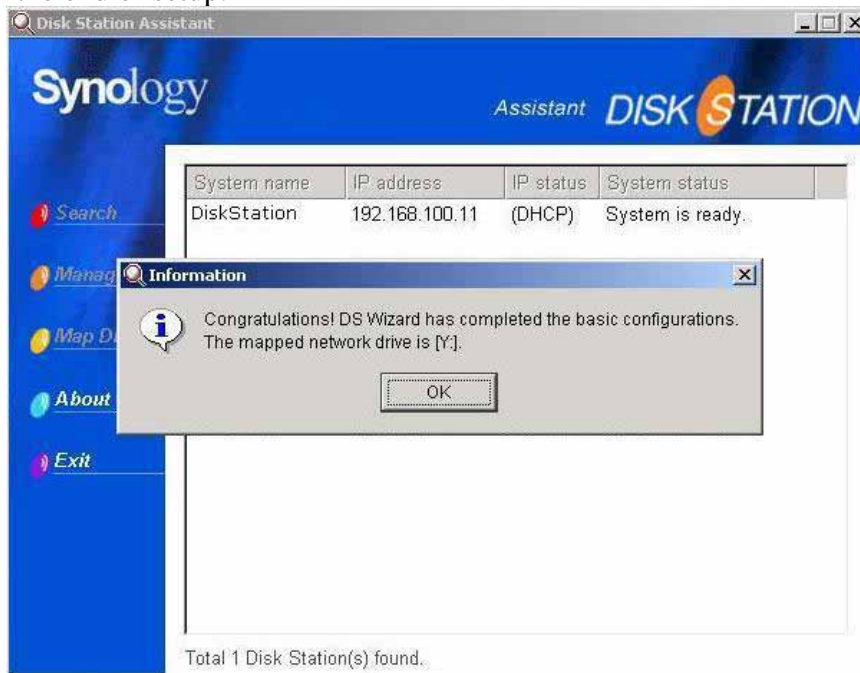


19. Congratulations! The DSAssistant setup has now completed successfully.

Step 3. You can start to use DS-101j Disk Station.

Welcome to use the DS-101j Disk Station; and you can start to store your data.

- 3.1. After the DSAssistant setup completed, please enter the administrator's password which you entered in 3-13, and you can start to use the DS-101j Disk Station.
- 3.2. The system will automatically display the mapped drive/volume (public share), at the end of setup.



- 3.3. You can start to store your data to this drive/volume (public share.)
- 3.4. Other users on the same network can now start using the DS-101j Disk Station. (Refer to the 'Tips' at the following page.)

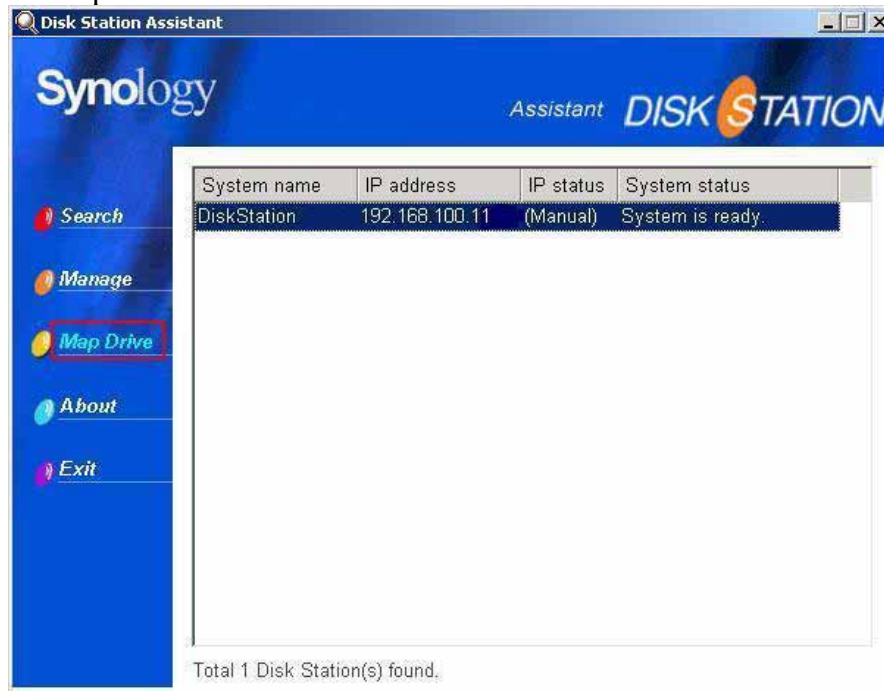
Step 4. Map drive of shared network folder that you will often access in the future.



**Warning: Map drive function is for Windows only.**

Mapping a shared folder as a mapped network drive makes it easy and quick to access the shared folder from My Computer on your desktop.

- 4.1. Choose your DS-101j Disk Station, and click Map Drive on the left side. The Map drive wizard will help you to connect a shared network folder and assign a drive letter to the connection so that you can access it through “My Computer” on your desktop later.



- 4.2. Map drive wizard will list the shared network folders that you can access on the selected DS-101j Disk Station. Click on the folder you want to connect, and click Next to continue.



- 4.3. Enter a user name in Account column, and password in Password column. Click Finish to continue.



- 4.4. You will see the following page if you map a network drive successfully. You can either enter the shared folder by clicking Finish button or through “My Computer” later on.



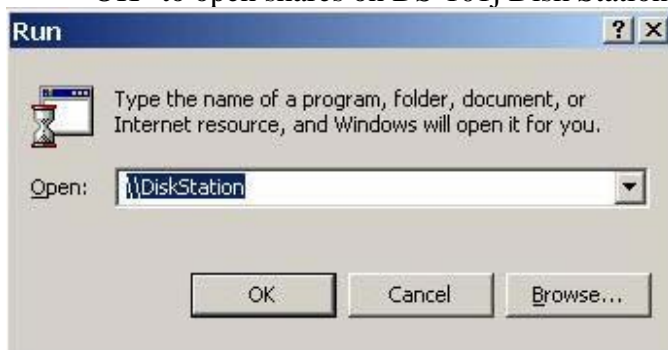
### 3.2. Tips – Without DS Resource CD, you can also use and manage DS-101j easily with the following tips.

#### 1. Copy or access data on DS-101j Disk Station from PC.

1.1 Click “Start” at the bottom. Select “Run” and click it.



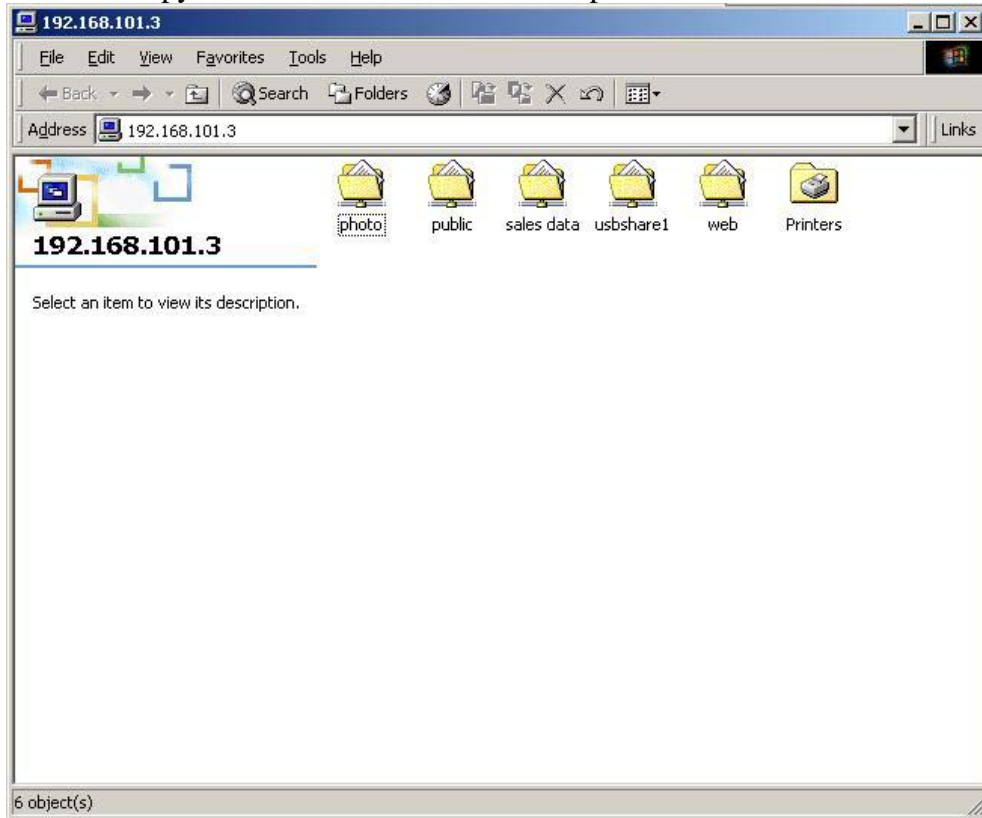
1.2 Enter “\\system-name” (type two backslashes followed by the system name; the system name should be the same as what you entered in 3-12; and if you didn’t change the system name, please enter \\DiskStation) and click “OK” to open shares on DS-101j Disk Station.



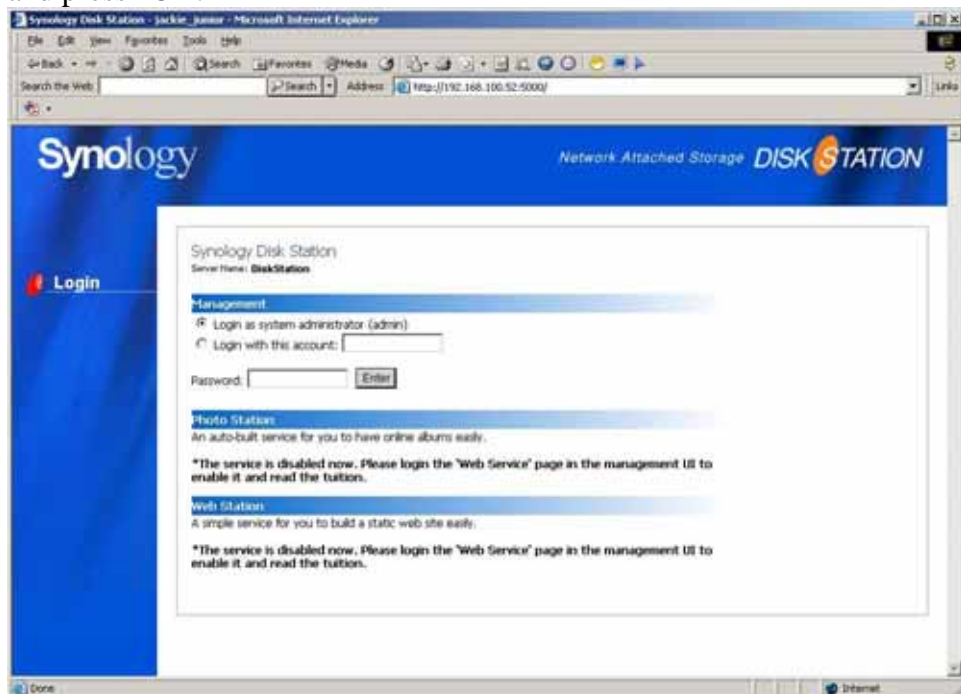


1.3 Then you can see all shares that can be used, including the public share.

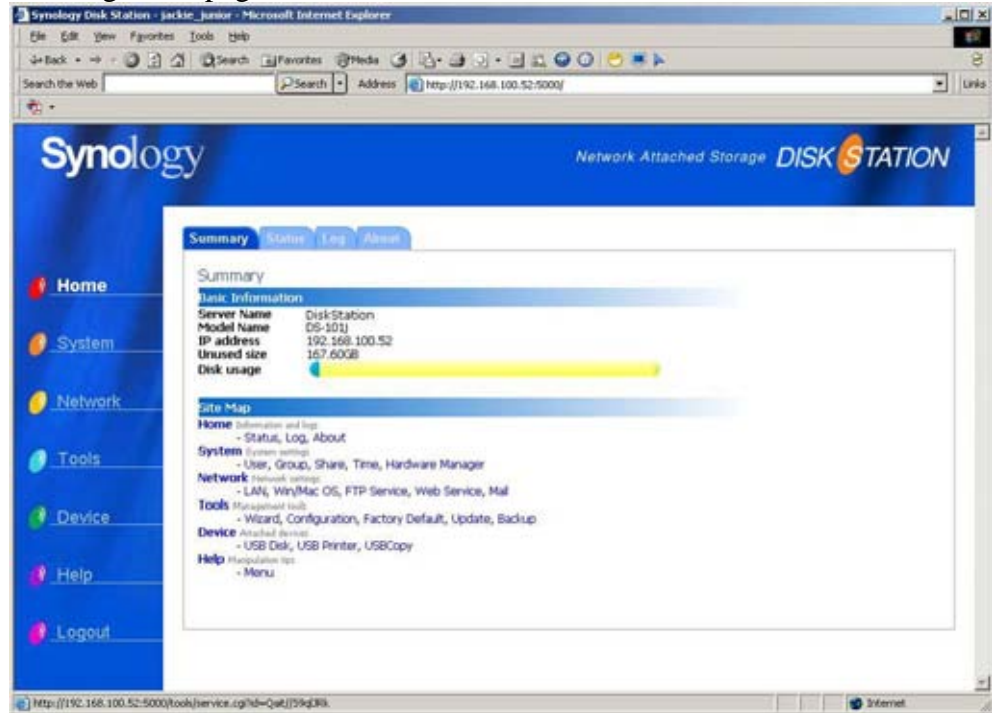
Access “public” and then you can start to use this folder. For example, you can copy some data and store it to this “public” folder.



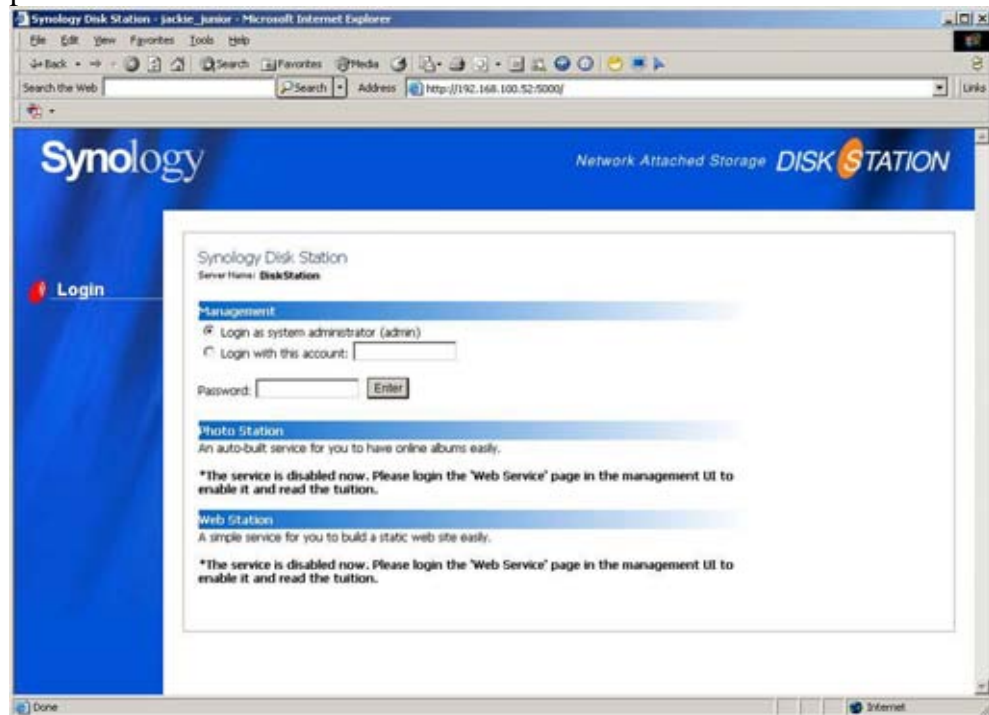
2. Use Microsoft Internet Explorer to manage DS-101j Disk Station from PC or Mac.
  - 2.1 Open your Microsoft Internet Explorer. (IE 6.0 or above for PC, 5.2 or above for Mac.)
  - 2.2 Enter “http:// system-name:5000” (type two forward slashes followed by the system name; the system name should be the same as what you entered in 3-12. If you didn’t change the system name, please enter <http://DiskStation:5000>) and click “Go” button.
  - 2.3 Select “Login as system administrator” and enter the administrator’s password (the password should be the same as what you entered in 3-13) and press “OK.”



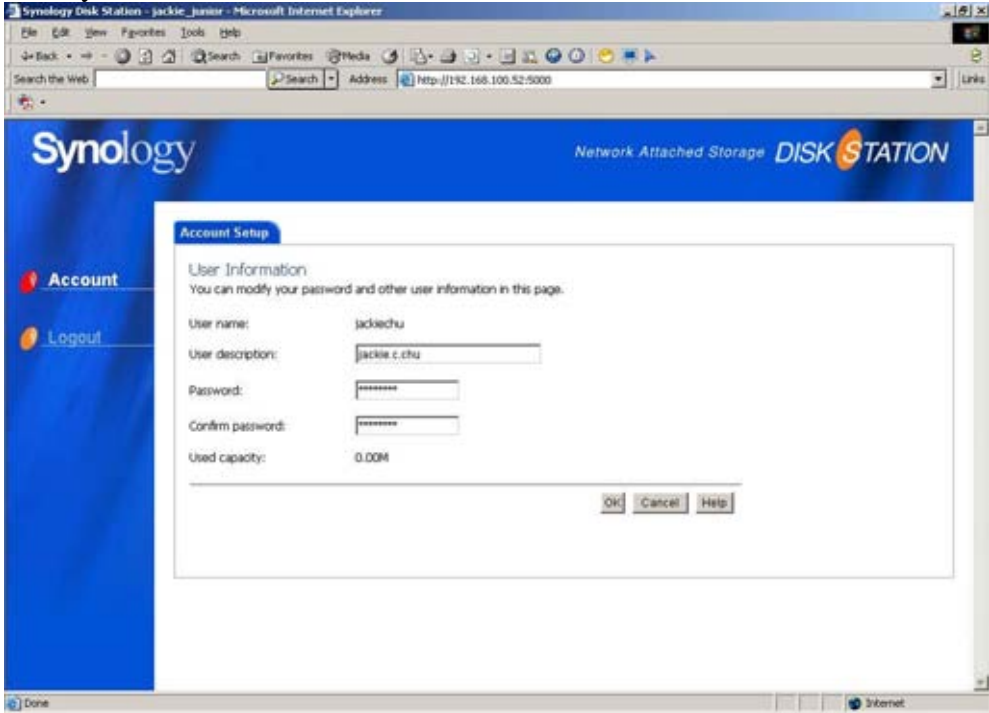
2.4 Then you can start to manage your DS-101j Disk Station from the management page.



3. Use Microsoft Internet Explorer to change your user information on DS-101j Disk Station.
  - 3.1 Open your Microsoft Internet Explorer. (IE 6.0 or above for PC, 5.2 or above for Mac.)
  - 3.2 Enter “http:// system-name:5000” (type two forward slashes followed by the system name; the system name should be the same as what you entered in 3-12. If you didn’t change the system name, please enter <http://DiskStation:5000>) and click “Go” button.
  - 3.3 Select “Login with this account”, and enter the user name and the password (the password would be the one assigned by the system administrator) and press “OK.”



3.4 Then you can view your account information on this Disk Station and modify it.



## Chapter 4 Manage your DS-101j Disk Station



**Please note that the DS-101j Disk Station only supports browser based management using Internet Explorer 6.0 or above for PC, 5.2 or above for Mac.**

### 4.1 Home (Home Information)

#### 1. Summary

In this page you can see the basic information of the system, including your server name, IP address, unused space, and disk usage. You can also see the clear sitemap shown in the middle of this page. By clicking an item listed in the sitemap, you may directly enter the section you want to visit.

The screenshot shows the Synology Disk Station web interface in Microsoft Internet Explorer. The browser window title is "Synology Disk Station - jackie\_junior - Microsoft Internet Explorer". The address bar shows "http://192.168.100.52/5000/". The page features a blue header with the Synology logo and "Network Attached Storage DISK STATION". A left sidebar contains navigation links: Home, System, Network, Tools, Device, Help, and Logout. The main content area has tabs for "Summary", "Status", "Log", and "About". The "Summary" tab is active, displaying the following information:

Basic Information	
Server Name	DiskStation
Model Name	DS-101j
IP address	192.168.100.52
Unused size	167.60GB
Disk usage	

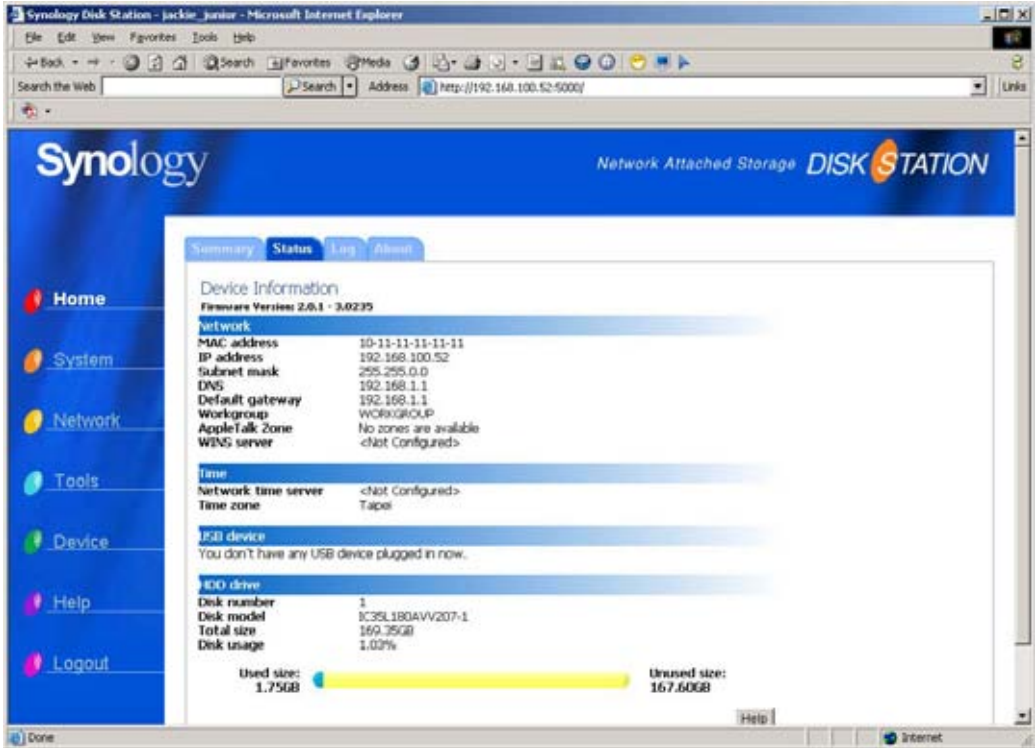
Below the basic information is a "Site Map" section with the following links:

- Home** - Information and logs
  - Status, Log, About
- System** - System settings
  - User, Group, Share, Time, Hardware Manager
- Network** - Network settings
  - LAN, Win/Mac OS, FTP Service, Web Service, Mail
- Tools** - Management tools
  - Wizard, Configuration, Factory Default, Update, Backup
- Device** - Attached devices
  - USB Disk, USB Printer, USB Copy
- Help** - Manipulation tips
  - Menu

The status bar at the bottom of the browser window shows the URL "http://192.168.100.52:5000/books/service.cgi?d=QatJ59dJ3K" and the "Internet" icon.

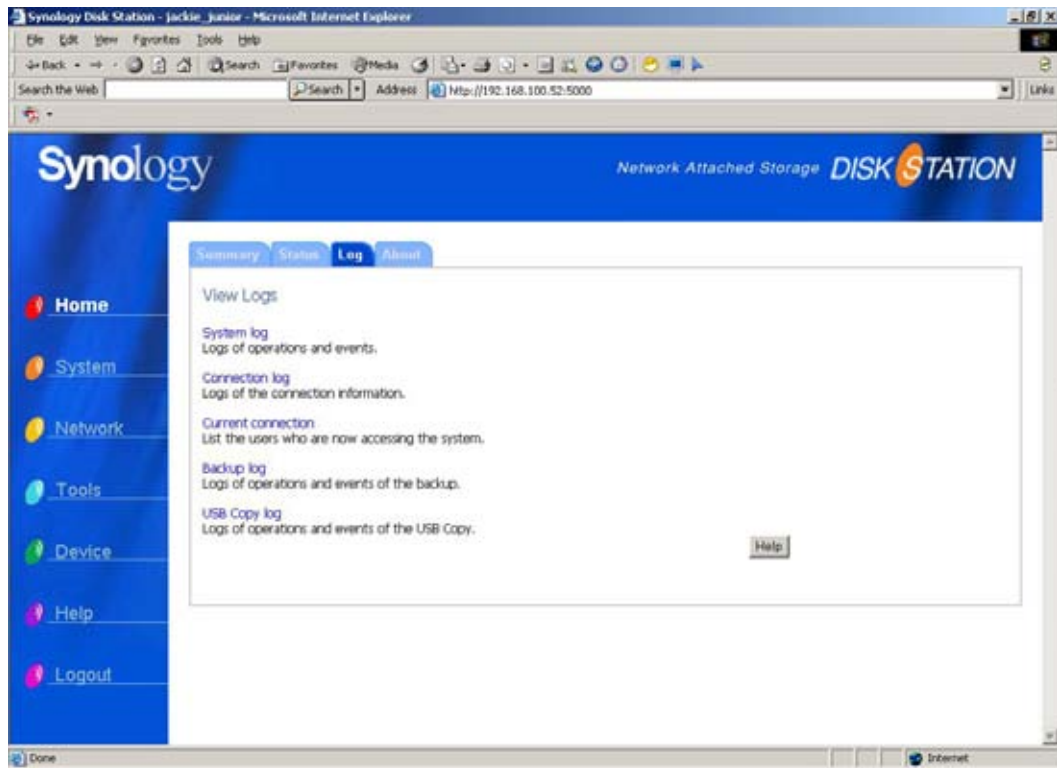
2. Status

In this page you can see a summary of all system devices and their status. The information is only for your reference. You will not be able to do any modifications here. If you want to change any settings, please go to Wizard in Tools. (4.4-1)



### 3. Log

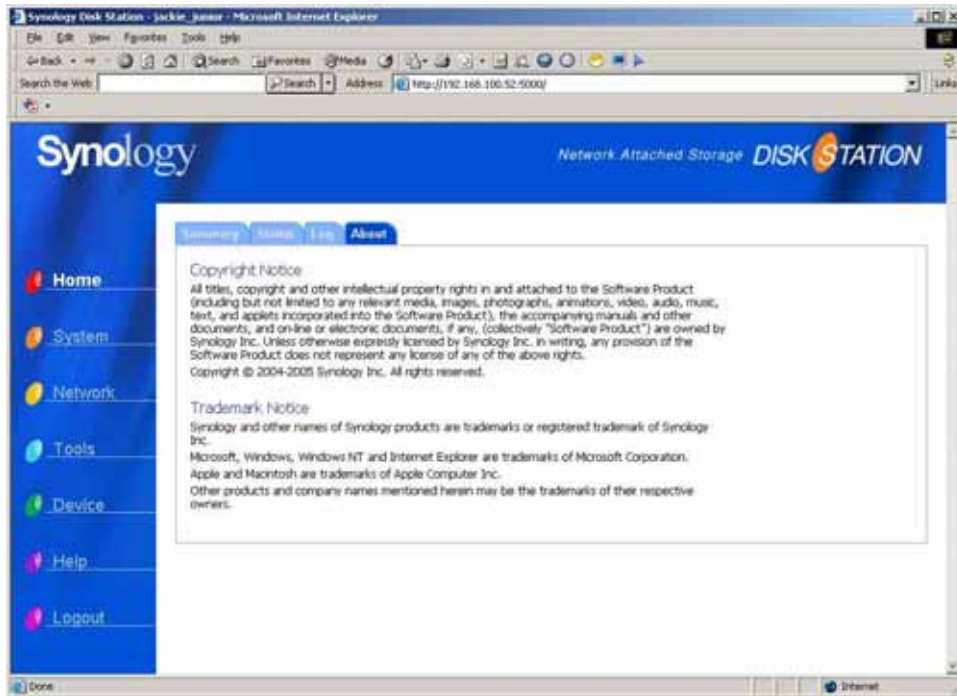
In this page you can see five items, which are System log, Connection log, Current connection, Backup log, and USB Copy log. These five logs are just like a diary keeping a record of all the actions and events on the DS-101j Disk Station. In this way, you will be able to know what has happened on your DS-101j Disk Station by checking these logs, furthermore, you can also check the users who are now accessing the system resources.





#### 4. About

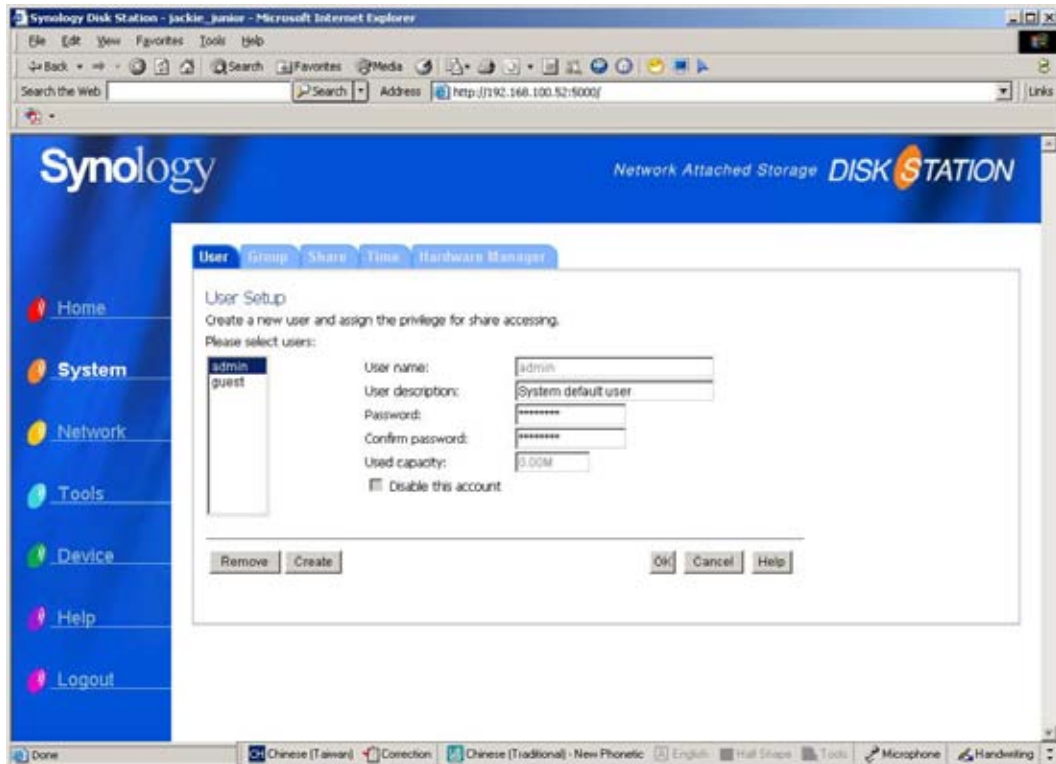
In this page we have put our Copyright Notice and Trademark Notice for your reference.



## 4.2 System (System Setting)

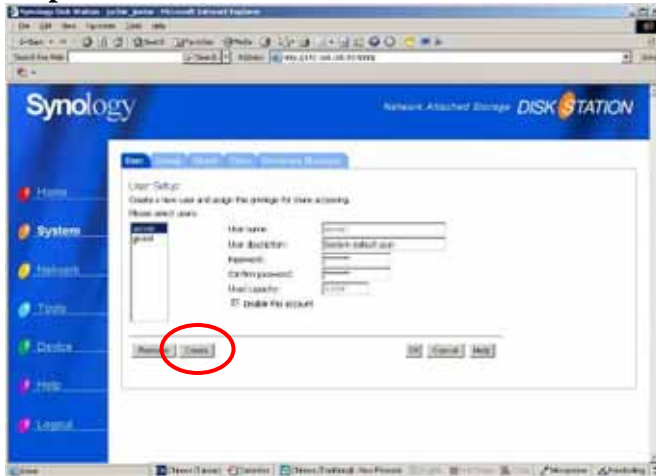
### 1. User

In this page you may add or remove users who can access the DS-101j Disk Station. A user account is assigned its name and password by the administrator. This password is used to obtain the data inside the shared folder. If a user does not have the proper user account credentials, they will be denied when accessing data.



## To create a new user

**Step 1** Click **Create** button to add a new user.



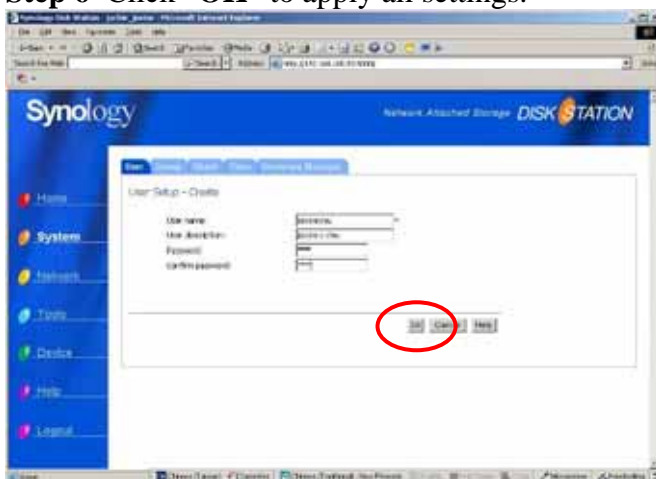
**Step 2** Enter the name of the user in the **User name** column; this should reflect the user added.

**Step 3** Enter the user's full name in the **User description** column. The user description will help to identify different users on the DS-101j Disk Station.

**Step 4** Enter the user's password. The password is associated with the user. It can be up to 12 characters and can contain hyphens, spaces, and underscores.

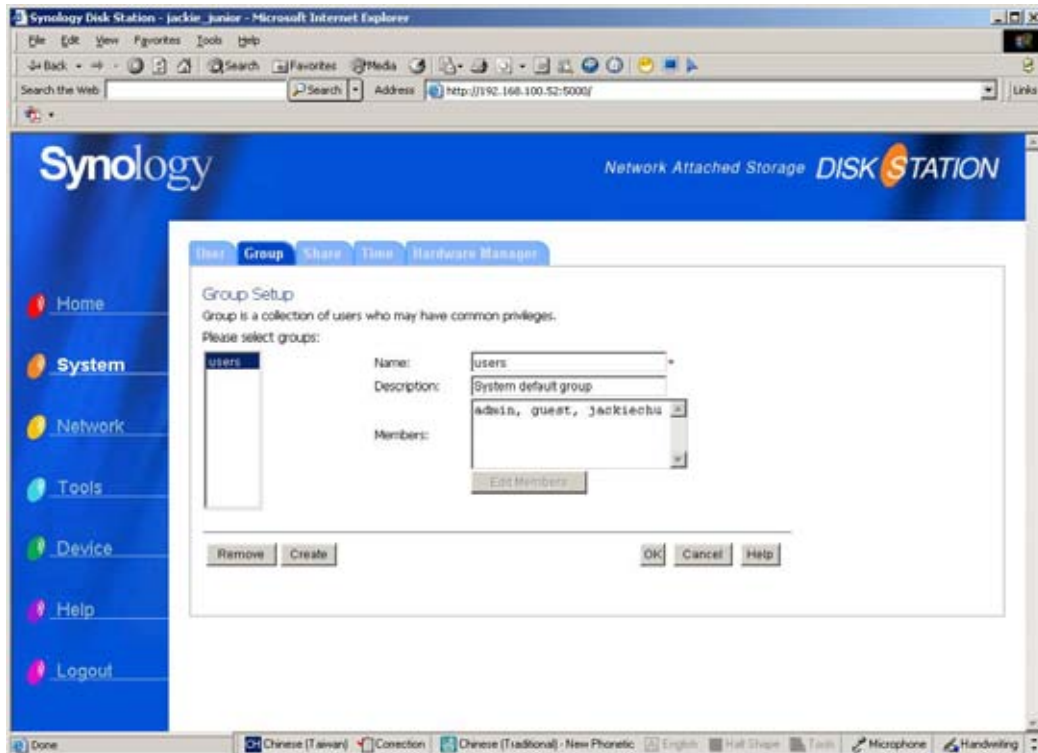
**Step 5** Re-enter the password for confirmation. The password can be changed at a later time by editing the user's settings.

**Step 6** Click "OK" to apply all settings.



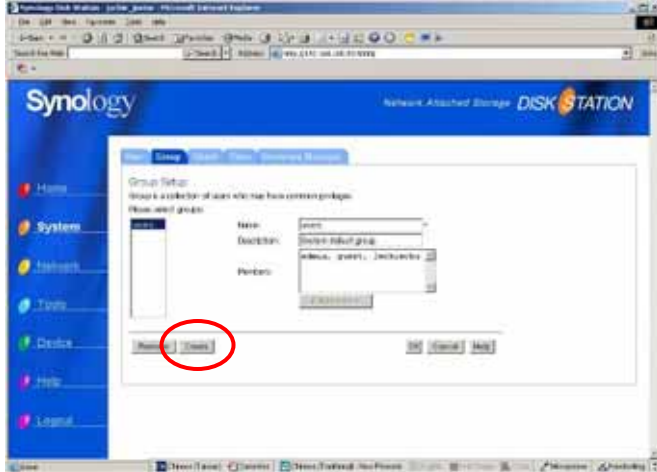
## 2. Group

In this page you may classify users who can access to DS-101j Disk Station into groups. Setting up groups can help you assure data security. For example, a user group is a group of users with specific access privileges to a specific shared folder. You can create groups here as well. For example, a businessman may want to create an “Executive” group for adding all of its managers and supervisors to this group. This “Executive” group could have the access privilege to a shared folder that other regular staff cannot access to.



## To create a new group

**Step 1** Click **Create** button to add a new user group.

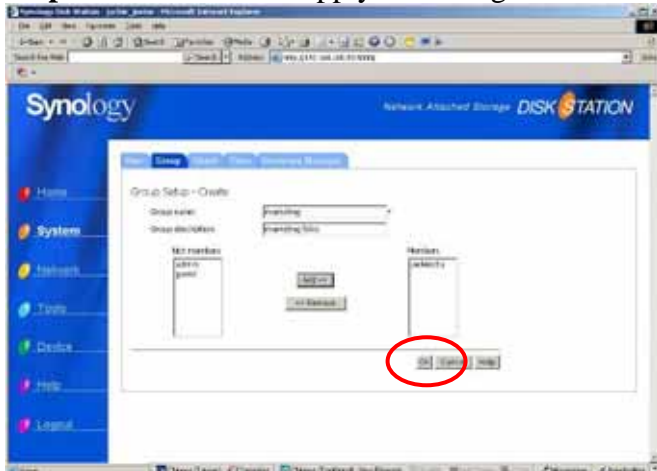


**Step 2** Enter the name of the group in the **Group name** column; this should reflect the types of users added.

**Step 3** Enter a description of the group added in the **Group description** column. The group description is used to identify different groups on DS-101j Disk Station. One brief sentence or phrase regarding the users inside of the group is suggested.

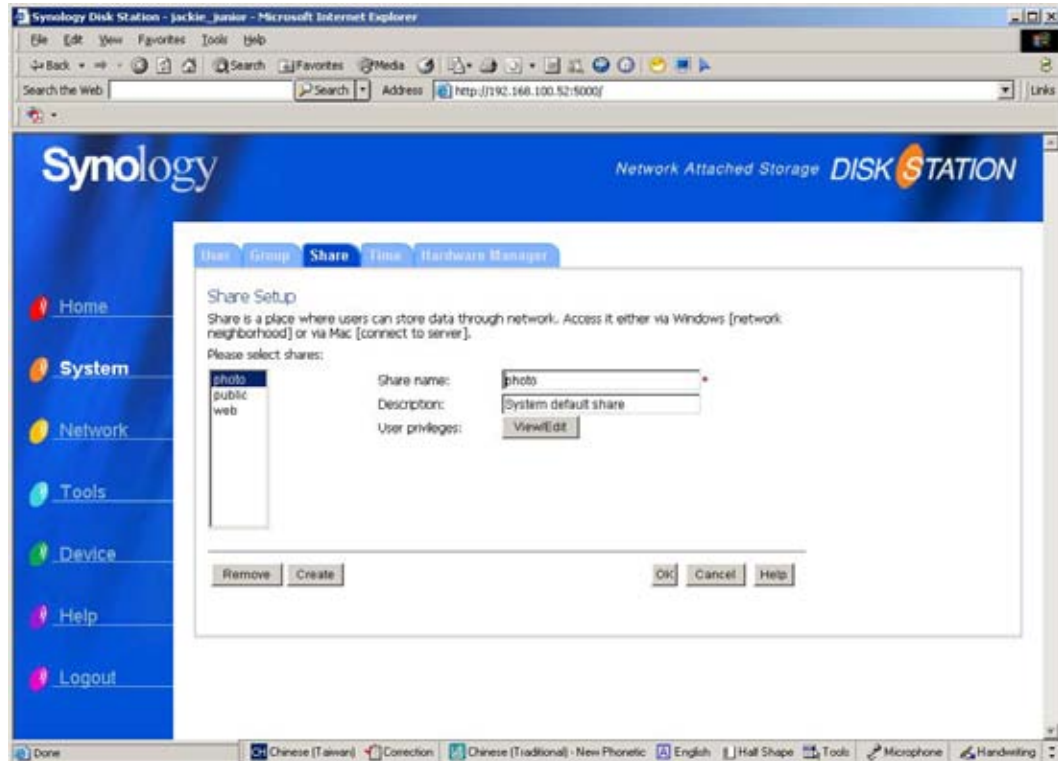
**Step 4** Select the users in the **Not members** column to be added to this new group as its members. Users can be added or members can be removed to the group at a later time by editing the user group.

**Step 5** Click “OK” to apply all settings.



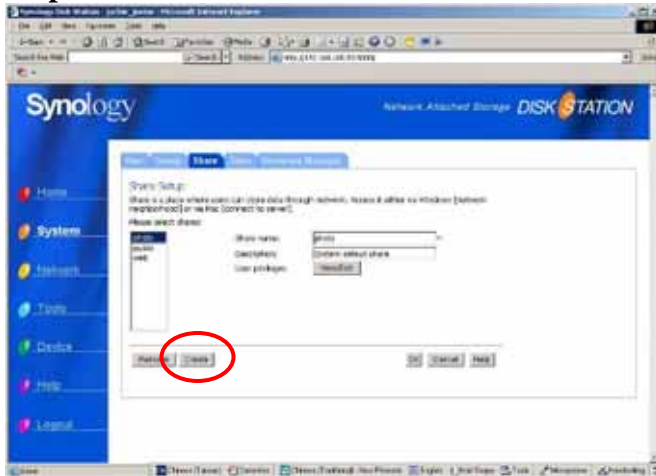
### 3. Share

In this page you may create folders so that you can store data on the DS-101j Disk Station via network. Meanwhile, you may also assign access privileges of users or groups on the local network. Access to shares can be controlled via Group and User permissions. By default, there are two shares called “public” and “usbshare” that cannot be deleted.



## To create a new share

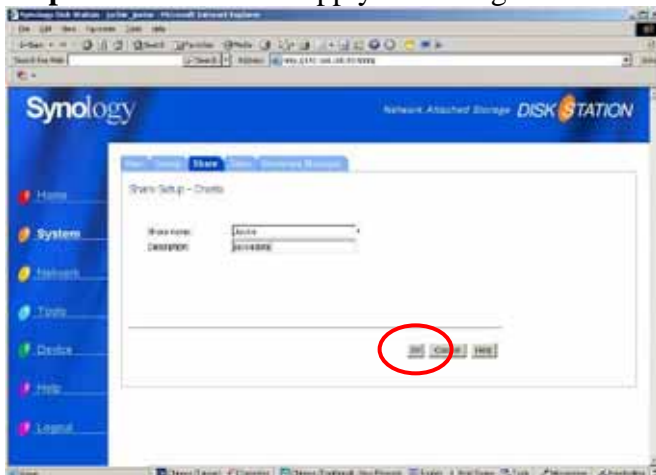
**Step 1** Click **Create** button to add a new share.



**Step 2** Enter the name of the share in the **Share name** column; this should reflect the purpose of shares added.

**Step 3** Make some description about the share added in the **Description** column. The share description is used to identify different shares on the DS-101j Disk Station. One brief sentence or phrase regarding the use of the share is suggested.

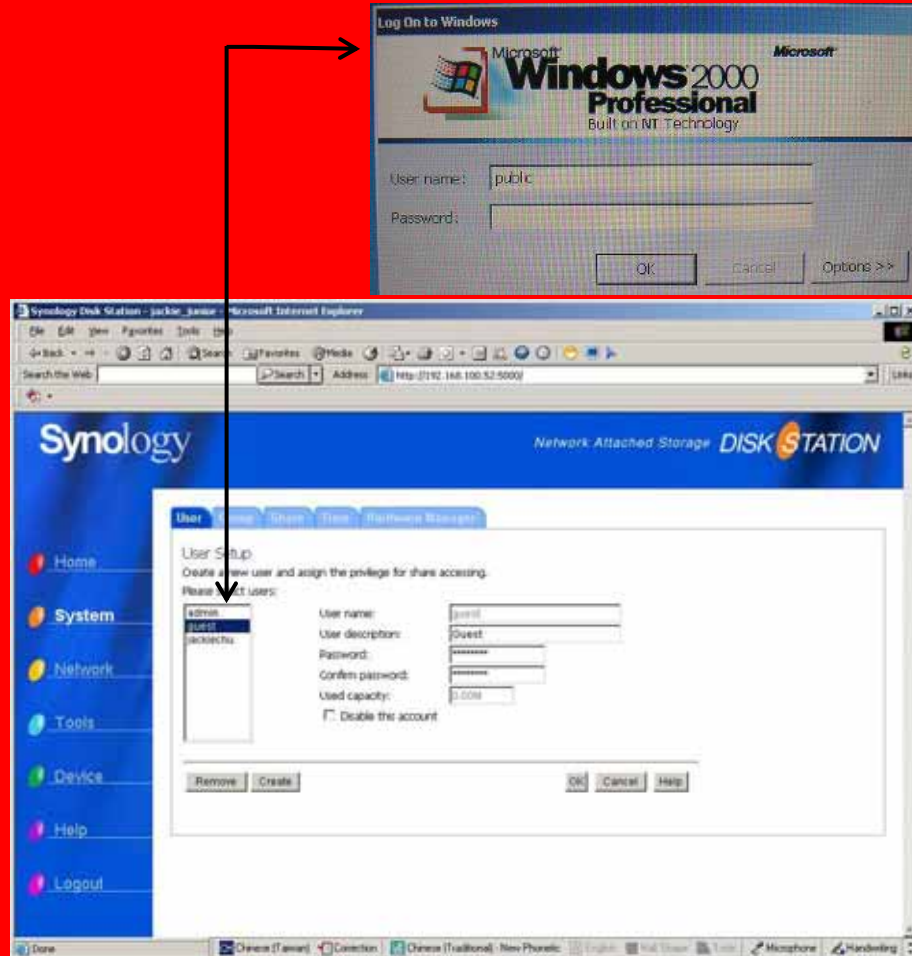
**Step 4** Click “OK” to apply all settings.



To assign privileges of users and groups to access shares:

**Warning: Before you assign access privileges, please note two following points:**

**If your account name is not on the user list, the system will automatically transform your account name into “guest”. So that you won’t be able to access the share folder, which was set to be accessed by some specific users or groups.**

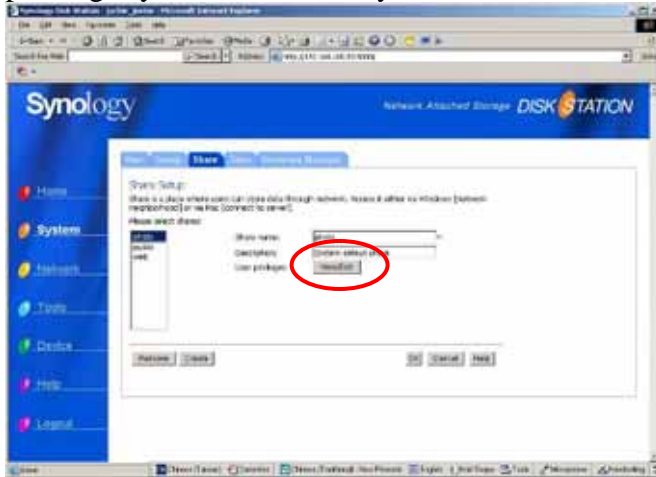


**If you must assign privilege to secure shares, we strongly suggest you:**

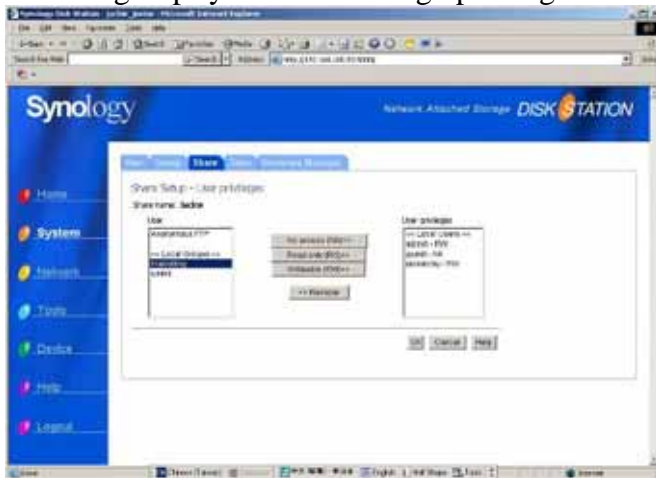
- a. Go to User in System (P. 41 in User’s Guide) to change the password of guest. The proper password should be non-blank.
- b. Go to User in System (P.41 in User’s Guide). Select “guest” and check the box in front of Disable this user. Then click OK to apply the setting.



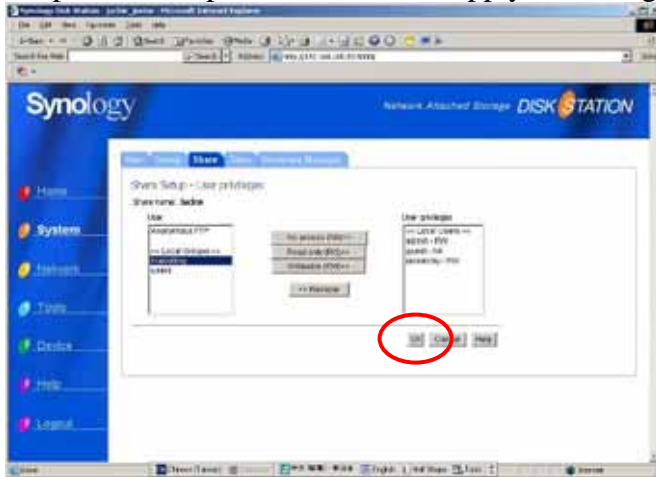
**Step 1** Click **Edit** to turn on users or groups permissions. By assigning different access privileges you have the ability to secure a share.



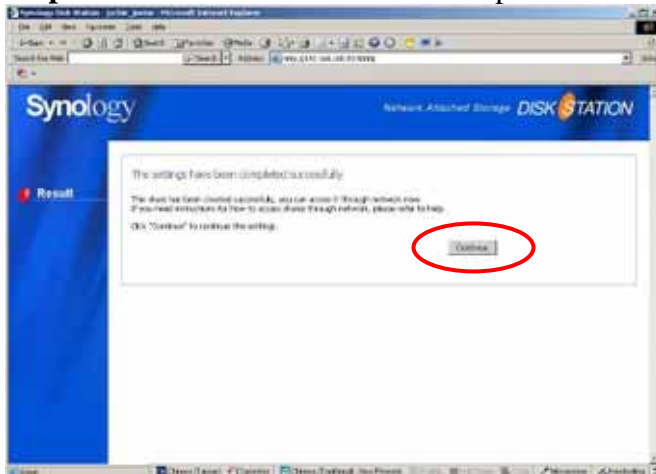
**Step 2** You can assign different privileges to users or groups. There are three kinds of privileges which are No access (NA), Read only (RO), and Writeable (RW). Click on the users or groups you want to assign privileges to.



**Step 3** Click the privilege button you wish to assign to the users or groups you chose in the previous step, and click **OK** to apply all setting.



**Step 4** Click **Continue** button to complete the settings you made.



#### 4. Time

In this page you may set up time. The time must be set to work on exact schedule and maintain proper logs. Choose the time zone first so the DS-101j Disk Station can configure the time correctly. You can either set the proper time and date manually or connect to an NTP (Network Time Protocol) time server. The server will help you to set up the time automatically.

#### NTP (The Network Time Protocol)

NTP time server is widely used in the Internet to synchronize computer clocks to a standard time. There are several suggested NTP time servers for Windows clients as follows. You may also go to <http://www.eecis.udel.edu/~mills/ntp/servers.html> for more information about NTP time server.

time.apple.com

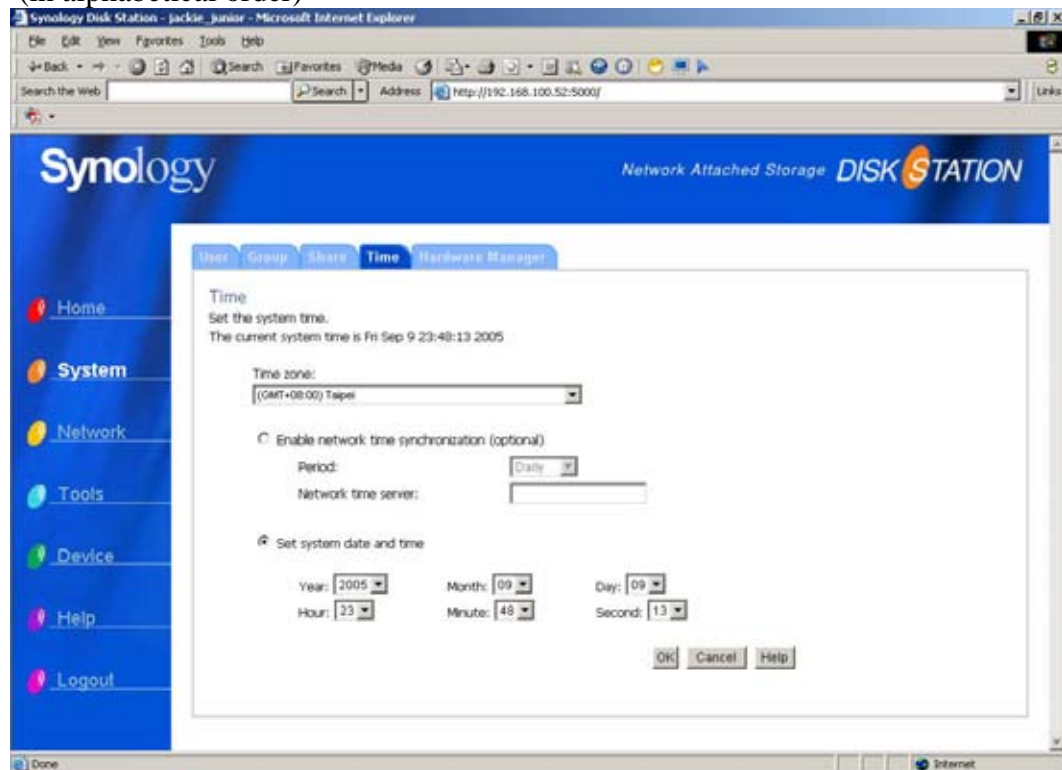
time.asia.apple.com

time.euro.apple.com

time.nist.gov

time.windows.com

(in alphabetical order)



## 5. Hardware Manager

In this page we provide three services.

### Power Recovery

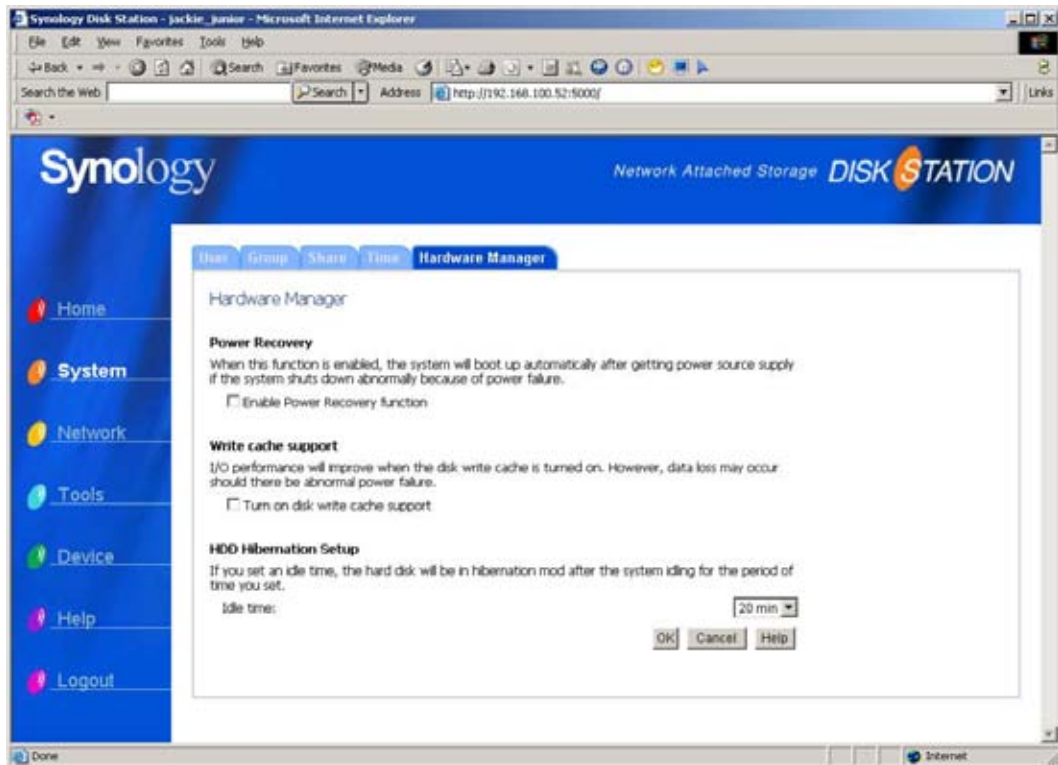
Check the checkbox to enable the Power Recovery function. The system will boot up automatically when power is supplied after the system shuts down abnormally because of power failure.

### Write Cache Support

Check the checkbox to turn on disk write cache support. Disk write cache is only effective on the hard disks that support it. I/O performance will improve when the disk write cache is turned on. However, data loss may occur in the event of abnormal power failure.

### HDD Hibernation Setup

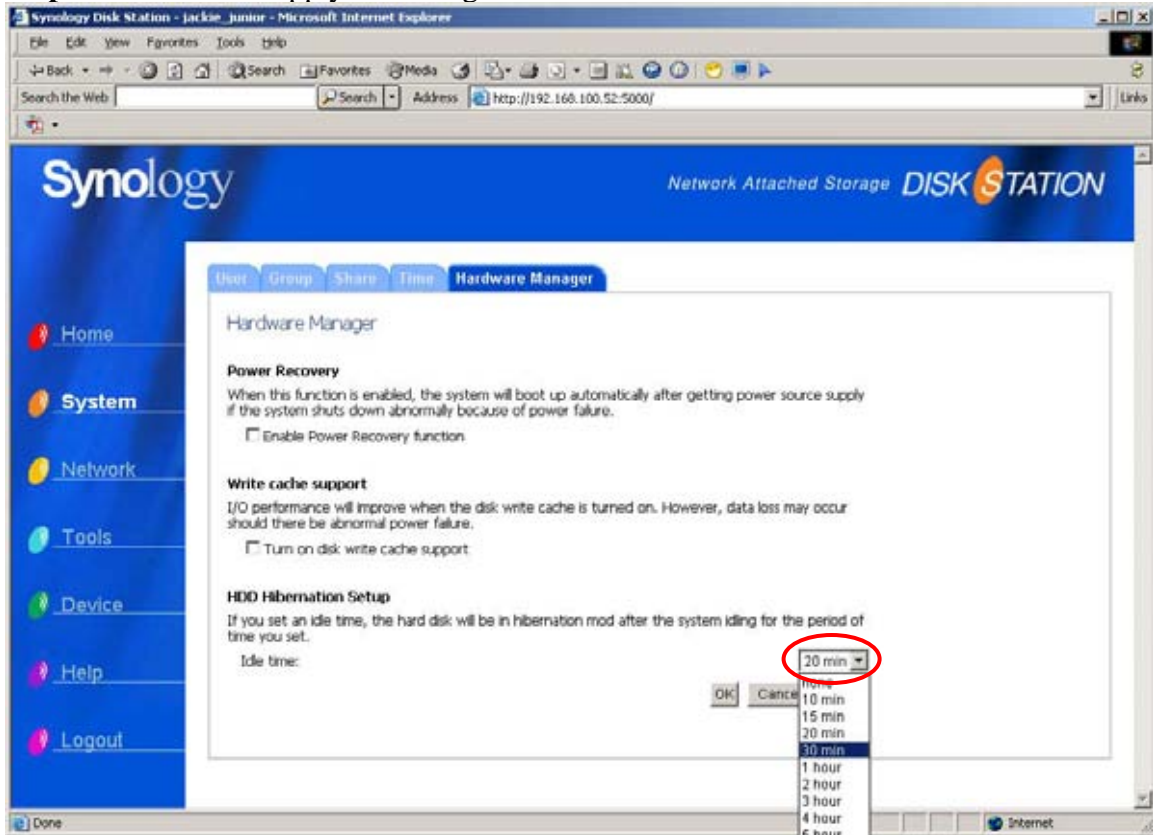
This function allows you to set the length of time the DS-101j Disk Station will wait before putting the internal HDD into sleep mode. The DS-101j Disk Station will start the HDD again when it is accessed.



## To set up the time

**Step 1** Click the **Idle time** column, and select the time you wish.

**Step 2** Click **OK** to apply all setting.

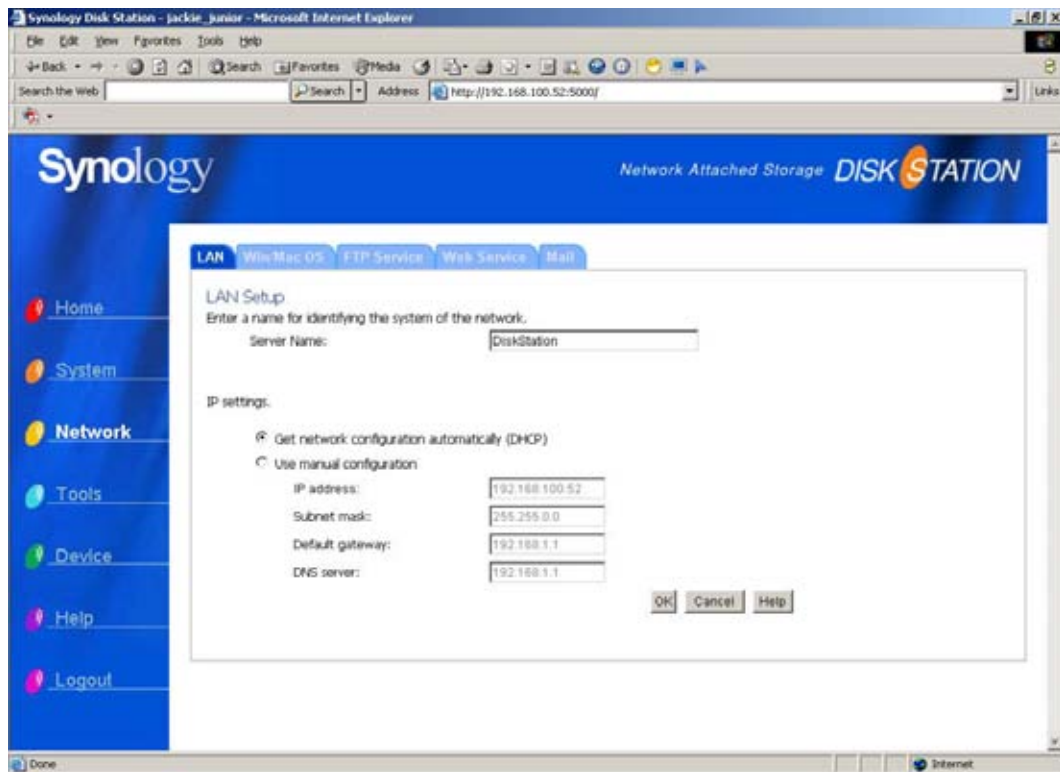


## 4.3 Network (Network Setting)

### 1. LAN

In this page you will have to enter a server name for identifying the system on the network.

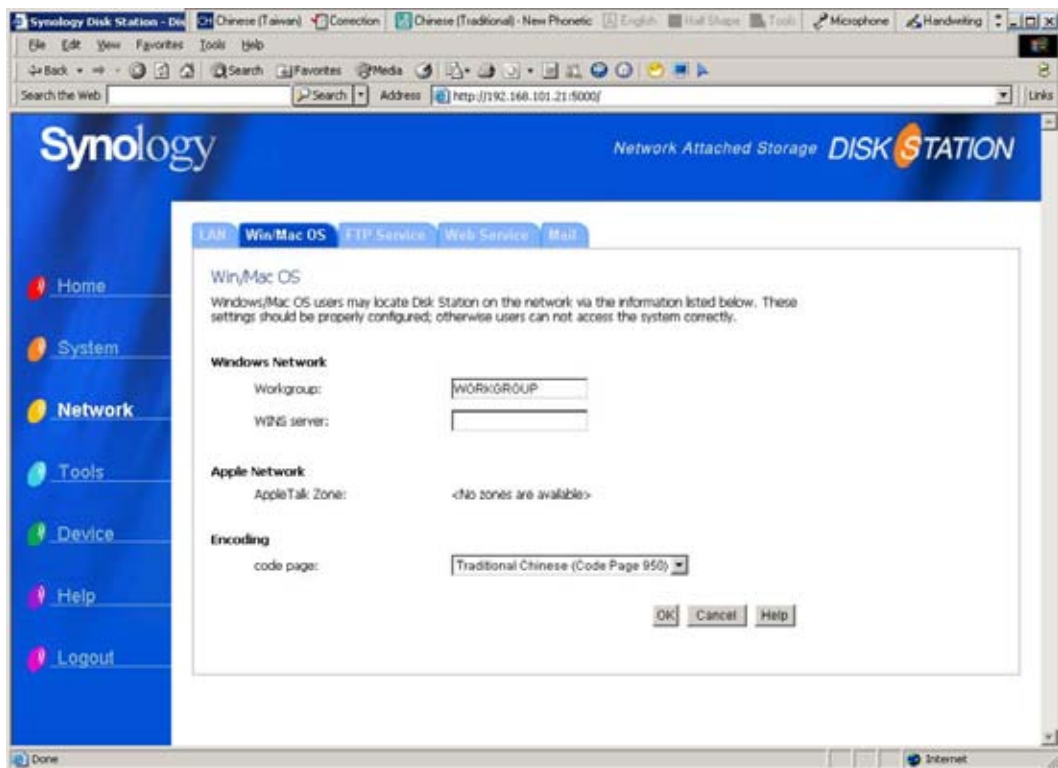
Below this you need to choose an IP setting. By default, the DS-101j Disk Station will attempt to obtain an IP address from a DHCP server. If there is no DHCP server available you can assign an IP manually based on your network environment.



## 2. Win/Mac OS

In this page, the setting of Workgroup or AppleTalk Zone allows you to access the DS-101j Disk Station through “My Network Places.” Workgroups and Zones are used to organize networks. A Workgroup is a collection of Windows computers on the same network; a Zone is a logical grouping unit of all devices on an Apple Network.

If you want the DS-101j Disk Station to be browsed through “My Network Places” then it needs to be placed in the same Workgroup as the PC’s on the network. The same is true for Macs needing to be in the same AppleTalk Zone. We suggest you do not change the encoding setting selected automatically by the system. For the system will select the according code page by itself. We’ll explain Workgroup, AppleTalk Zone, and Encoding in detail on the next page.



## Workgroup

A Workgroup means a collection of computers that are under the same network; setting workgroups allows you to manage network access easily. You can determine the Workgroup and WINS server IP.

\*\* WINS (Microsoft Windows Internet Name Service)

WINS is a Net BIOS name-to-IP-address mapping service, so it is easy for Windows users to configure and register their DS-101j Disk Station through TCP/IP with a WINS server.

## AppleTalk Zone

An AppleTalk Zone is a logical grouping of devices in an Apple Network. You can select the Zone or the DS-101j Disk Station will join the default Zone automatically if an AppleTalk Zone is configured.

## Encoding

Choose the appropriate encoding from the drop-down menu, so even if your PC doesn't support Unicode, you can still access the device and see all information in the correct language.

\*\* If only the local language is used in your working environment, there is no need to change any code page settings, just load its default. For example, if the local language is English, and all files or folders are named in English as well, then it is unnecessary to change any code page settings, just follow its default.

\*\* If it is needed to recognize a non-English local language, it is suggested to select the local language character encoding.

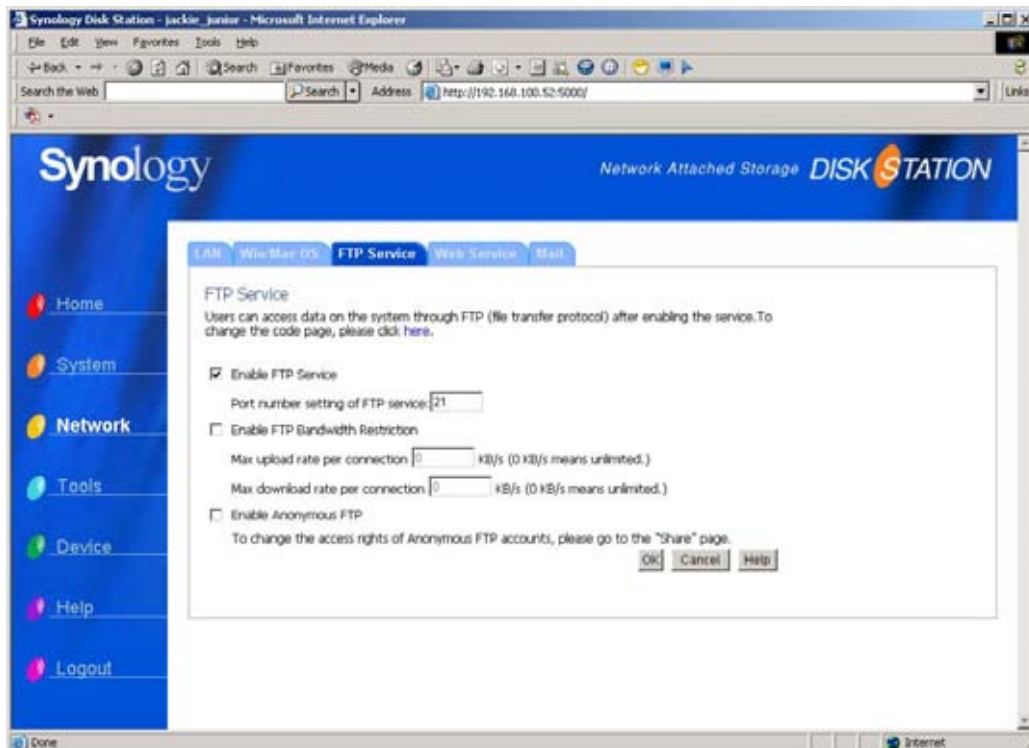


### 3. FTP Service

DS-101j Disk Station offers a facility for downloading or uploading all kinds of data easily and efficiently using Microsoft Internet Explorer 6.0 or above.

This page allows you to control whether the FTP service is available. Check the **“Enable FTP Service”** checkbox and click **“OK”**. Users are required to enter their passwords before they can start to use the FTP service. If you want to grant access rights to anonymous users, check the **“Enable Anonymous FTP”** checkbox and click **“OK”**. System administrators should later go to **System-Share** to grant the access rights to the user **“Anonymous FTP”**.

You can also set the bandwidth for uploading or downloading data from the FTP site. Check the **“Enable FTP Bandwidth Restriction”** checkbox, enter the transfer rates you wish, and click **“OK”**. If you set the transfer rate to 0, the bandwidth will be unlimited.



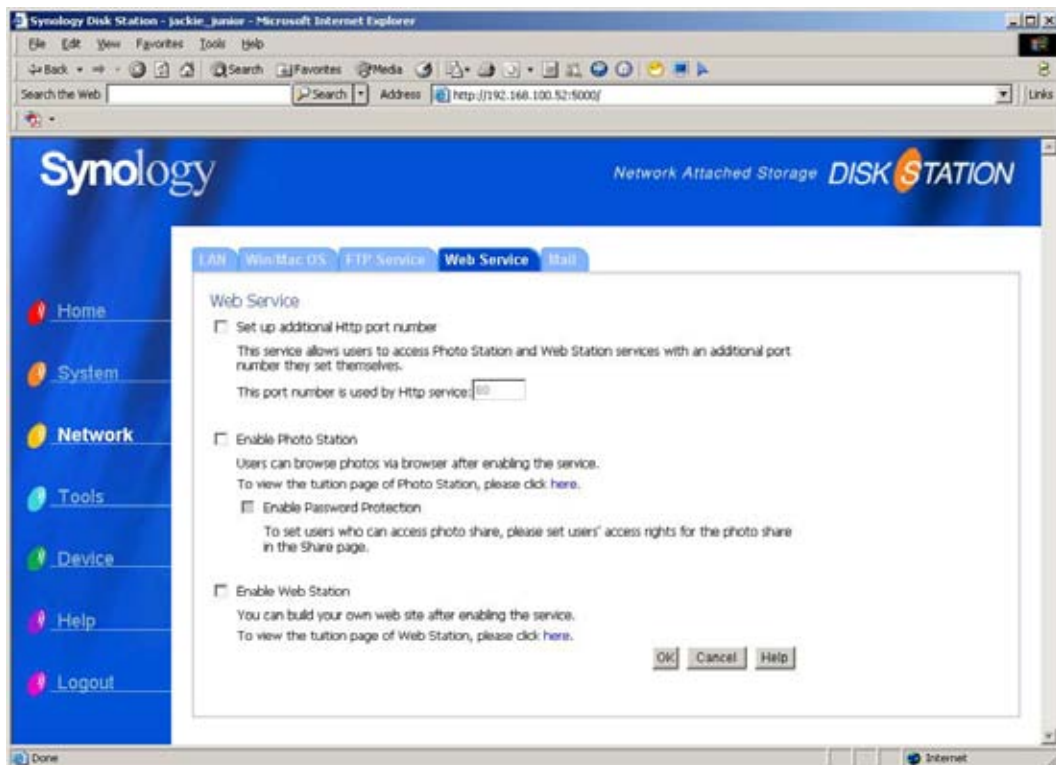
**The FTP service does not support Unicode. Before enabling the FTP service, please set the encoding in accord with your client PC. Click here in the middle of the page, and the page will jump to the previous one (Win/ Mac OS). You may then select the code page you need.**

**Systems that support Unicode:**  
Windows 2000 or later

#### 4. Web Service

DS-101j Disk Station offers Synology Photo Station as an online album, and Synology Web Station as a web server. The Synology Photo Station is an auto-build service that will generate image files automatically, allowing users to easily create online albums. The Synology Web Station is a simple service for building a static web site easily with .html files.

This page allows you to set the port numbers for accessing Photo Station and Web Station and to control the availability of these two functions. Check the **“Enable Photo Station”** checkbox and click **“OK”**. Users can then browse photos on the DS-101j Disk Station through Synology Photo Station. If you want to allow access rights to specified users only, check the **“Enable Password Protection”** checkbox and click **“OK”**. Users must have **“readable”** permission to **“photo”** share, and are required to enter a user name and password before they can log in to Synology Photo Station. Check the **“Enable Web Station”** checkbox, and click **“OK”**. The web site can then be browsed through the Internet.

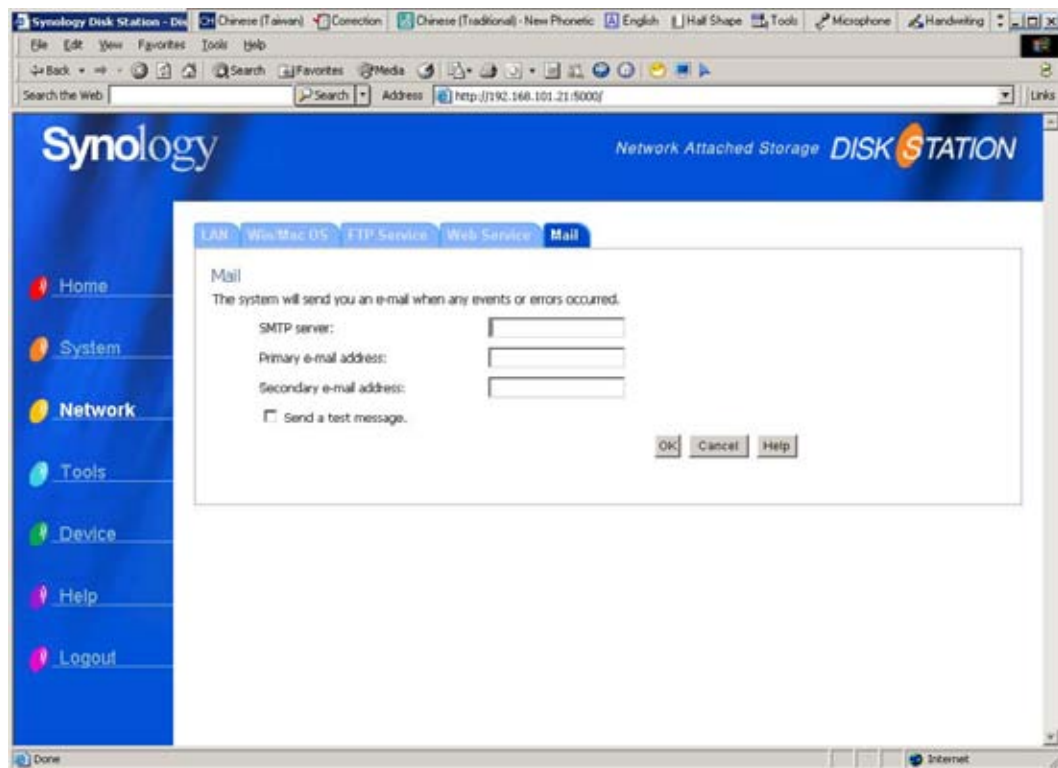


## 5. Mail (E-mail Notification)

In this page you may enter your e-mail address. The DS-101j Disk Station will send e-mails to notify the administrator when any important and critical events or errors occur. Please enter the SMTP server and assign up to 2 e-mail addresses for getting the notifications.

### SMTP (Simple Mail Transfer Protocol)

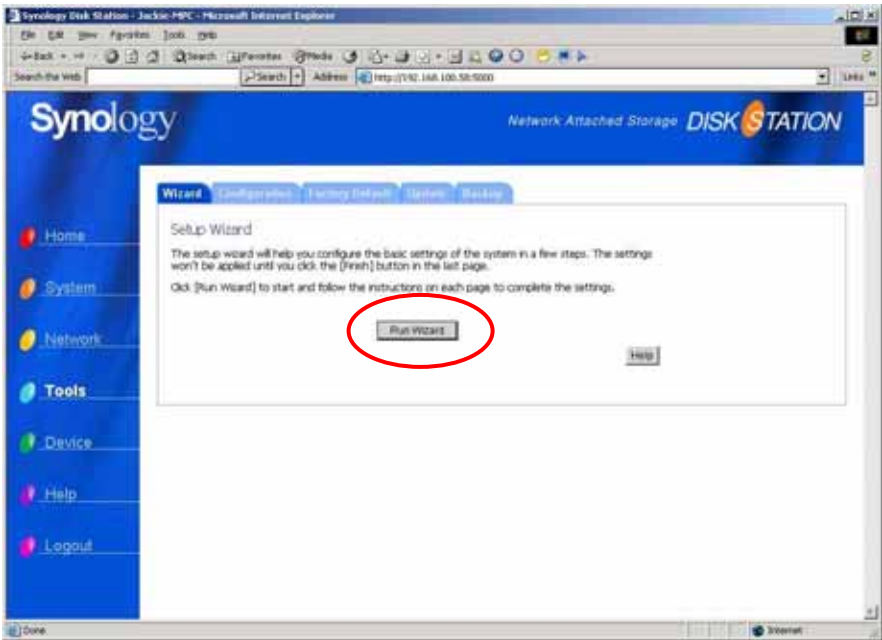
Most e-mail system that sends mail over the Internet use SMTP to send messages from one server to another. In addition, SMTP server accepts mail from the system and forwards them to their destinations.



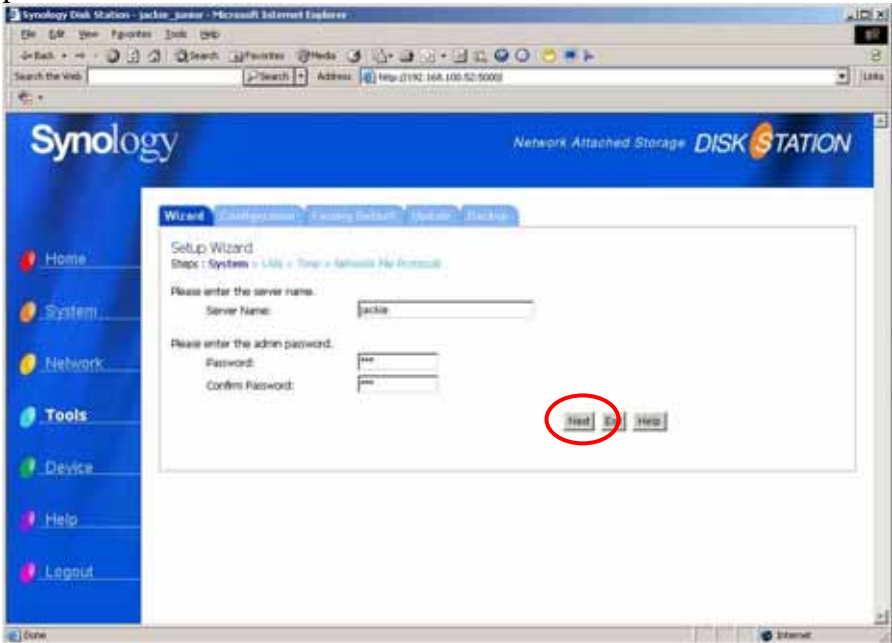
4.4 Tools

1. Wizard

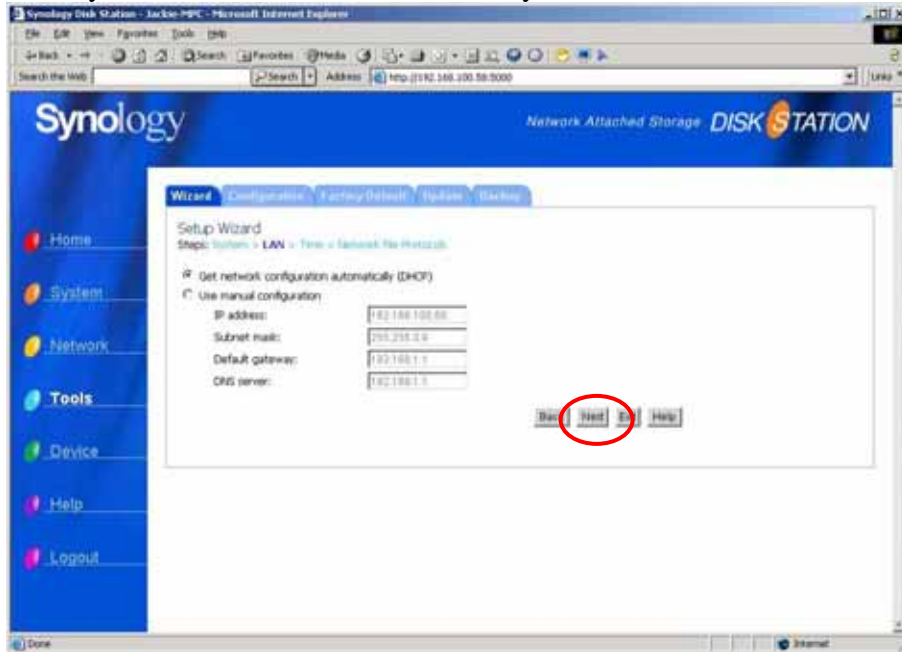
In this page the Wizard will guide you through setting up the DS-101j Disk Station step by step. Click on the Run Wizard button to go through the settings.



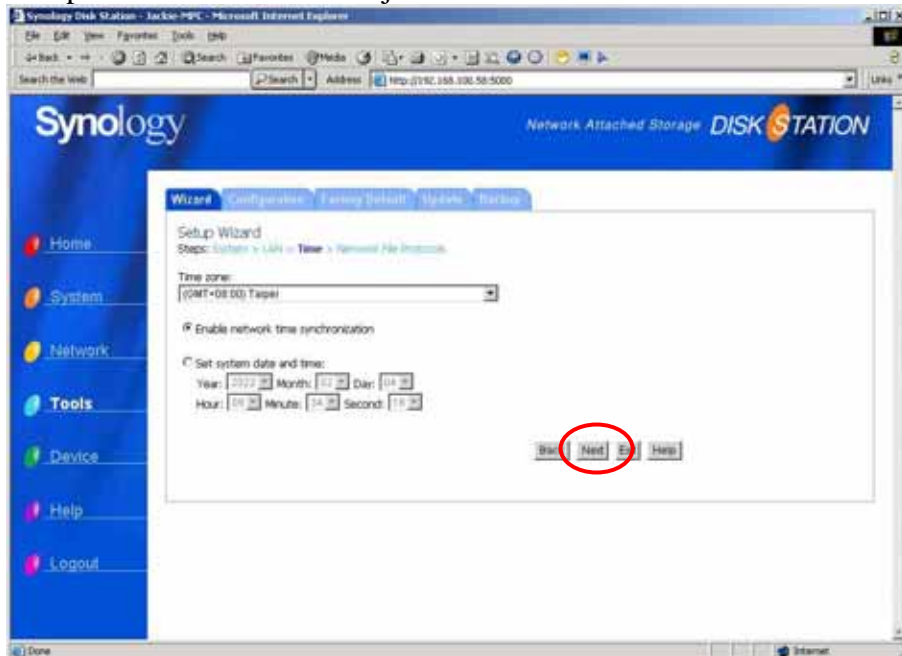
**Step 1 System Setting.** You will need to confirm your server name and your password. Click **Next** to continue.



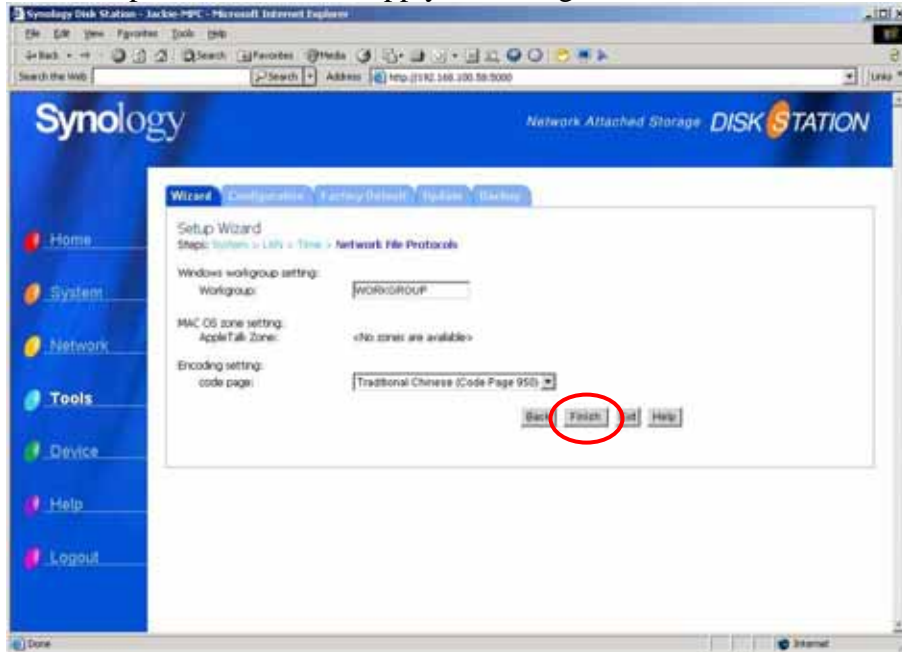
**Step 2 LAN Setting.** You will need to choose whether you want to get the IP directly from a DHCP server or manually. Click **Next** to continue.



**Step 3 Time Setting.** You will have to select the time zone of where you are, and set up the time of the DS-101j Disk Station. Click **Next** to continue.



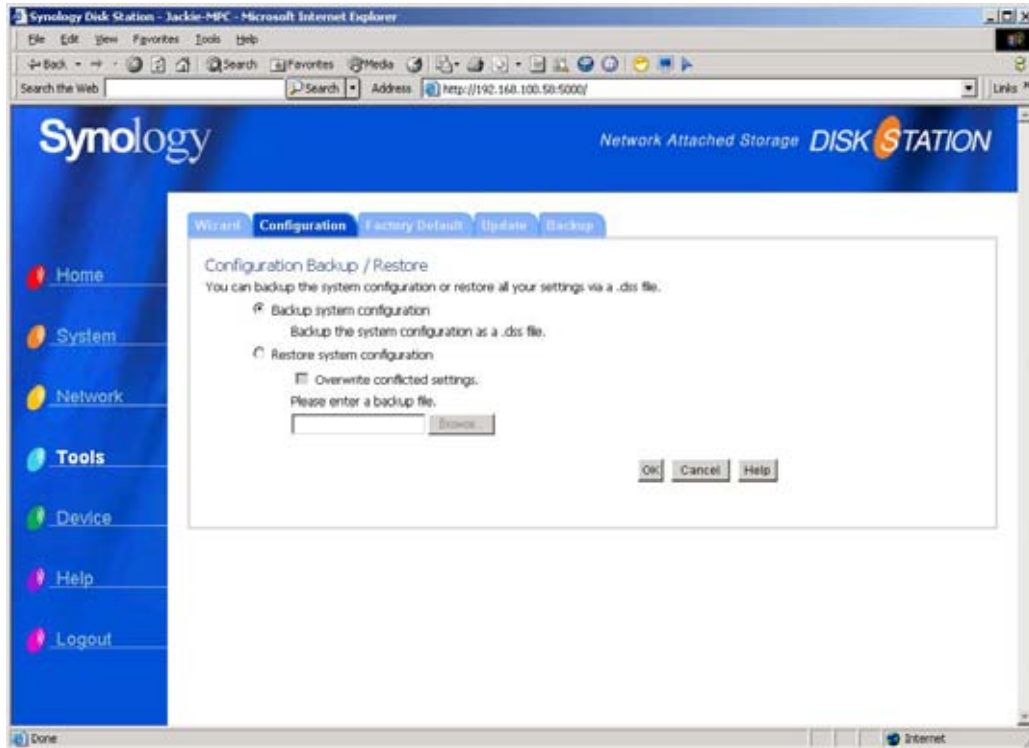
**Step 4** You will need to set up the workgroup and code page. After going through all the steps, click **Finish** to apply all settings.



It will take some time to apply settings you made. Please wait.

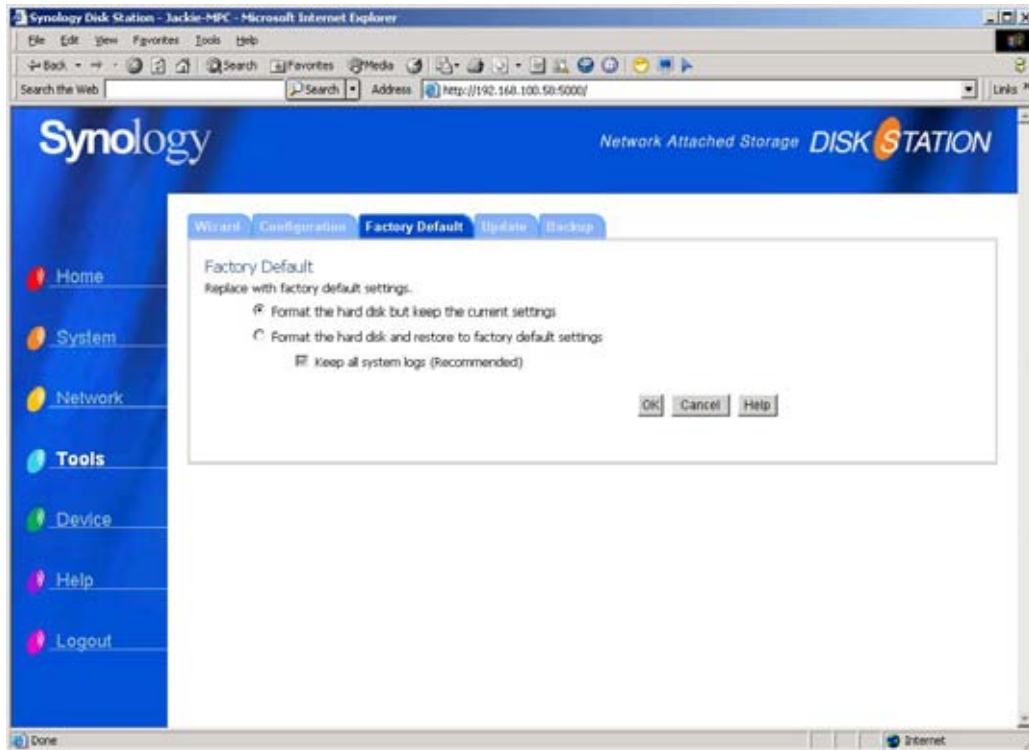
## 2. Configuration

In this page you may backup the system setting, and restore the system setting in the future. You can backup the system configuration (not data; to backup data, please refer to “Backup.”) and save it as a .dss file, or you can also restore the configuration from a selected .dss file.



### 3. Factory Default

In this page you may replace all the system settings with factory default settings. However, you can choose if you want to keep the current settings or restore back to the original factory settings when formatting the HDD.



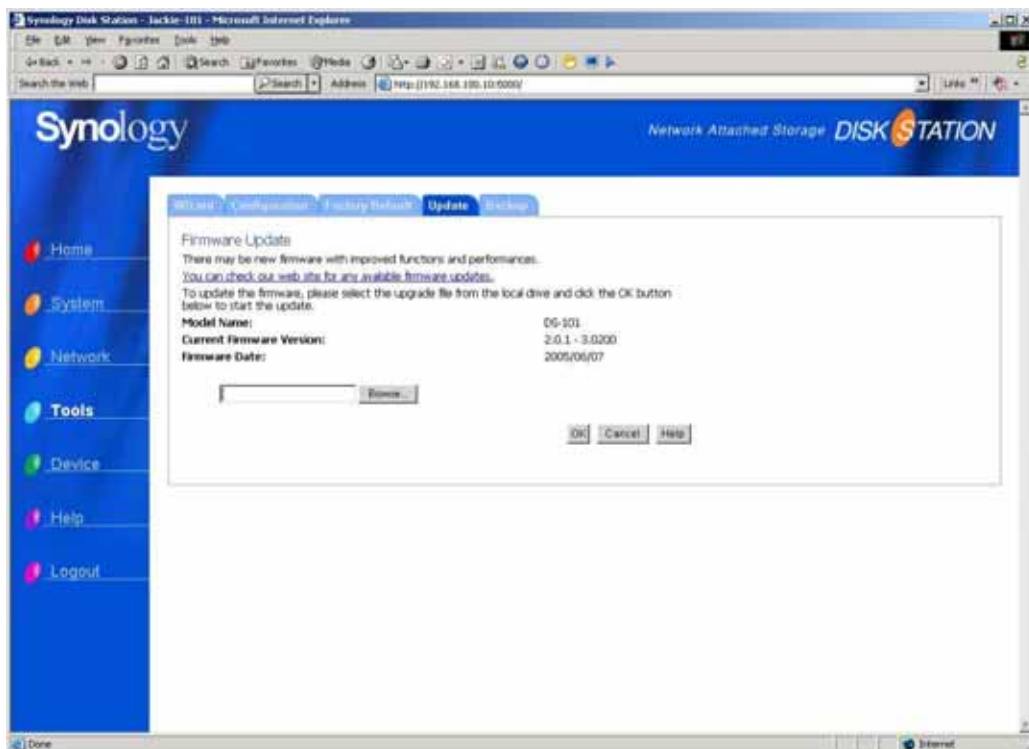


#### 4. Update

By connecting to Synology Website, you can check if the current firmware is the updated one; if it's not, you can also link to Synology Website to download the latest version and update it from this page.

**To update the firmware of the DS-101j Disk Station, please perform the following steps.**

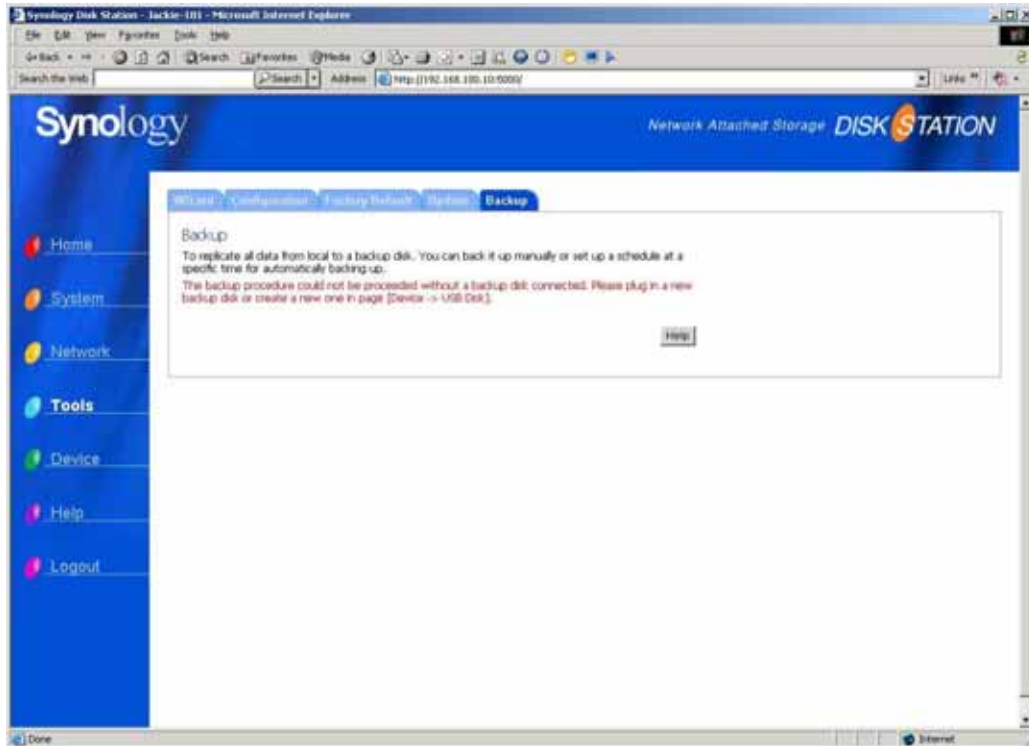
1. Enter the management User Interface of the DS-101j Disk Station. Go to **Update** in **Tools**. You may get the firmware version of this DS-101j Disk Station.
2. Go to **Download** at <http://www.synology.com>. Here you may see the latest firmware version for the DS-101j Disk Station.
3. If you want to update the firmware of the DS-101j Disk Station, download the firmware version from the web site to your local drive.
4. Enter the management User Interface of the DS-101j Disk Station. Go to **Update** in **Tools**. Click the **Browse** button and select the upgrade file from the local drive, and click **OK**.
5. The system will then start to update the firmware.



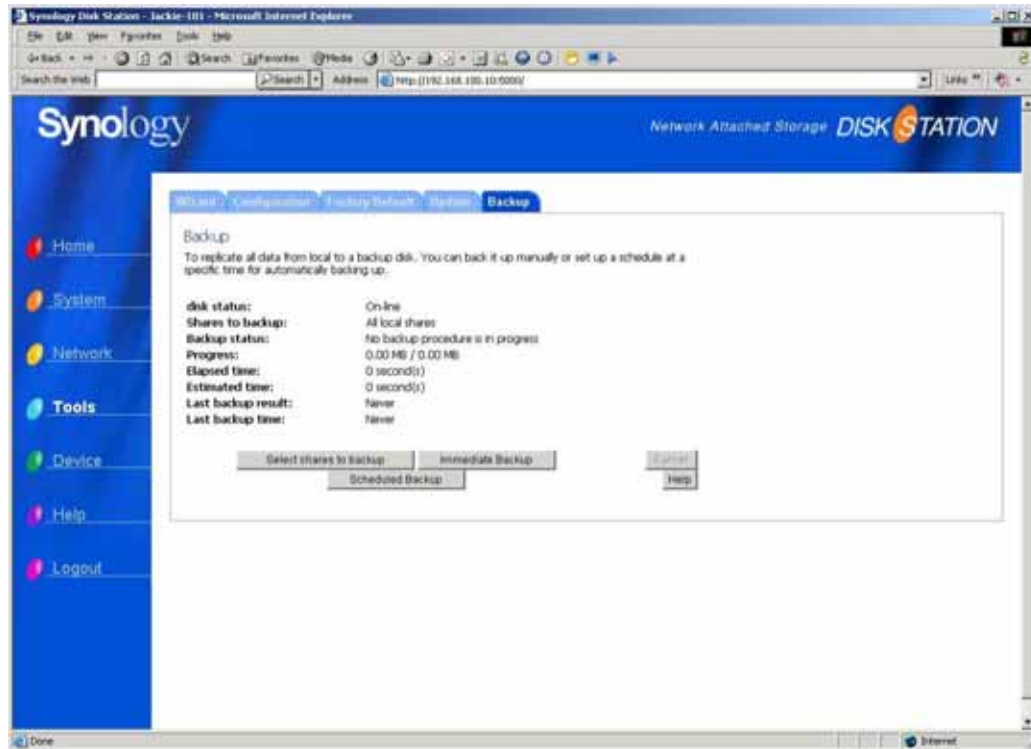
## 5. Backup

This page allows the DS-101j Disk Station's data to be backed up to an attached USB HDD. Backing up data is important in the event that the DS-101j Disk Station is being damaged. Without backing up, you will have the risk of losing data if a catastrophe happens.

To do data backup, please plug in a USB HDD, and read the following 4.5-1 USB Disk to format your USB HDD first.



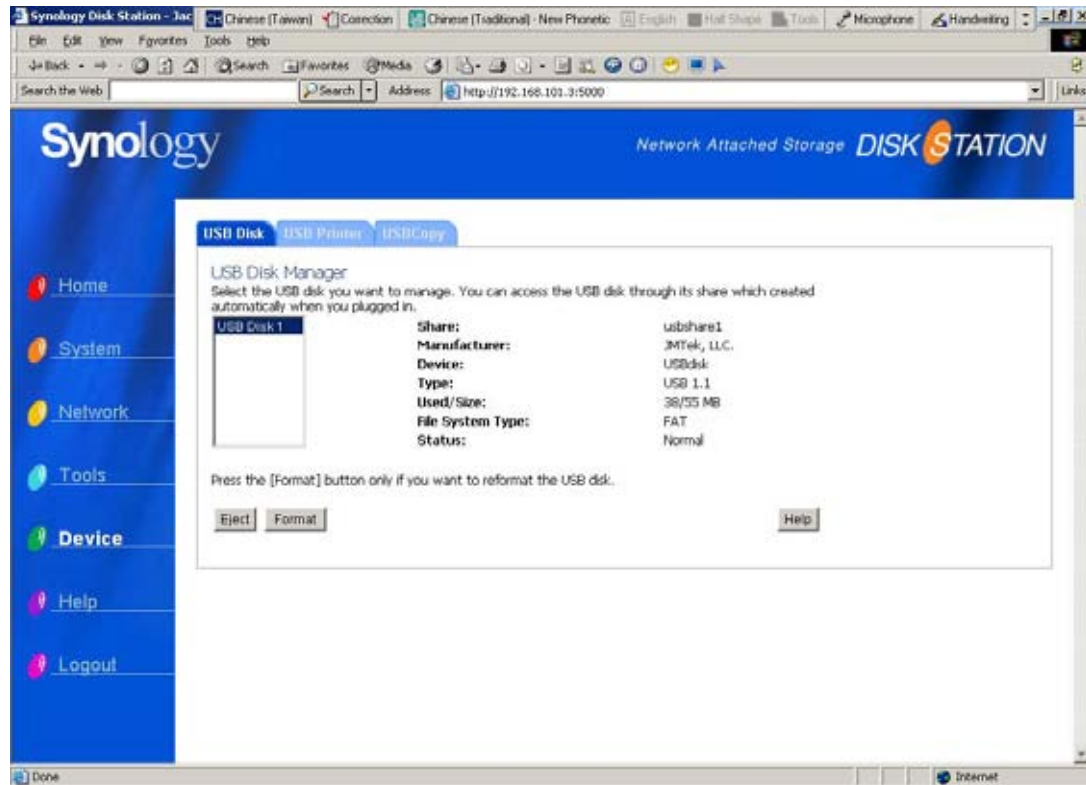
After the USB HDD is formatted for data backup, you will see the page below. You can select shares you want to backup first and then choose whether to backup immediately, or to set a time so that the data will be backed up according to a schedule.



## 4.5 Device (USB Settings)

### 1. USB Disk

An attached USB disk can be configured as an additional shared folder. If the USB disk is setup as a backup disk, it cannot be shareable and accessible. As a USB backup disk, the DS-101j Disk Station will format the attached USB disk.



\*\* The information of all USB devices currently connected to DS-101j Disk Station (including the share name, manufacturer, device, type, used size, format type, and the present status) will be automatically detected and shown in this page. It may be necessary to press refresh button when new USB devices are connected.

#### **DS-101j Disk Station will format the attached USB disk.**

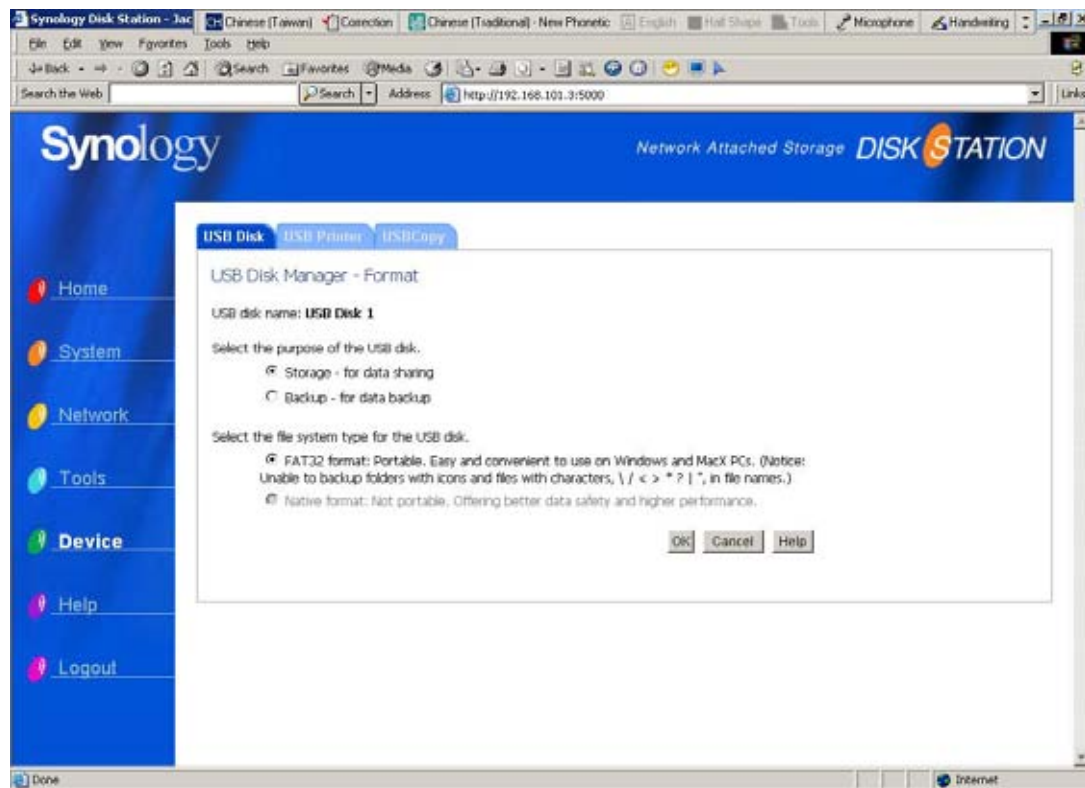
- \*\* In the following situations the Format button will not work.
- the USB disk is being initializing at the moment you plug in the USB disk.
  - the USB disk is being formatting.
  - the system is backing up files to the USB disk.
  - the USB disk is damaged.

You can either store data you want to share with others to the USB disk or backup data to it.

Connecting USB disks to DS-101j Disk Station will enlarge the capacity of the DS-101j Disk Station. The data on the USB disk can be shared if the name of the data starts with “usbshare.” This share will be removed automatically when the USB disk is ejected from the system.

## USB Disk Formats

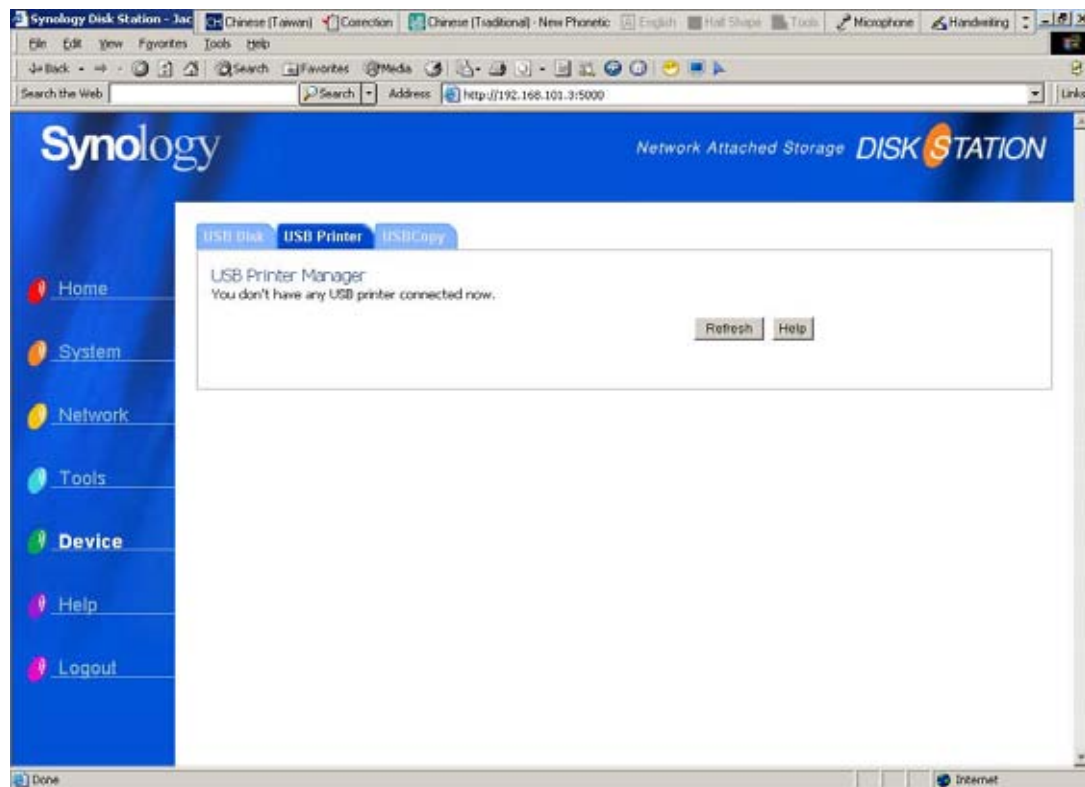
There are two different types of format for you to choose, FAT32 and Native format. FAT32 is a format you can use with all Windows PC and Mac that runs Mac OS X. On the other hand, Native format is the most reliable type for keeping all data from losing. However, it will only be recognized by DS-101j Disk Station. After the USB HDD is formatted, please go back to Step 4.4-5 Backup to do data backup.



**Warning: DS-101j Disk Station does not support using a hub for connecting any storage devices. If you try to connect an USB disk by a hub, the system won't be able to recognize the USB disk and the USB disk cannot be used.**

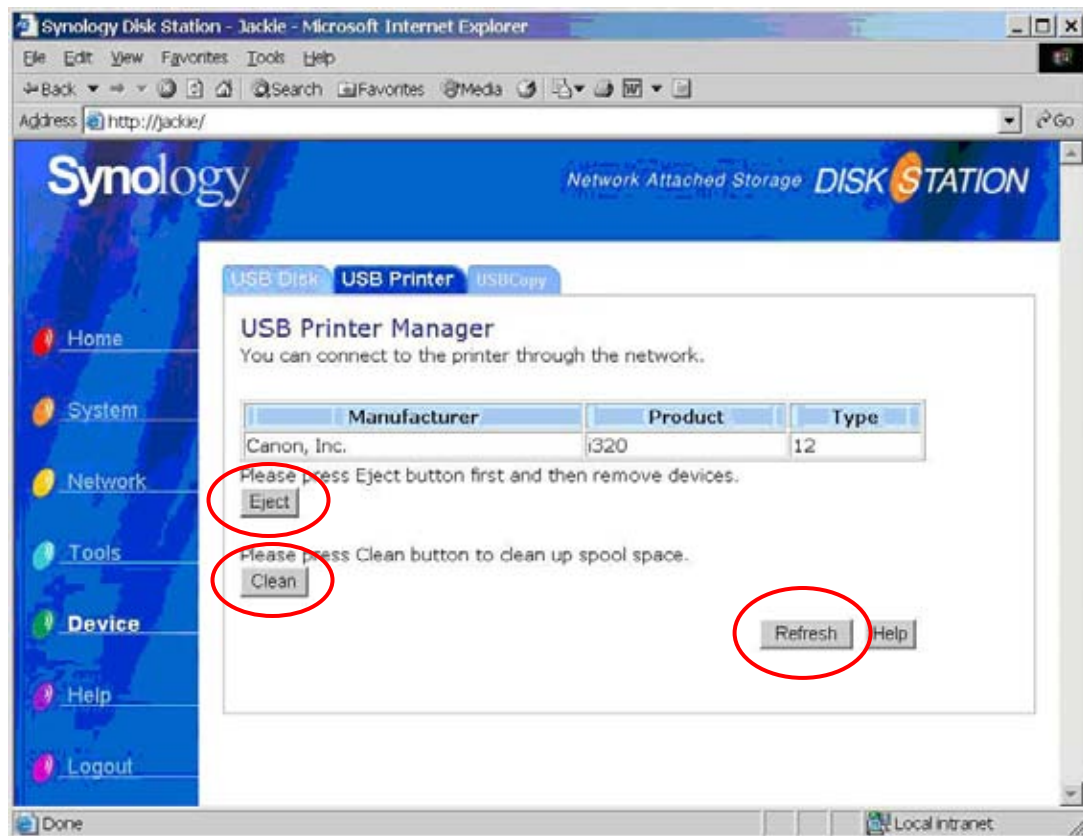
## 2. USB Printer

You may see this page before you plug in your USB printer.



An USB printer can be used if you connect it with a hub. For more instructions for using a USB shared printer, please go on to the next page.

By connecting a USB printer to DS-101j Disk Station, you will be able to share the USB printer through the network. Click Refresh button and USB printer status will become active as shown in the page below.



### Refresh the USB printer status

Click Refresh for updated status of the USB printer.

### Eject the USB printer

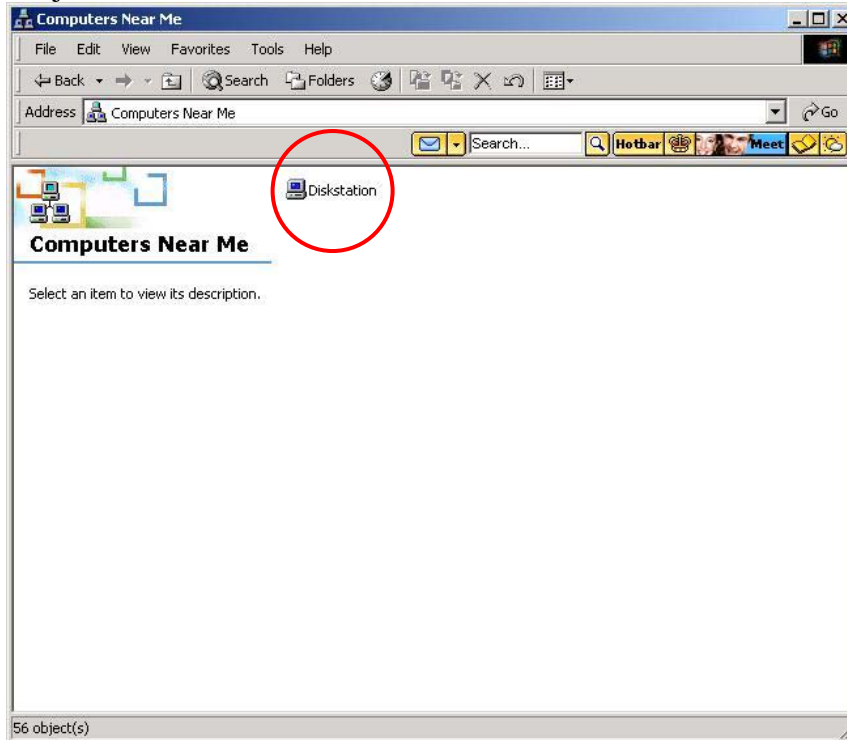
Please remember to always click Eject button, before you remove the printer.

### Clean up the printer spool space

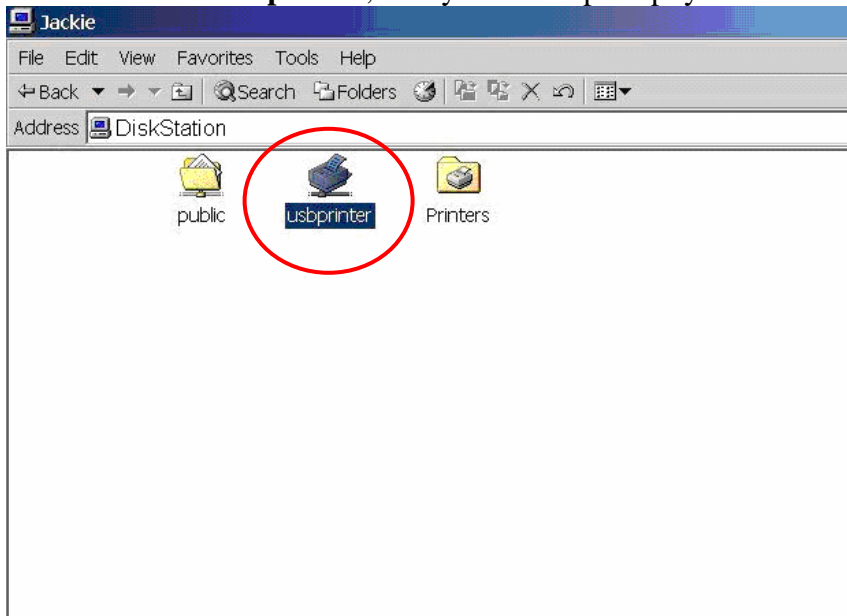
Click the Clean button when you want to clean up the printer spool space.

## Steps for setting up USB printer in Windows

1. Open **Computers Near Me** in **My Network Places** and double click on your DS-101j Disk Station.



2. Double click on **usbprinter**; the system will prompt you to install a correct driver.



3. Click Finish when the setup is done. Then you may start using the printer.

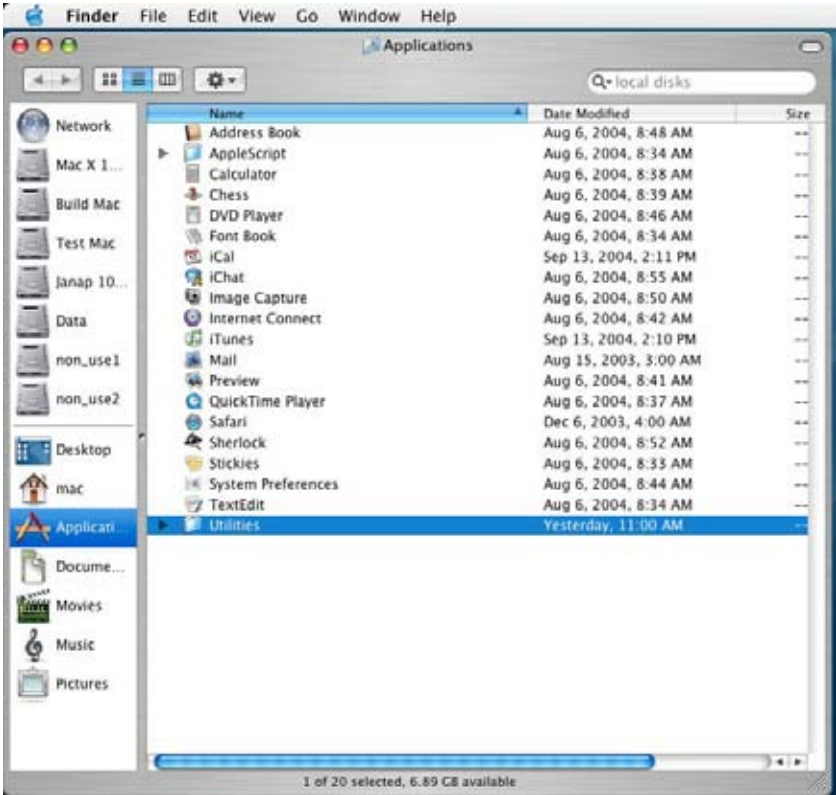


### Steps for setting up USB printer in Mac OS 10.2.X running AppleTalk

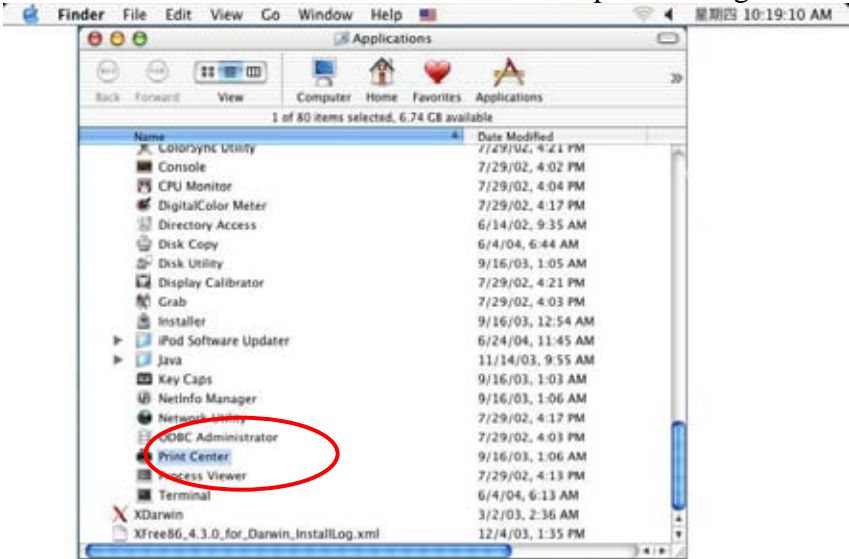


**Warning: For Mac users, DS-101j Disk Station only supports USB printers with PostScript.**

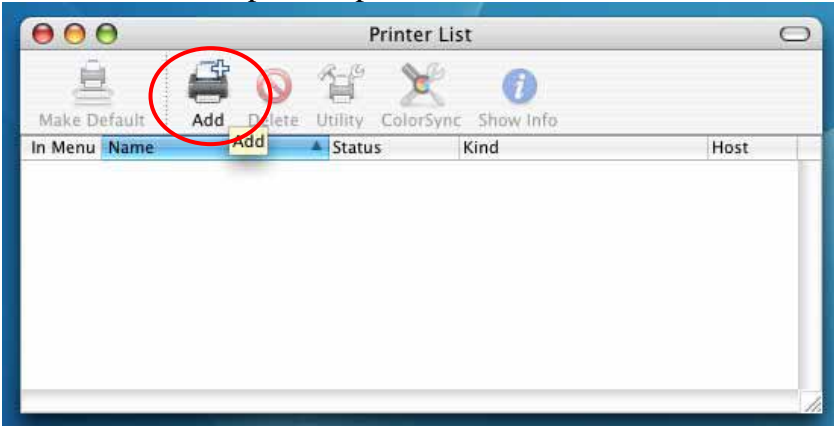
- 1. Follow the path as **Go / Applications / Utilities.**



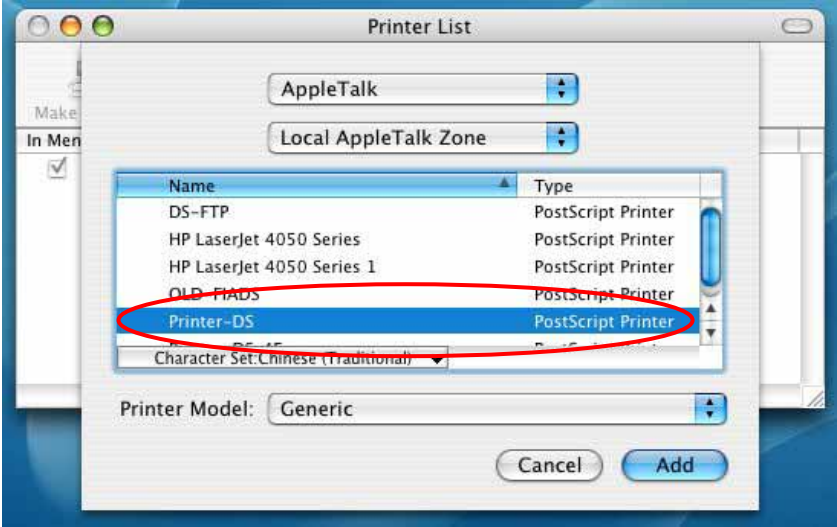
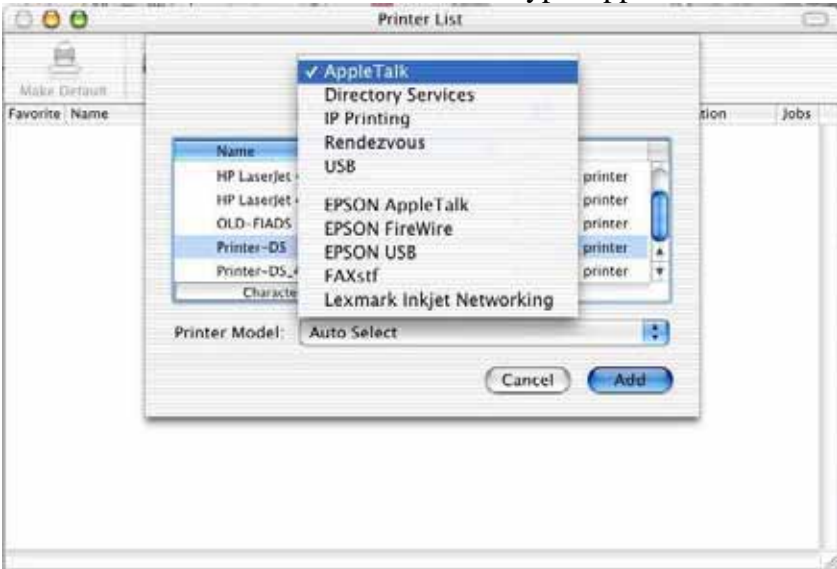
2. Find **Print Center** and double click on it to open a dialog box.



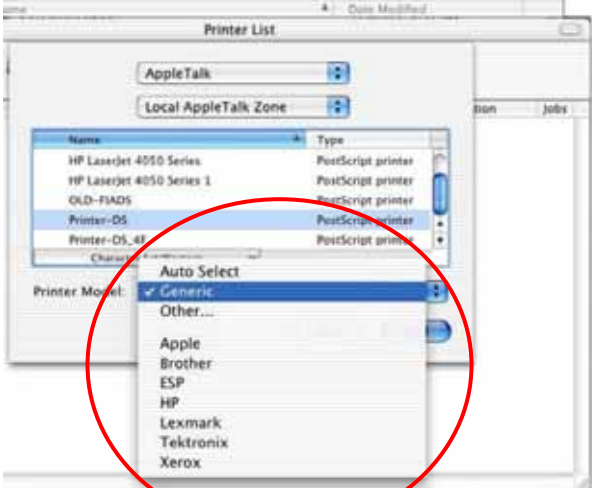
3. Select **Add** to set up a new printer.



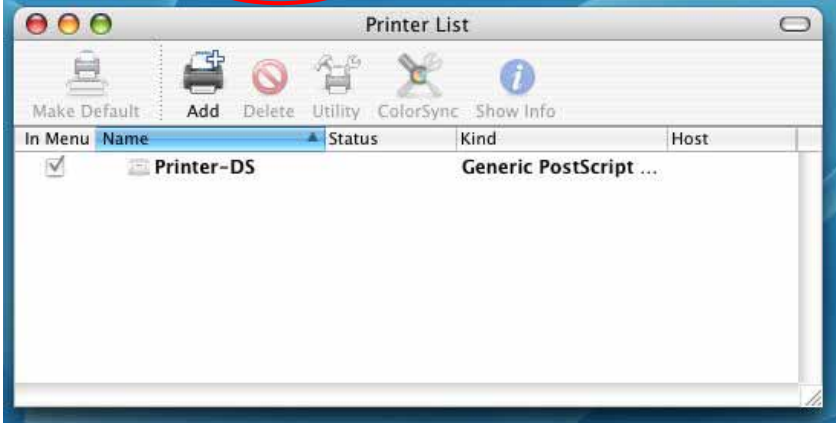
4. Select the correct server and choose the type AppleTalk.



5. Select **Generic** for Printer Model.

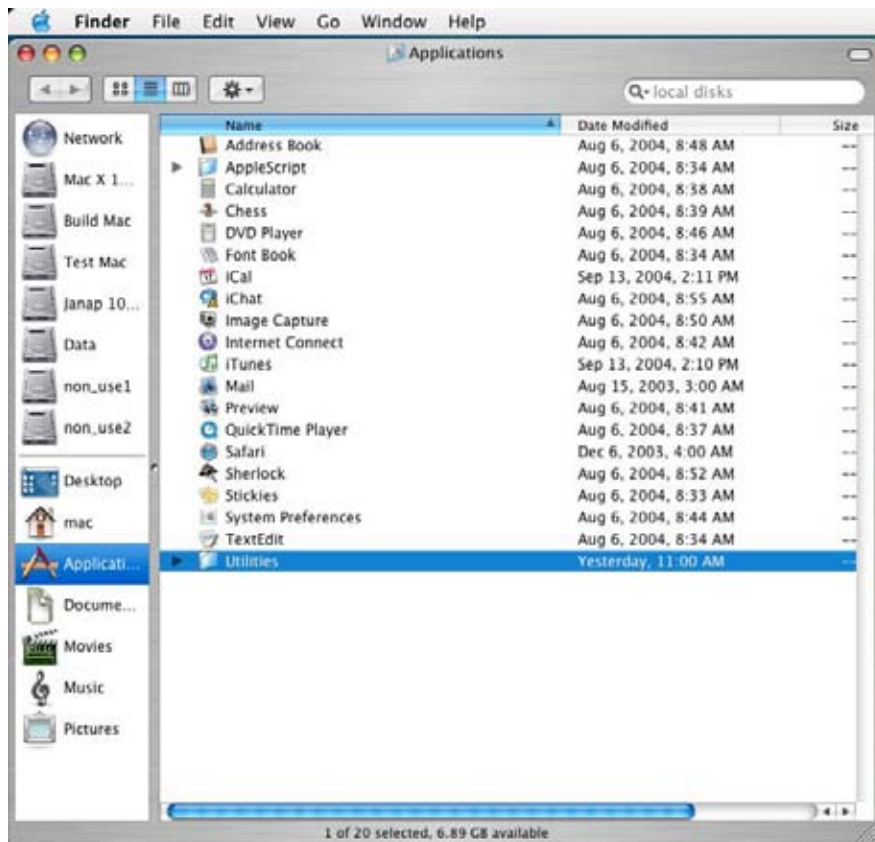
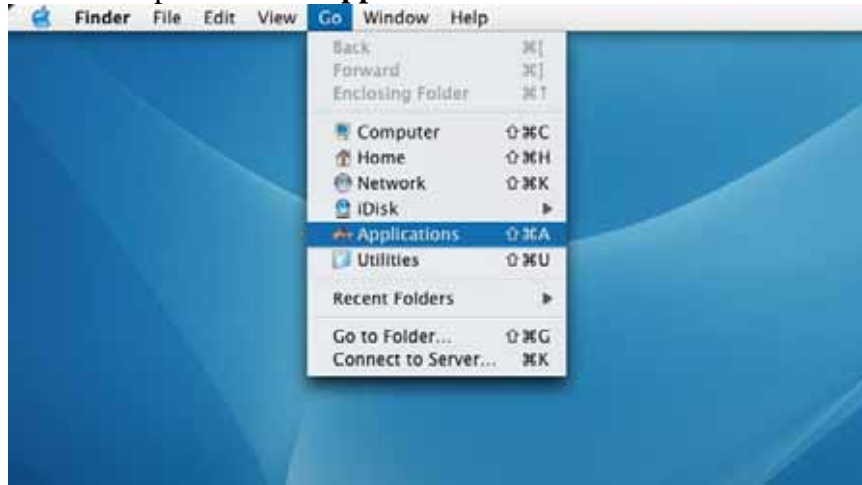


6. Click **Add** to finish.

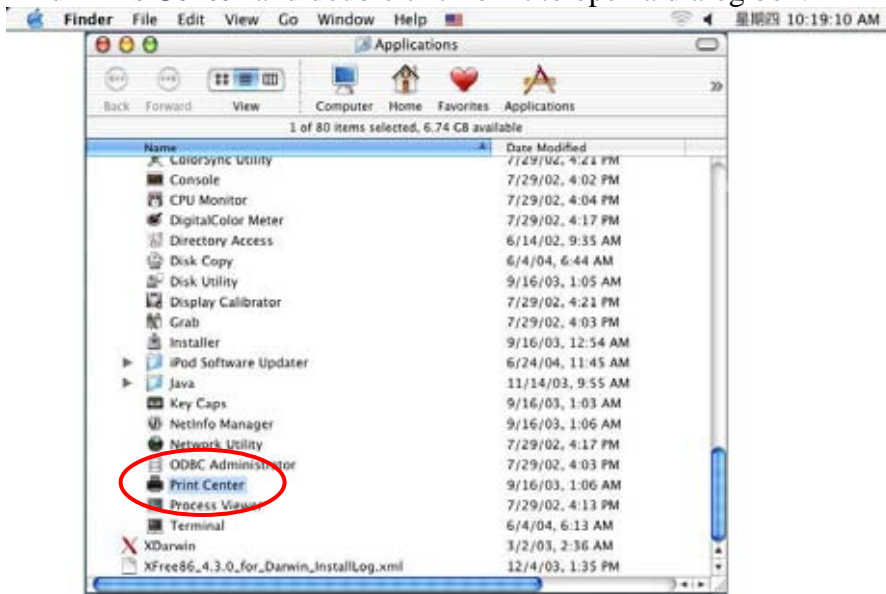


## Steps for setting up USB printer in Mac OS 10.2.X running TCP/IP

1. Follow the path as **Go / Applications / Utilities**.



2. Find **Print Center** and double click on it to open a dialog box.



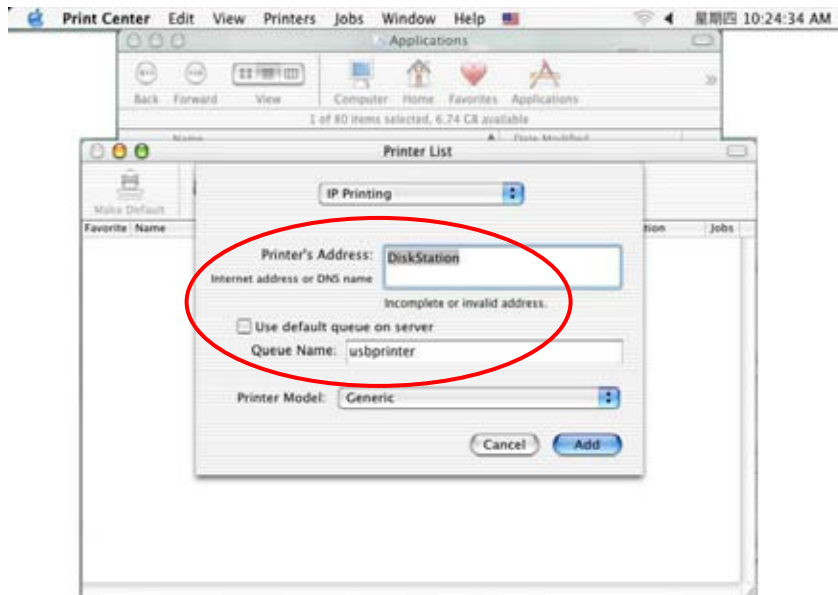
3. Select **Add** for setting up a new printer.



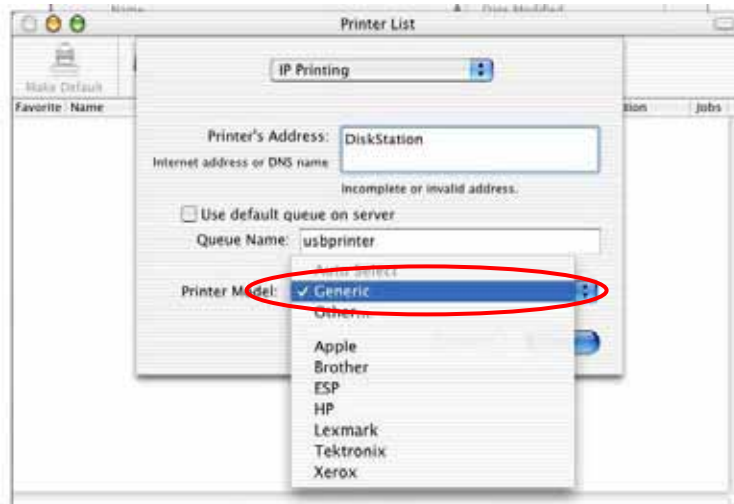
4. Choose the type **IP printing**.



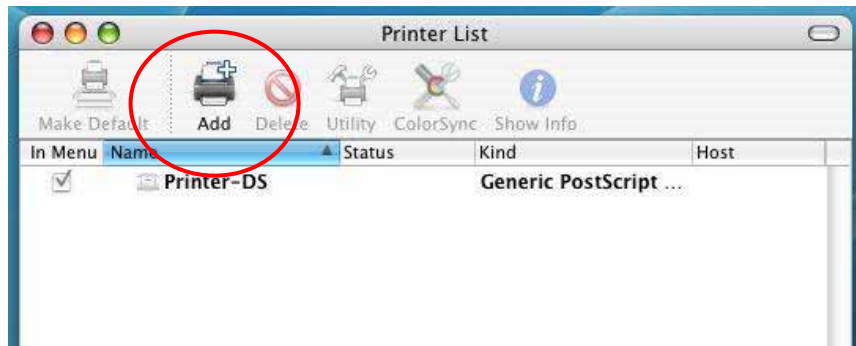
5. Enter the printer's address.
6. Uncheck **Use default queue on server**, and enter '**usbprinter**' for Queue Name.



7. Select **Generic** for Printer Model.



8. Click **Add** to finish.

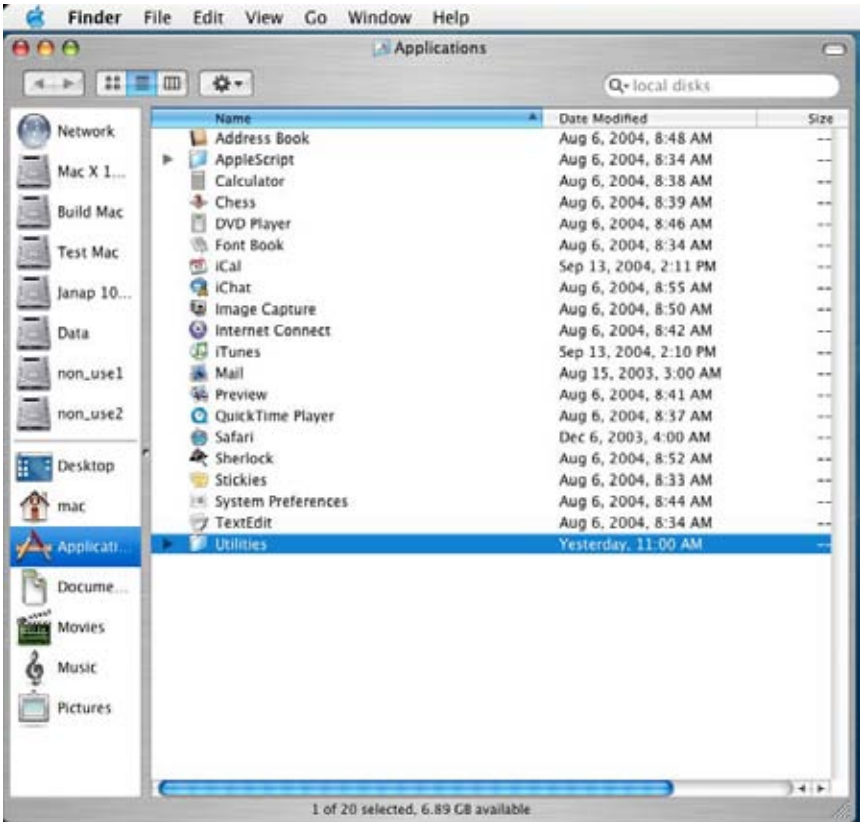


## Steps for setting up USB printer in Mac OS 10.3.X running AppleTalk

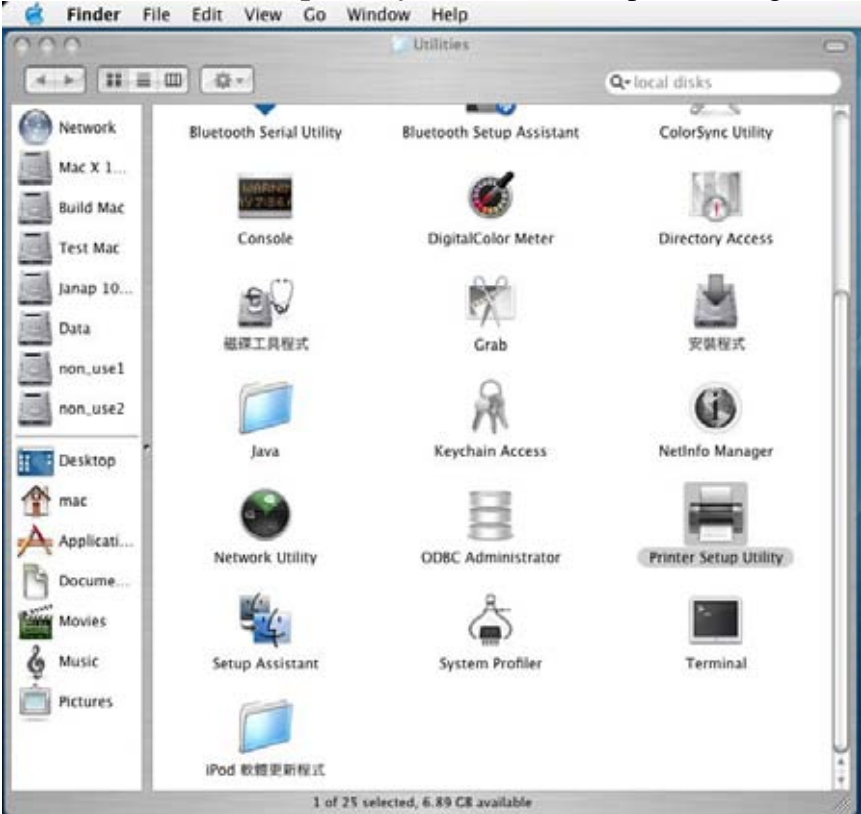
1. Follow the path as **Go / Applications / Utilities**.



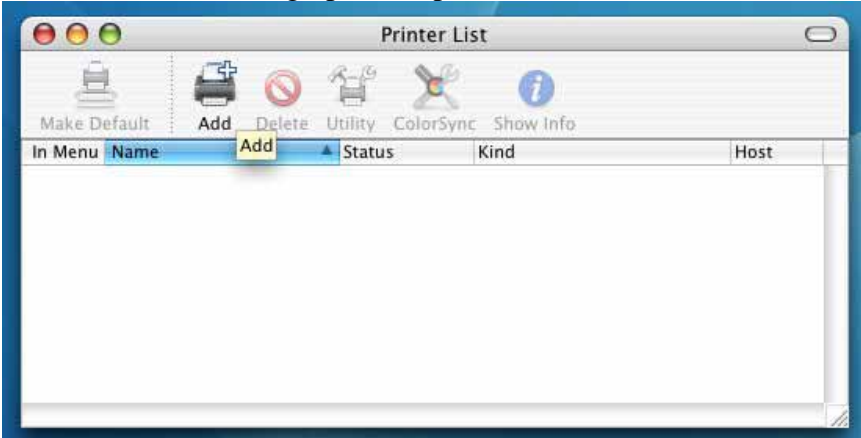




2. Find the **Printer Setup Utility**, and click it to open a dialog box.



3. Select **Add** for setting up a new printer.

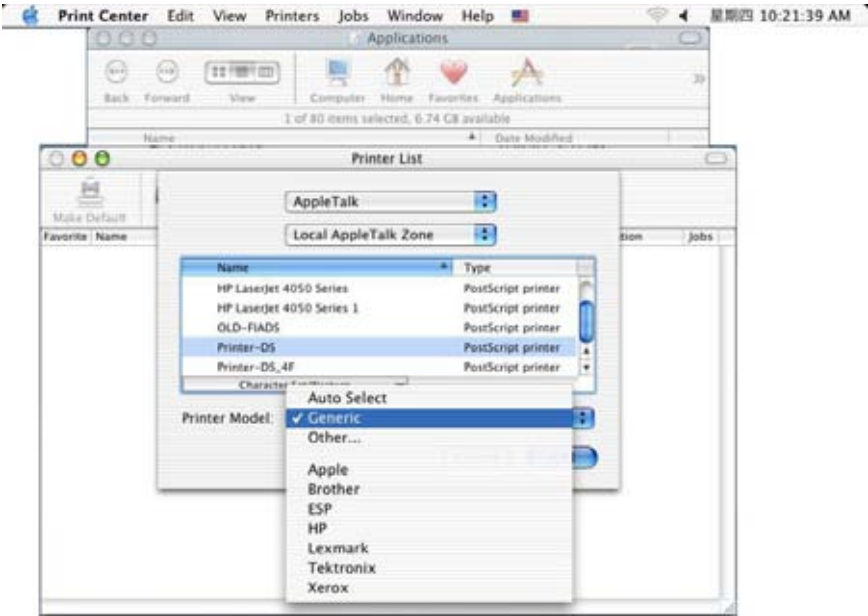


4. Choose **AppleTalk**.

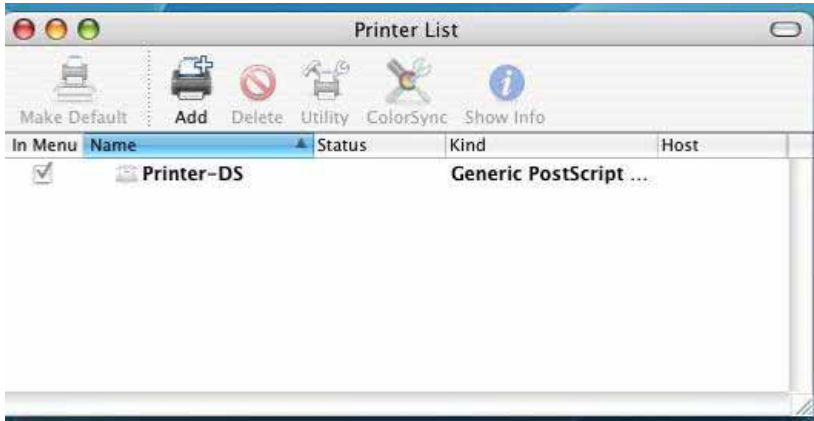


5. Select the correct server.

6. Select **Generic** for Printer Model.

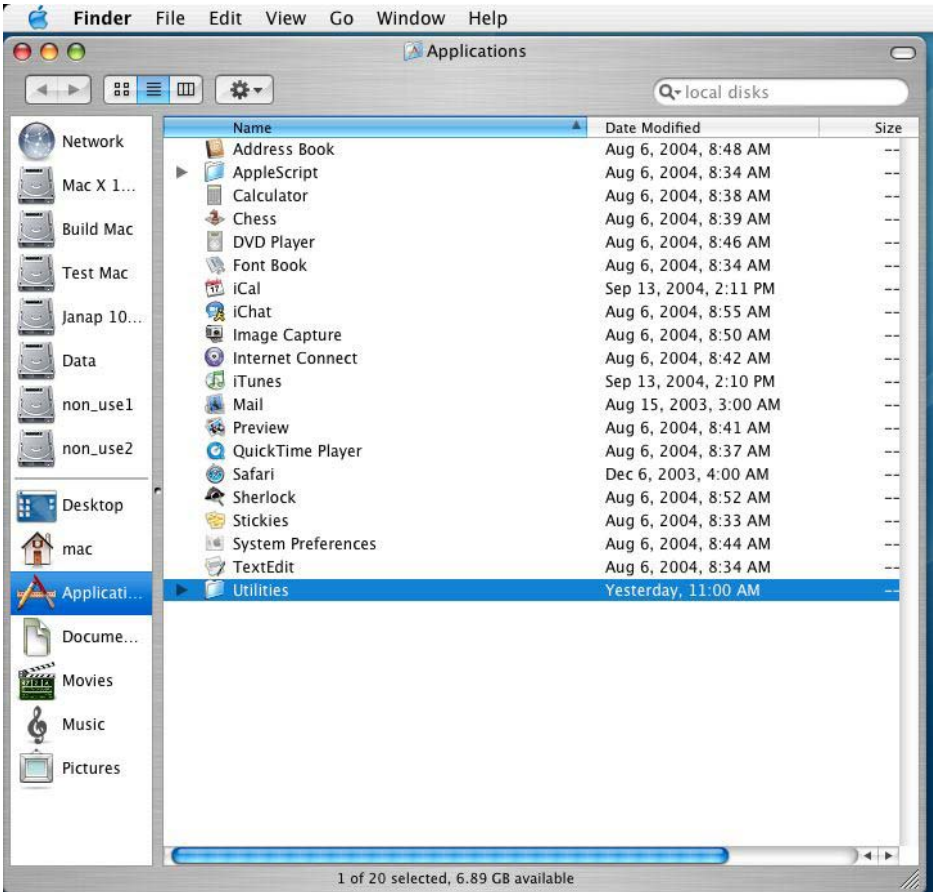
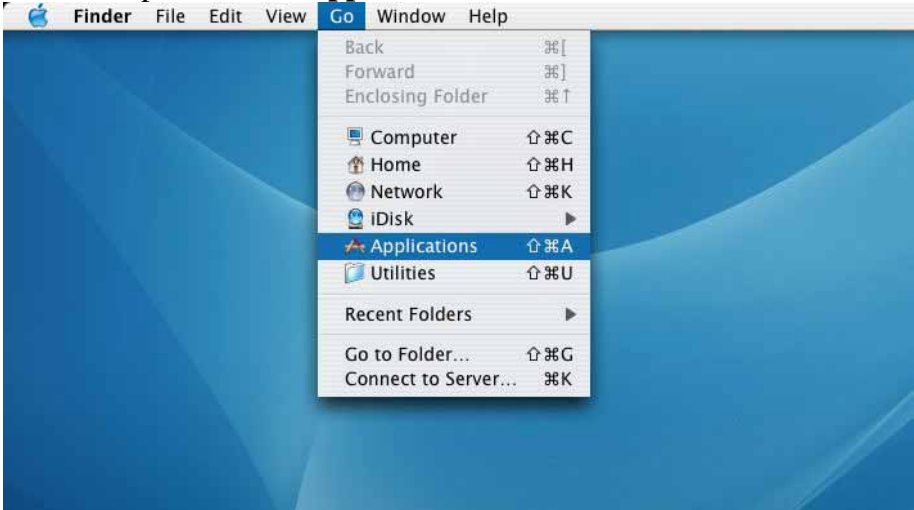


7. Click **Add** to finish.

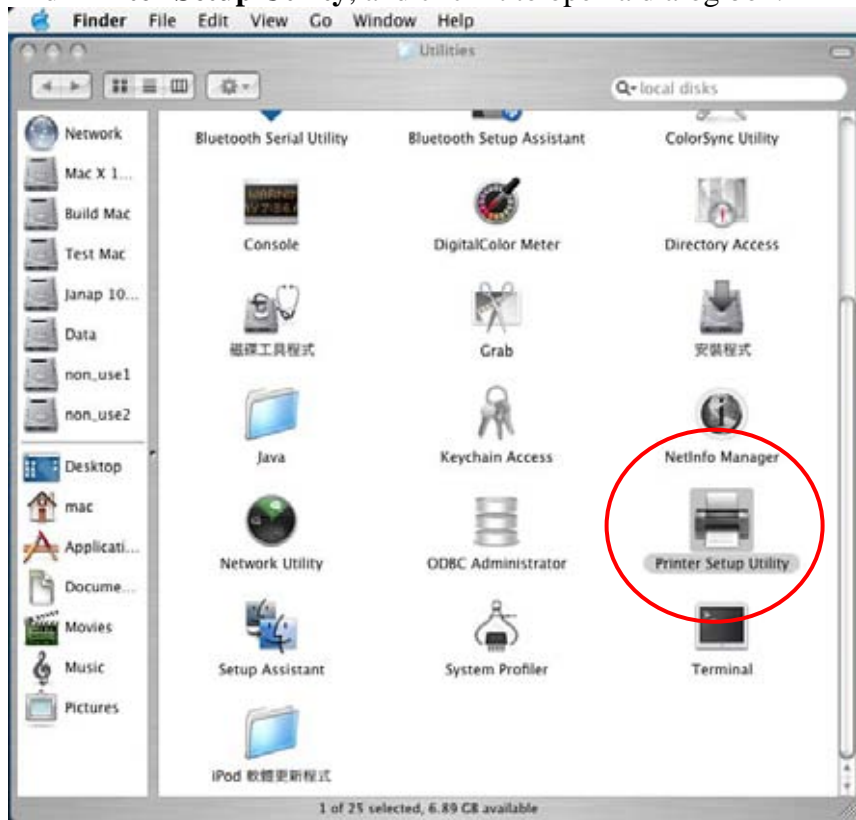


### Steps for setting up USB printer in Mac OS 10.3.X running TCP/IP

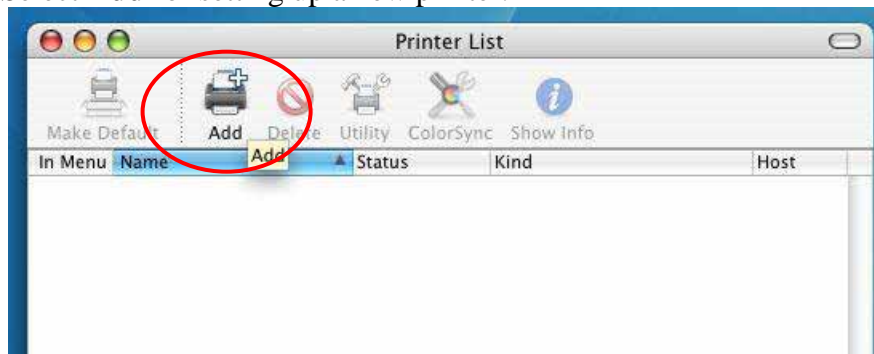
1. Follow the path as **Go / Applications / Utilities**.



2. Find **Printer Setup Utility**, and click it to open a dialog box.



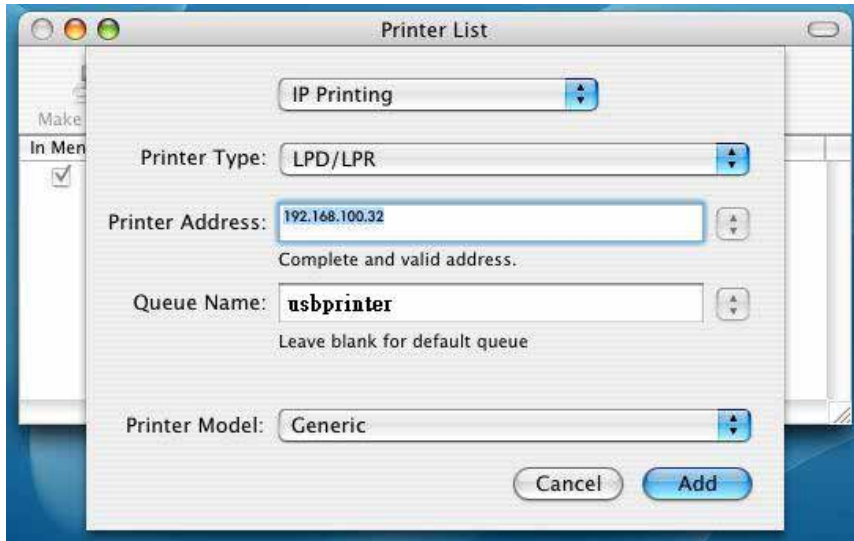
3. Select **Add** for setting up a new printer.



4. Choose **IP Printing**.



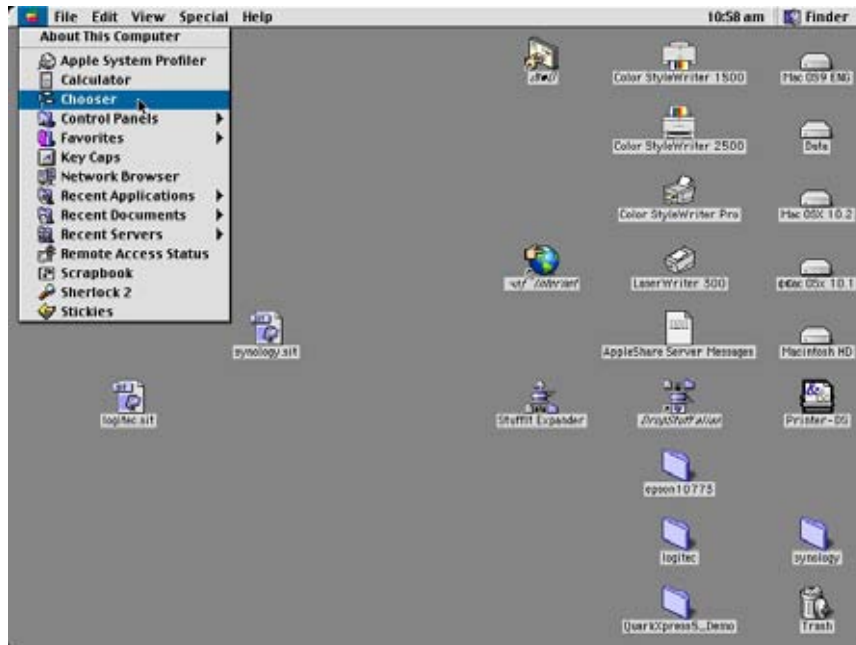
5. Select **LPD/LPR** for Printer Type.
6. Enter the printer's address.
7. Enter '**usbprinter**' for Queue Name.
8. Select **Generic** for Printer Model.



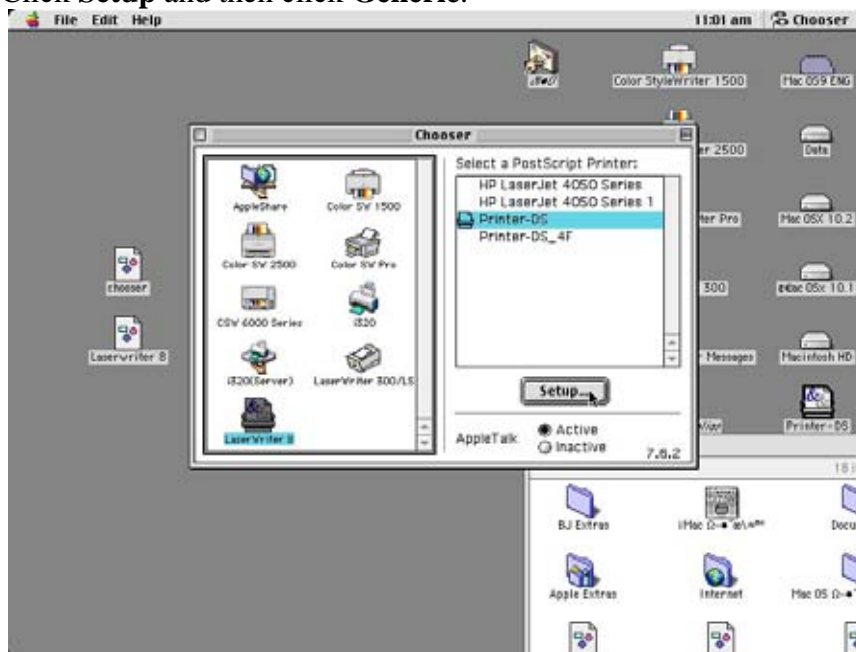
9. Click **Add** to finish.

## Steps for setting up USB printer in Mac OS 9 running AppleTalk

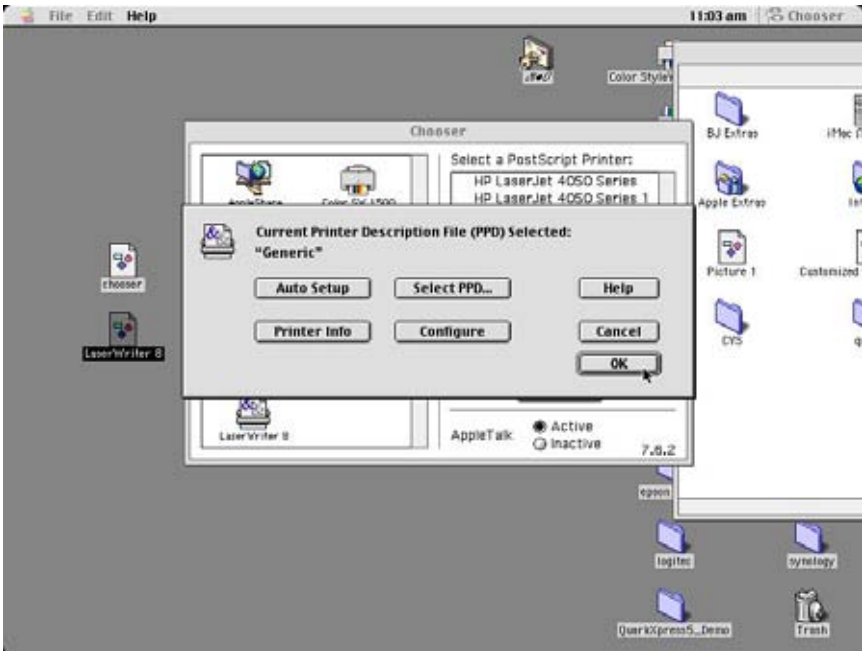
1. Click on **Chooser**.



2. Under the LaserWriter 8, click the server.
3. Click **Setup** and then click **Generic**.



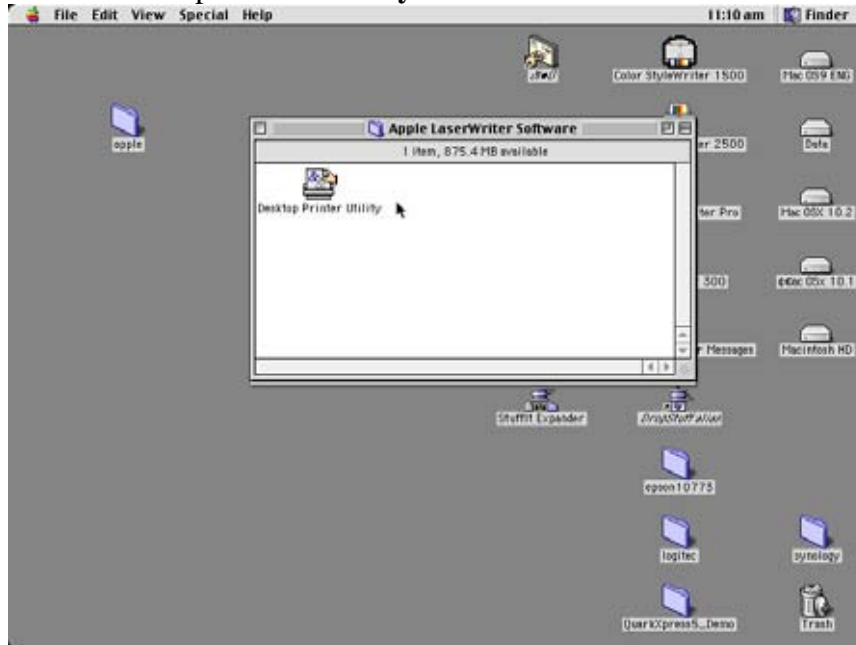
4. Finish.



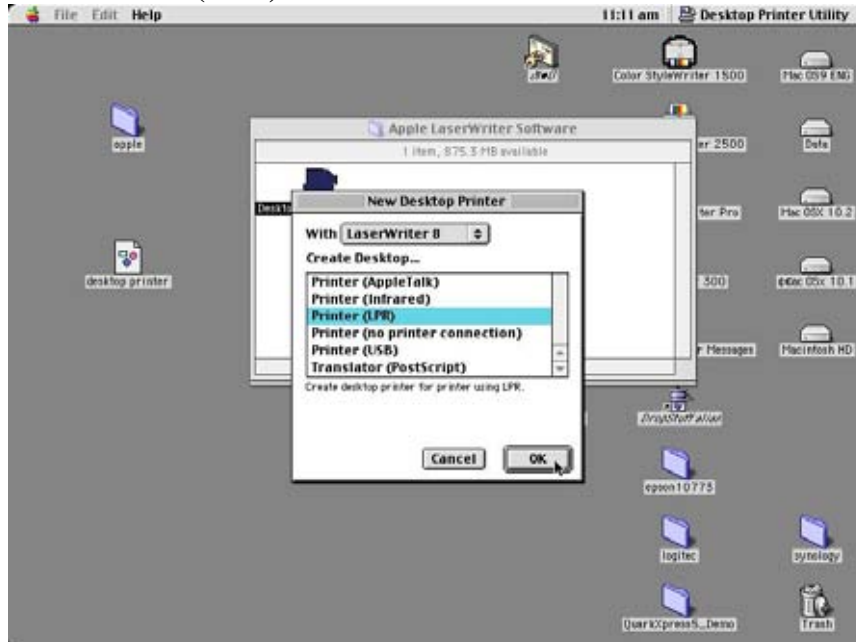


## Steps for setting up USB printer in Mac OS 9 running TCP/IP

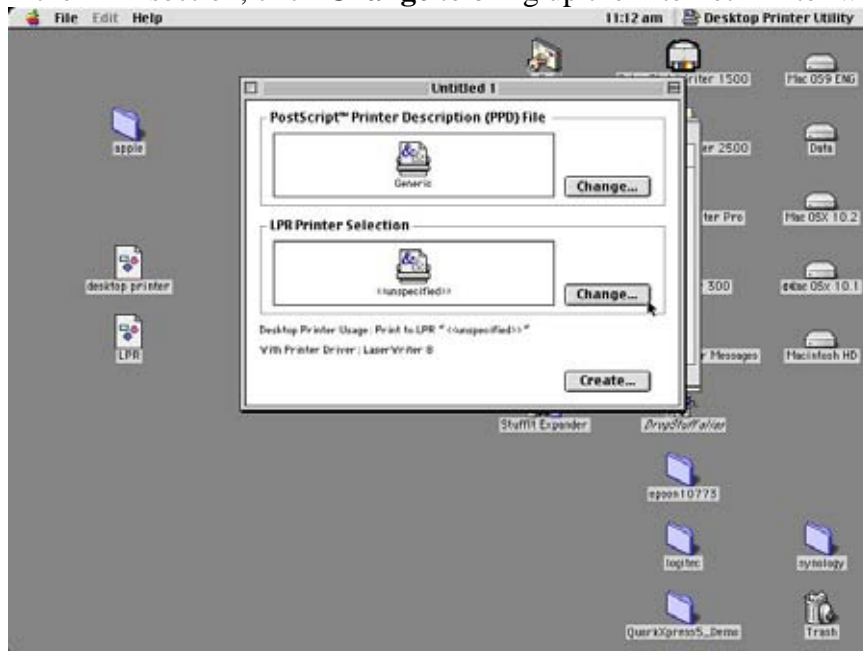
1. Launch Desktop **Printer Utility**.



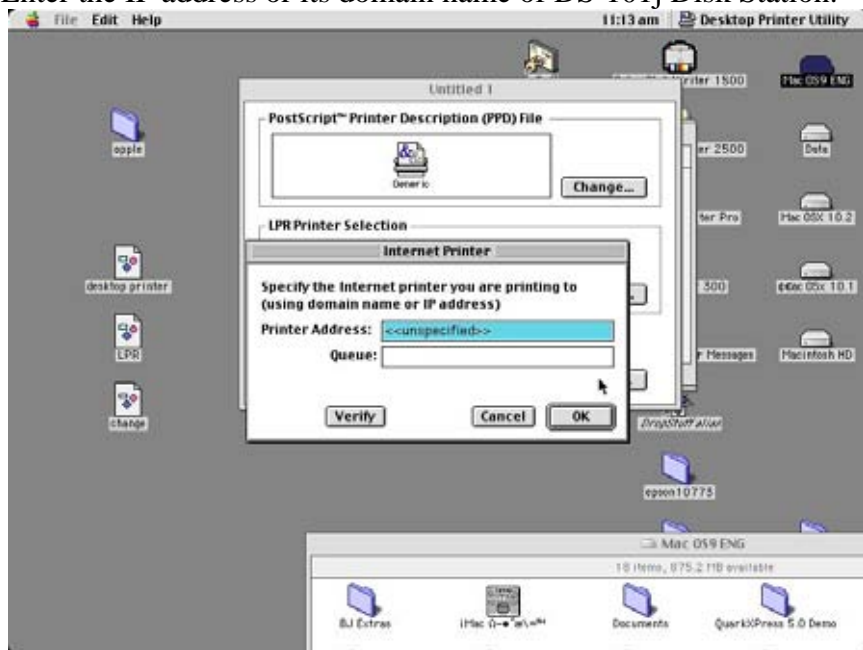
2. Select **Printer (LPR)** and click **OK**.



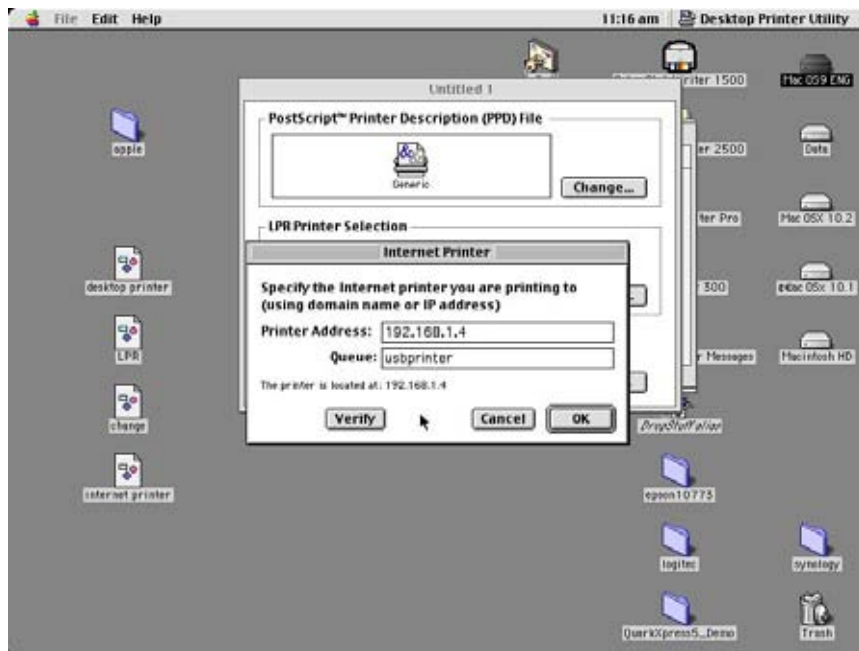
- In the LPR section, click **Change** to bring up the Internet Printer window.



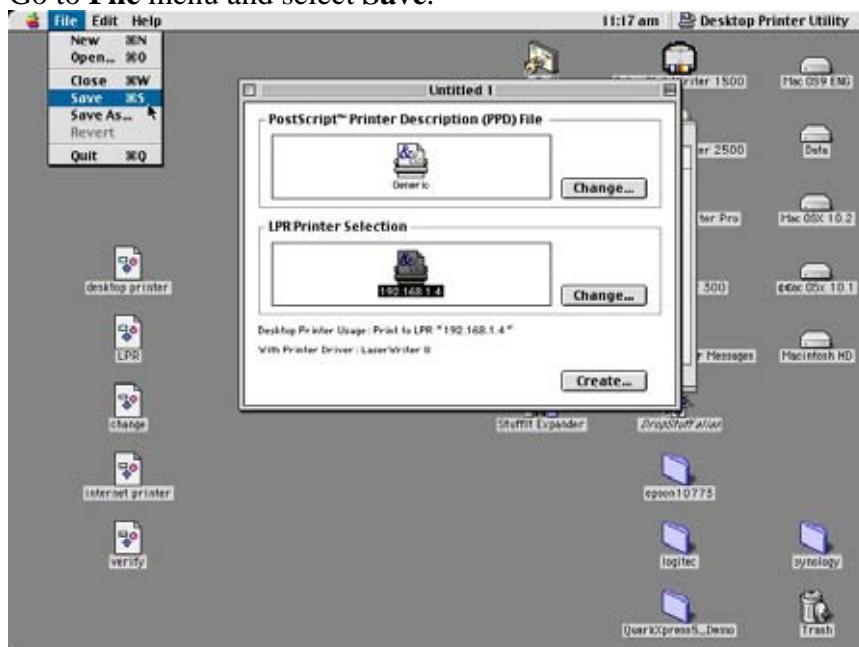
- Enter the IP address or its domain name of DS-101j Disk Station.



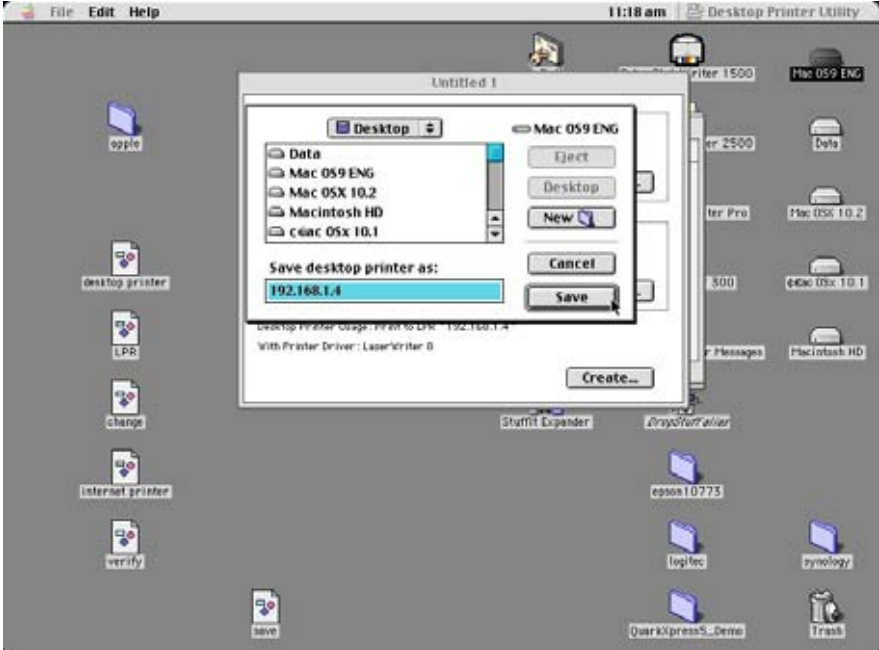
- Enter **usbprinter** for Queue Name.
- Click on **Verify** to make sure the printer was found.
- Click **OK**.



8. Go to **File** menu and select **Save**.



9. Enter a name and location for the desktop printer icon and click **OK**. The default name is the printer's IP address, and the default location is at the desktop.

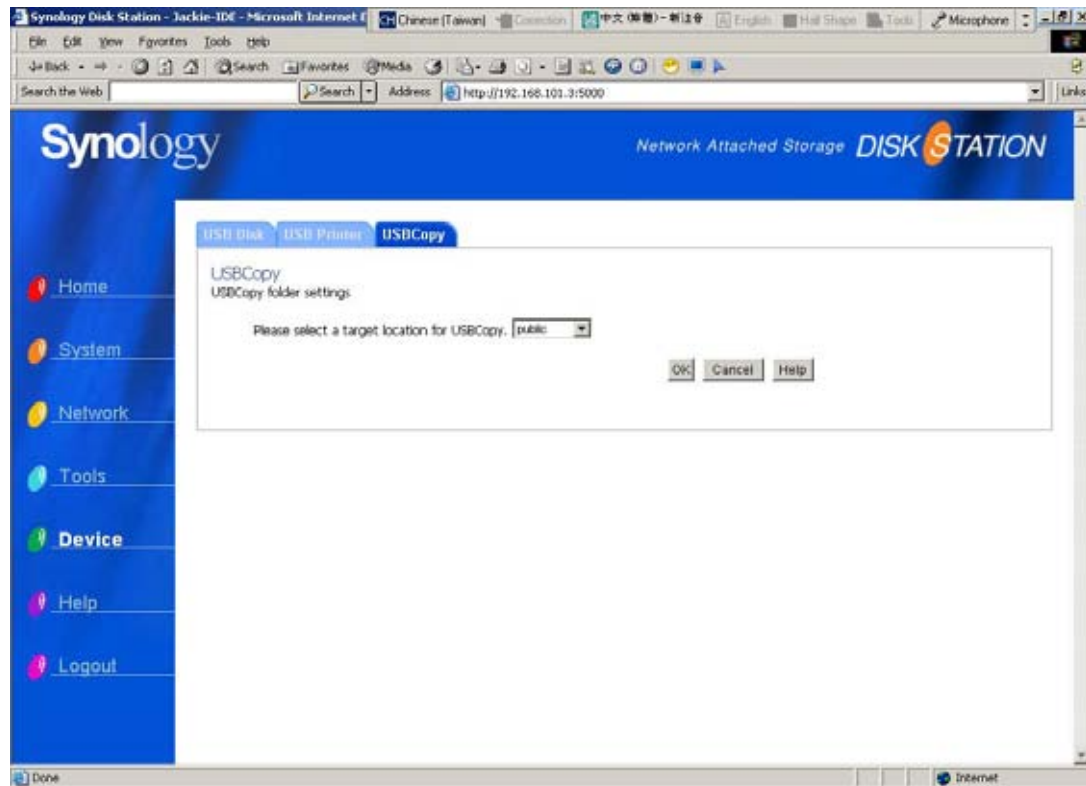


10. Finish.

### 3. USBCopy

By connecting a USB device to the front panel USB port of the DS-101j Disk Station, all data can be copied to the internal hard disk by pressing the USBCOPY button on the front panel of the DS-101j Disk Station.

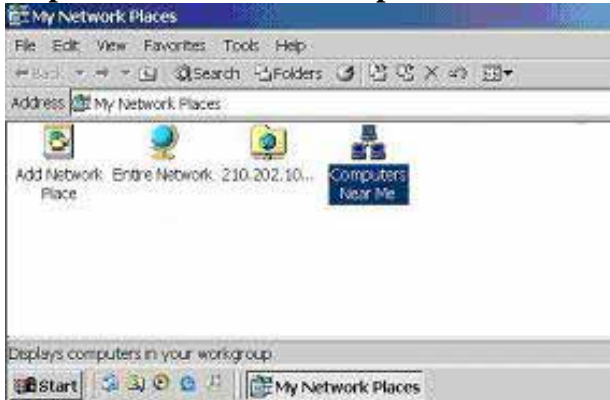
You can choose a share folder for storing data copied from the USB device here. The DS-101j Disk Station will automatically create a “**USBCopy**” folder in the specified share folder to store all data. The title of each data file you copy will include the date and time each file copy was created by pressing the USBCOPY button.



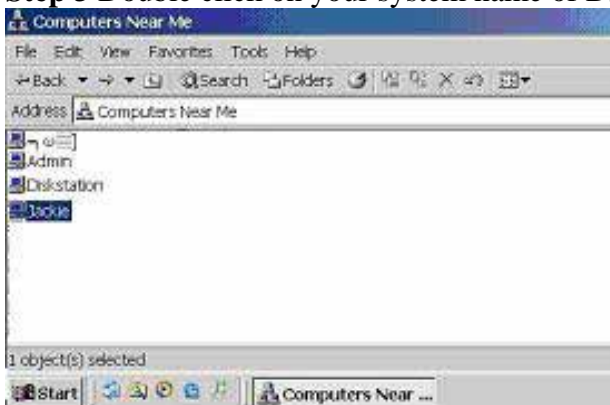
To access the data you copied from your USB device, please follow the instructions below.

**Step 1** Go to **My Network Places**.

**Step 2** Double click on **Computers Near Me**.



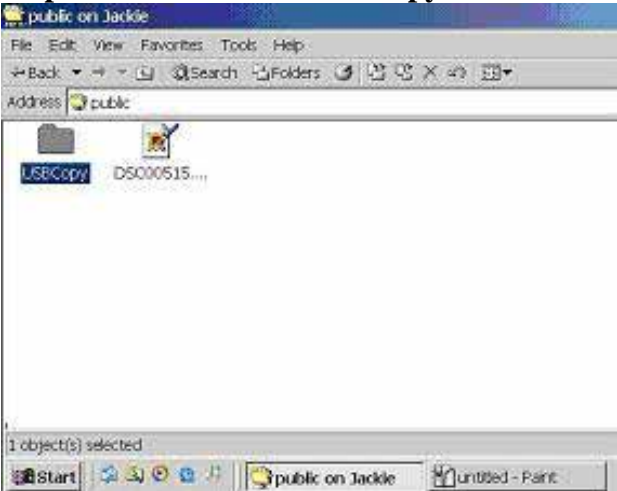
**Step 3** Double click on your system name of DS-101j Disk Station.



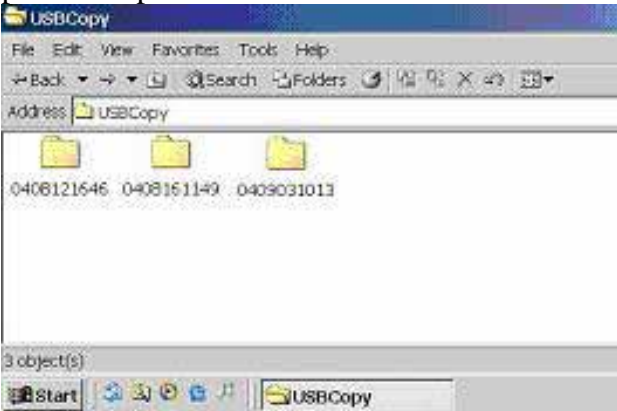
**Step 4** Double click on the specified share. (Public for example)



**Step 5** Double click on **USBCopy**.



**Step 6** You will see the folders named by the date and time the Copy button on the front panel was pressed.



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## Chapter 5 Use Data Replicator

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Having data backed up is one of the methods to ensure data completeness. However, people are often too busy to do backup regularly. In order to have your files backed up in an efficient and real-time way, Data Replicator fully automates the backup process from Windows clients to the DS-101j Disk Station. It can:

1. Monitor specified folders on your computer and perform immediate backup for modified files to the DS-101j Disk Station;
2. Encrypt files to provide higher security;
3. Compress backup files in order to save storage space on DS-101j Disk Station;
4. Provide version management function and save files up to 20 versions on the DS-101j Disk Station;
5. Provide tag management function, and tag up to 20 of the most representative versions;
6. Recover files from the DS-101j Disk Station to your computer when needed in the future, which makes file backup, management and protection easier than ever.



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## 5.1 Before You Begin

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### 1. Install DS-101j Disk Station

Before using Data Replicator, you must make sure the following thing:  
Your computer and DS-101j Disk Station have the same encoding setting.

### 2. Basic Computer Requirements

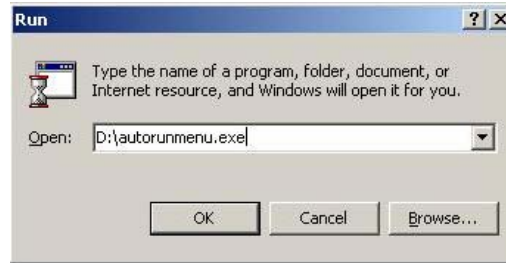
- 5MB Hard Disk Space
- Operating System: Windows 98/ME/2000/XP
- Optimal Screen Resolution: 1024\*768 or above
- Microsoft Networking over TCP/IP protocol enabled, and the networking to DS-101j Disk Station is properly configured.

### 3. Install Data Replicator

Insert the DS Resource CD into your PC's CD-ROM drive, and you will see the following window. Click **Data Replicator** and the system will lead you go through the process of installing Data Replicator.



If the window above didn't appear, please go to Start on the left bottom of the screen and select Run. Enter D:\autorunmenu.exe (where D is the letter of your CD-ROM drive) in the Open: box and click OK. The auto-run menu should appear. Then you can install Data Replicator according to the instructions on the screen.



To make sure Data Replicator is installed properly, please shut down all running programs or remove the old version of Data Replicator before installation.

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## 5.2 Use Data Replicator

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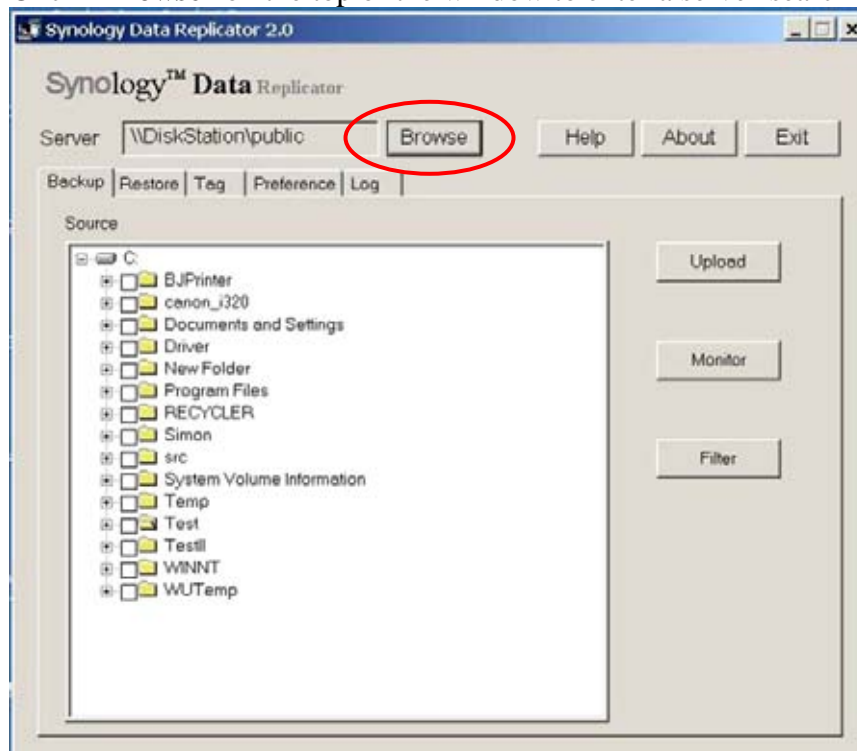
### 1. Backup Windows clients' data to DS-101j Disk Station

#### 1.1 Uploading

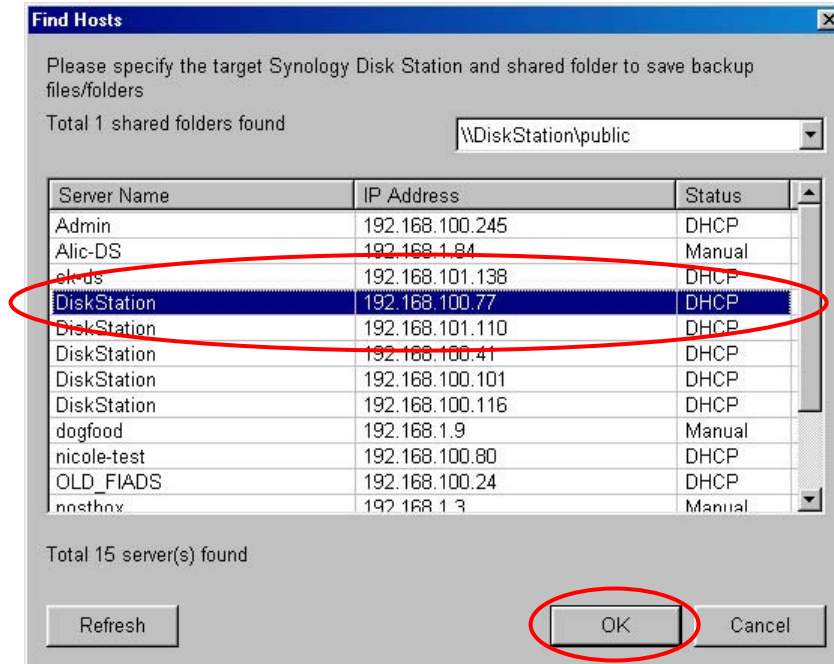
##### A. All files

At the first time running Data Replicator, you need to backup all the files in the selected folders to DS-101j Disk Station. After that, you may monitor for the modified versions.

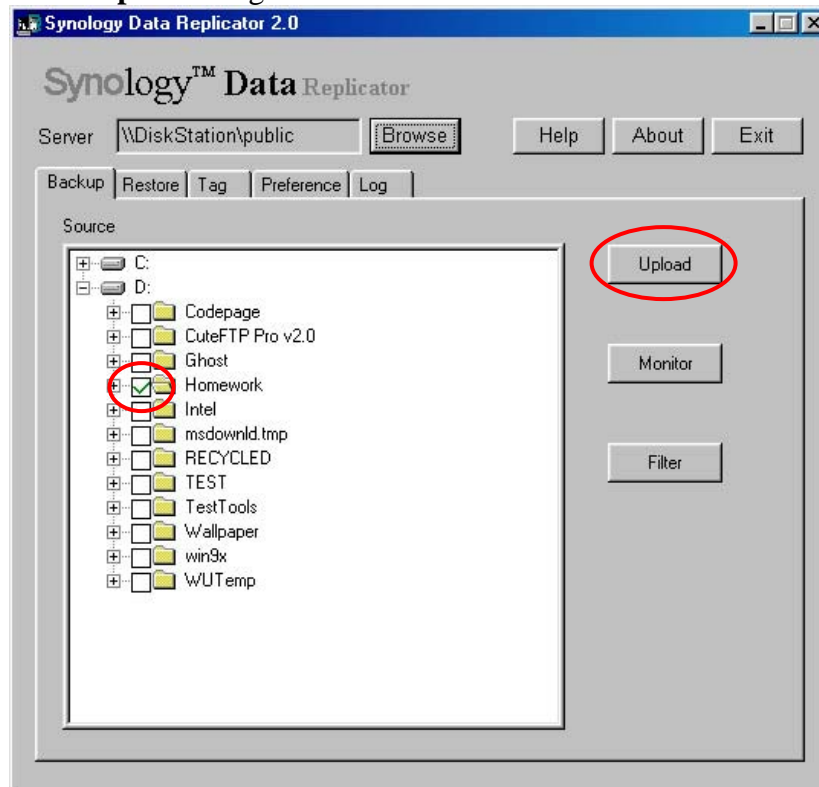
- a. Click "**Browse**" on the top of the window to enter a server-searching window.



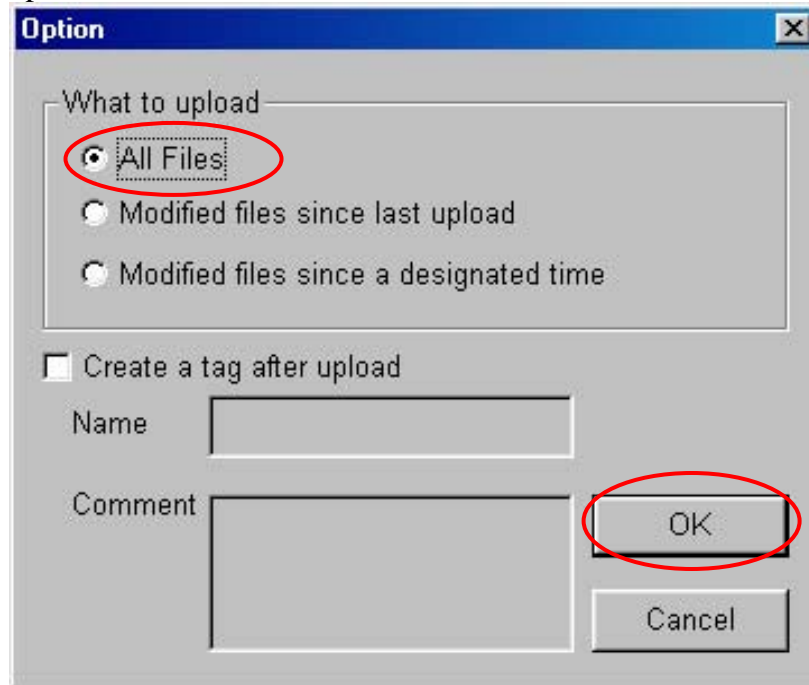
- b. Select which DS-101j Disk Station you want to backup the file to. And click **OK**.



- c. Check the folders you want to backup and monitor in the “**Source**” list, and click “**Upload**” to go on.



- d. Make sure the “**All Files**” option is selected, and click “**OK**” to start the upload.



If this file version has a special representative meaning, you can select the option “**Create a tag after upload**” so that after the upload is complete this file version can be created with a tag to allow for easy restoration in the future. Please refer to “**3. Tag Management**” for the usage of “**tags**.”

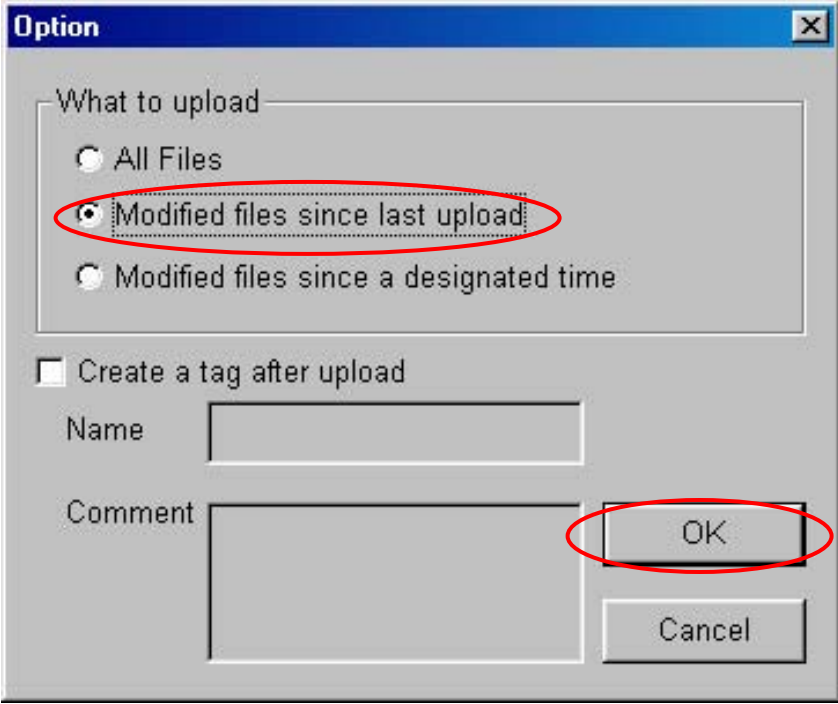


1. **Data Replicator** only monitors the folders in the local hard disk. The monitoring does not include network drives or other external storage devices.
2. **Data Replicator** does not support monitoring of files under the root directory in this machine.

### **B. Modified files since last upload**

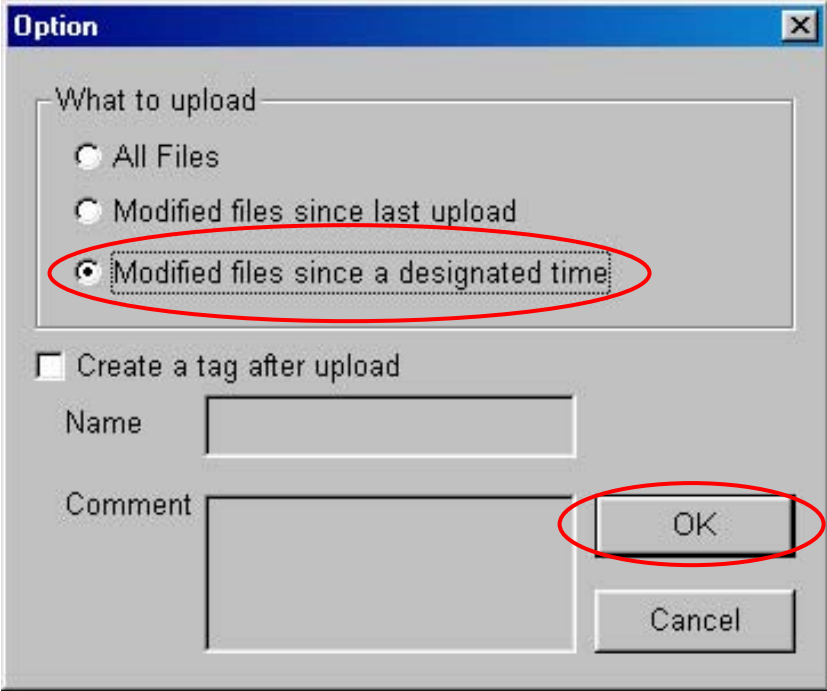
If the files in your computer are large and modified frequently, monitoring the files could result in network inefficiency, for every file modification will have an according upload. If the network’s efficiency is a concern then it is suggested that you disable the “Monitor” function after the first time full upload, and only upload the files manually whenever you think necessary.

You can select the “**Modified files since last upload**” and click “**OK**” to do a manual upload.



**C. Modified files since a designated time**

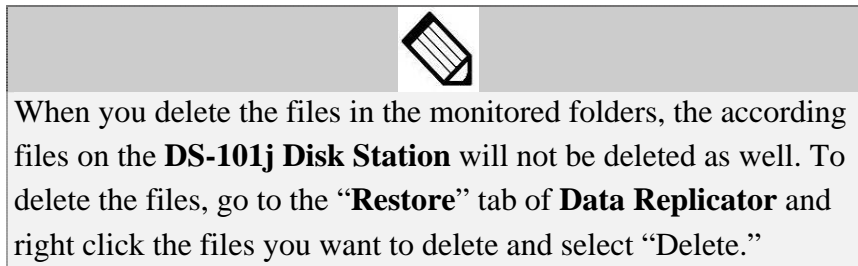
If for personal reason you have to upload files modified after a specified time, select the “**Modified files since a designated time**” and click “**OK.**”



## 1.2 Monitoring

After first-time backup, you can continue monitoring the folders in your computer. Any changes made to the files in the folders will be uploaded to the **DS-101j Disk Station** automatically.

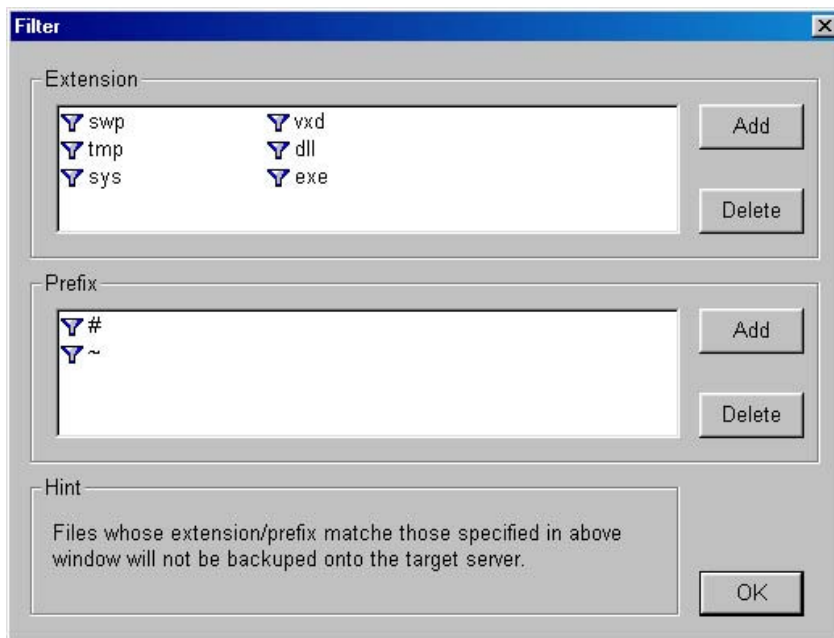
To monitor the folders, select file folders and click the “**Monitor**” button, and the **Data Replicator** program will be minimized to the system tray to perform monitoring.



## 1.3 Filtering

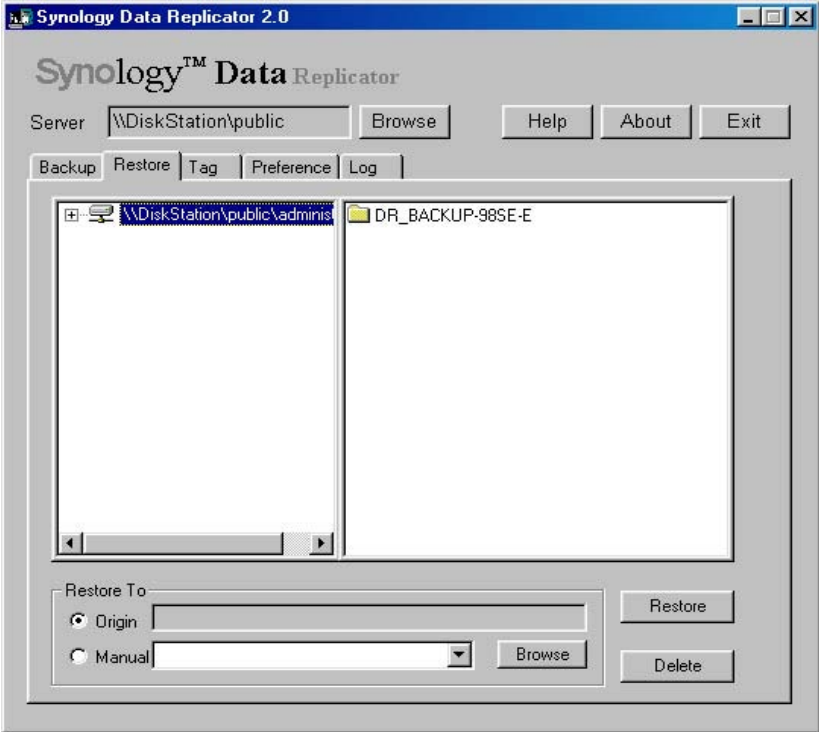
You can choose not to backup certain file types with the “**filtering**” function by doing the following:

Click the “**Filter**” button, add specific file “**extension**” or “**prefix**” to the ignore list, and click “**OK**” to finish.



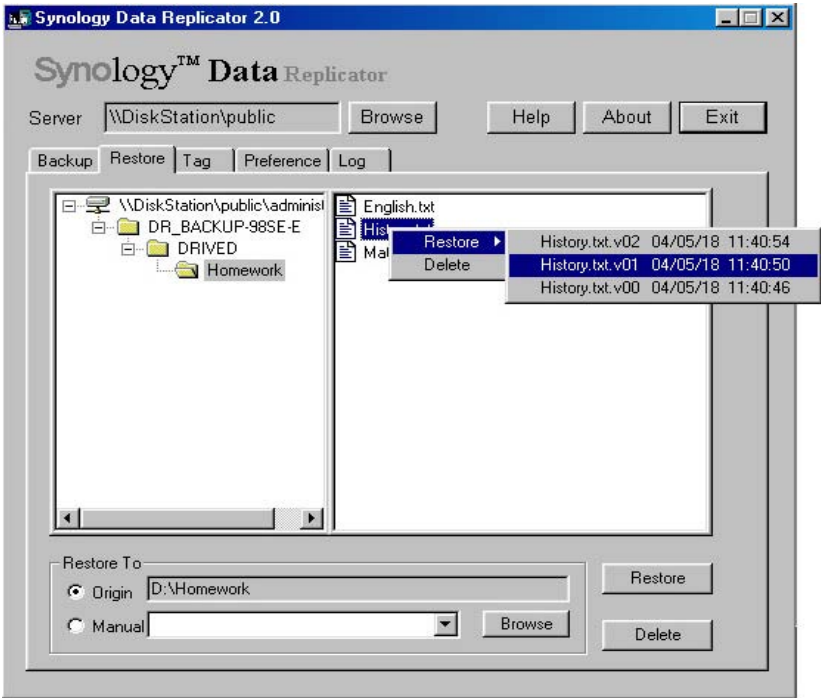
2. Restore data to your computer

2.1 Select the “Restore” tab.



2.2 Select the destination where the file will be restored to in the “Restore to” section.

2.3 Select files or folders you want to restore, and click the “Restore” button, or right-click the files or folders and select “Restore.”





2.4 Choose which file version or tag to restore. Please refer to “**3. Tag Management**” for the usage of “**tags.**”



1. If you restore the files one by one, you can only choose which file version to restore.
2. If you restore multiple files and folders at a time, because different files and folders might have different versions, you can only choose to restore “Current Version” or a specific tag.

### 3. Tag Management

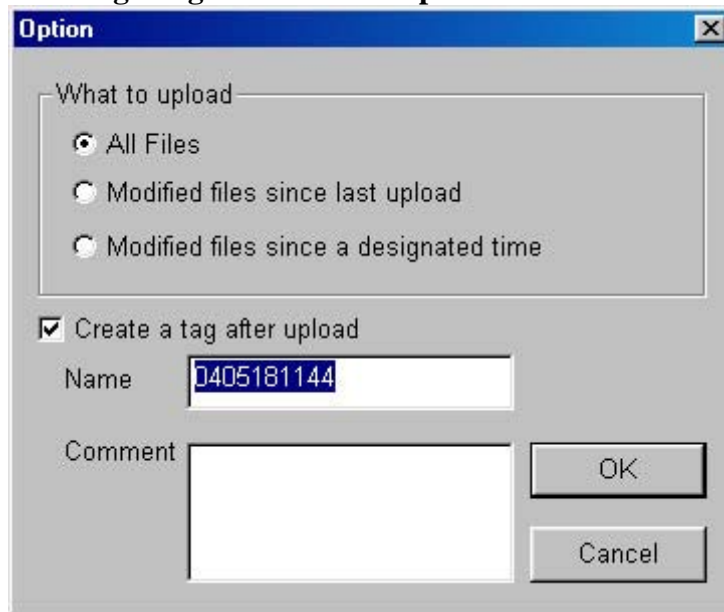
**Data Replicator** allows you to create tags up to 20. The purpose of creating a tag is to keep “the status of all files and folder on the **DS-101j Disk Station** at a specific time” on record. For example, if a software engineer has already completed program version 1.0 and is preparing to start coding version 2.0. To this engineer version 1.0 is the version with special representative meaning. While completing all version 1.0 program files, he/she can create a tag for these files at the specific point in time when uploading these version 1.0 files to the **DS-101j Disk Station**. To avoid problems while modifying version 2.0, the engineer can easily restore all 1.0 program files to his machine for further modification.

Once the number of tags reaches 20, and you want to create more tags, it is required that you manually delete existing and unwanted tags. **Data Replicator** will not delete the oldest tags automatically in this case.

By default the tag name is the date and time while the tag was created. For example, “0111072228” means the tag is created on November 7, 2001 at 10:28 pm. You may change the tag name according to your preference.

**You can create a tag in 2 ways:**

#### 3.1 Creating a tag after files are uploaded



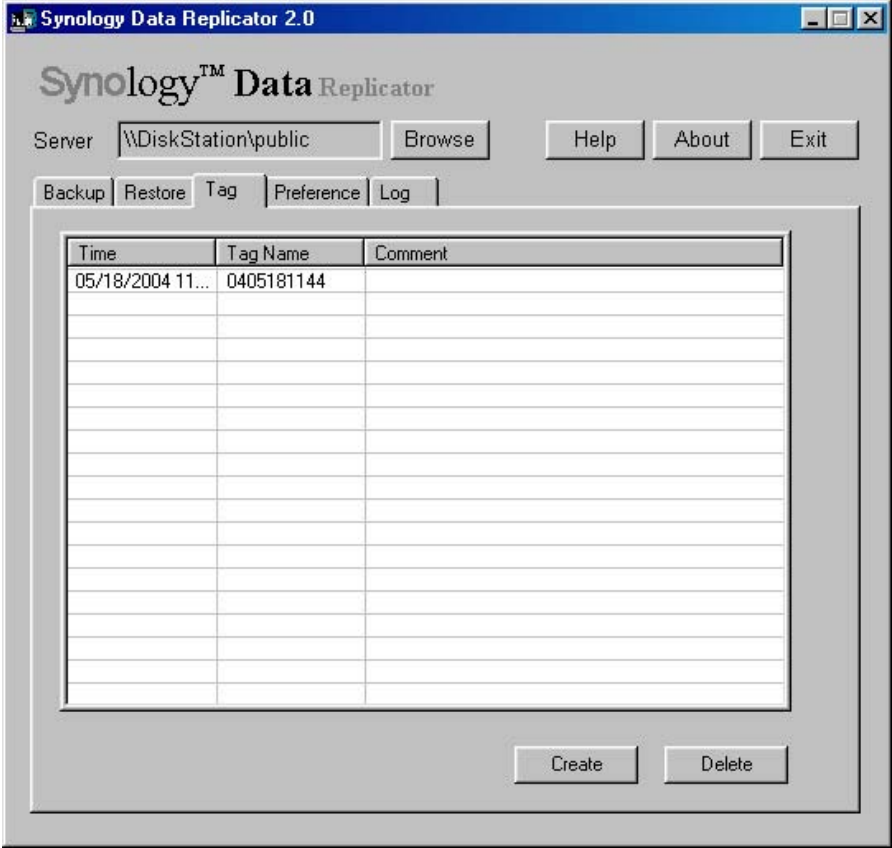
You can create a new tag for uploaded files when uploading files in the “**Backup**” tab. Select **Create a tag after upload**, and click **OK**.

When creating a tag, the files uploaded will not only be tagged with that tag, but also the existing files on **DS-101j Disk Station**.



For example, if there are “file A” and “file B” on **DS-101j Disk Station** at the time you create “tag 22222” by uploading “file 1” and “file 2,” then “tag 22222” will tag “file A,” “file B,” “file 1,” and “file 2,” that is, in the future when you choose to restore “tag 22222,” not only “file 1” and “file2” will be restored, but also “file A” and “file B.”

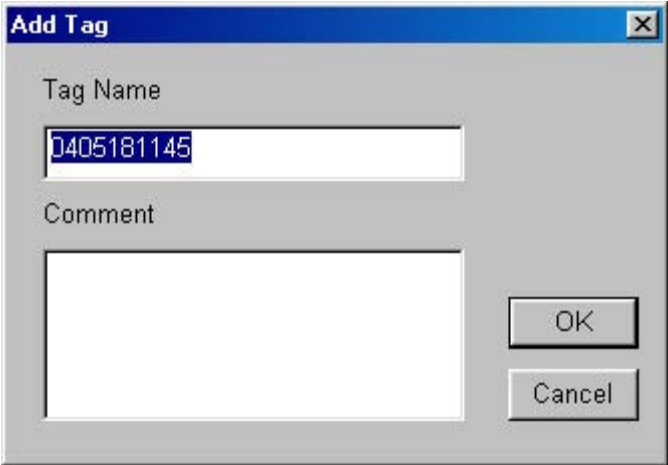
**3.2 Creating a new tag in the “Tag” tab.**



Please follow the steps below to create a tag:

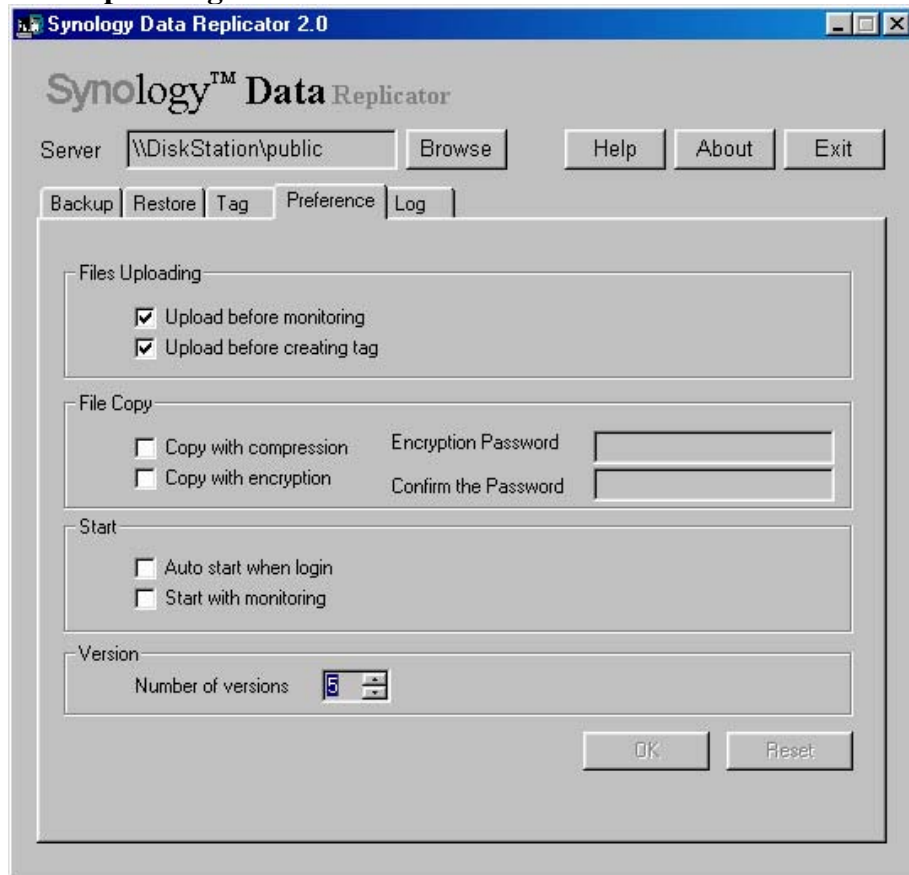
1. Click the “**Tag**” tab.
2. Click “**Create**” button.
3. Enter tag name and comment for this tag.

4. Click **“OK”** to finish.



## 4. Preferences

### 4.1 Files Uploading



#### A. Upload before monitoring.

When this option is checked, each time “Monitor” is executed, the program will check if there are files that have not been uploaded. If there are, the system will automatically upload these files. This is to prevent some files being updated but not uploaded.

#### B. Upload before creating tag.

If you check this option, before a new tag is created, the program will upload updated files from your computer to the DS-101j Disk Station and then create a tag after uploading. This is to ensure that the created tag has tagged all the latest version of files in your computer.

## 4.2 File Copy

### A. Copy with compression

In order to save storage space, when this option is enabled, the program will compress all backup files stored on the DS-101j Disk Station.

### B. Copy with encryption

In order to ensure data security and prevent others from intercepting data, you can choose this option to set password protection for files in DS-101j Disk Station.

## 4.3 Setup

### A. Auto start when login.

You can choose to run the program after logging on to Windows.

### B. Start with monitoring.

You can choose to run the “**Monitor**” function after starting the program. If you also checked the “**Upload before monitoring**” option, once you are logged in, the program will first upload all the files that have not been uploaded before running the “**Monitor**” function.

## 4.4 Version

Data Replicator allows creating up to 20 versions. You can decide the number of versions for a single file that will be uploaded.

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## Chapter 6 Troubleshooting


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Here we have listed a few questions you might have when operating the Synology DS-101j Disk Station, and we have listed some possible solutions to each question.

<b>1. The DS-101j Disk Station does not work after the HDD was installed.</b>	
<b>Check</b>	<b>Solution</b>
If you've connected the DS-101j Disk Station with AC power adapter, power cord and RJ-45 LAN cable, put the plug in the power outlet, and pressed the Power button.	<b>Please connect the DS-101j Disk Station with AC power adapter, power cord and RJ-45 LAN cable, put the plug in the power outlet, and pressed the Power button.</b>
If you've pressed the "RESET" button (on the back panel) twice in 10 seconds correctly to format the internal hard disk.	<b>Please make sure that you've pressed the RESET button twice in 10 seconds correctly to format your internal HDD. After the HDD is formatted, you may be able to use your DS-101j Disk Station. Please refer to 1.3 Install HDD in Chapter 1 for the detailed steps for HDD installation.</b>
<b>Please note that all data on the hard disk you prepared by yourself will be deleted after the hard disk has been formatted.</b>	
<b>2. I can't see the USB share from My Network Places after I plug in an USB device to DS-101j Disk Station.</b>	
<b>Please note that if you've pressed the COPY button on the front panel, you will not be able to see the USB share from My Network Places.</b>	
<b>Check</b>	<b>Solution</b>
What you plug in is a USB storage device, such as USB disks, USB thumb drives, and digital cameras.	<b>Change it if it's not a USB storage device.</b>
Please connect to the Web management User Interface (UI) and check the USB Device section to see if your USB device is recognized.	<b>Try another USB device if you can't see your USB device in the UI. Because it may mean that your USB device has a compatibility problem. Also it might be because the DS-101j Disk Station doesn't support USB storage devices behind an USB hub.</b>

The USB device is not defective.	<b>Change for another one if it's defective.</b>
Your USB device is not connected through a USB hub device.	<b>Change for another USB device. The DS-101j Disk Station doesn't support USB storage devices through a USB hub.</b>
The USB device is formatted already.	<b>If it hasn't been formatted yet, you can format it as a FAT32 file system from your PC or Mac. Please refer to 4.5-1 USB Disk in the User's Guide for detailed instruction.</b>
<b>3. My USB printer can't work in a sudden after I configured it successfully.</b>	
<b>Check</b>	<b>Solution</b>
If the printer is physically alright. Such as whether the power is on, the ink is sufficient, etc.	<b>If it's not physically alright, please mend it.</b>
The disk usage on Status page of the DS-101j Disk Station UI.	<b>If the amount of free space on DS-101j Disk Station is not sufficient to queue a print job, you may have to remove some unused files to get more space.</b>
<b>4. I can't delete folders in DS-101j Disk Station.</b>	
<b>Check</b>	<b>Solution</b>
If you used "/" or ":" to name the folder when you created it on a Mac.	<b>If you'd like to delete the folder, please do it on a Mac. Some characters such as \ / : * ? " &lt; &gt;   do not work on Windows while they are suitable for Mac. Therefore, you might have to avoid using these characters when naming folders. Otherwise, you need to go to a Mac every time you want to delete folders with these characters.</b>
If the name of the folder on Mac ends up with ". " or "space."	
<b>5. I can't use the USB printer from Mac.</b>	
<b>Check</b>	<b>Solution</b>
Whether the printer has a PostScript function.	<b>The DS-101j Disk Station only supports USB printers, which have PostScript function.</b>
<b>6. DS-101j Disk Station automatically shuts down after it was turned on.</b>	
<b>Check</b>	<b>Solution</b>
The system.	<b>There are disk bad sectors in an important system area. Please contact with your vendor for further checking.</b>



<b>7. I can't find DS-101j Disk Station on my computer.</b>	
<b>Check</b>	<b>Solution</b>
<p>If you've unblocked DSAssistant in the firewall on your computer that is running Windows XP or protected by anti-virus programs.</p>	<p><b>Click unblock button when the security alert message pops out.</b></p> 
<p>If DS-101j Disk Station has been connected to the network and turned on.</p>	<p><b>Connect DS-101j Disk Station to the network with RJ-45 LAN cable. And then turn it on.</b></p>
<p>If your computer is connected to the network.</p>	<p><b>Connect your computer to the network.</b></p>

There are more frequent asked questions on [www.synology.com](http://www.synology.com). You may also check out our website for more information.

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## Appendix A Suggested Periphery

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### Suggested HDD

<b>Brand</b>	<b>Model</b>	<b>Size</b>
Seagate	ST3200822A	200GB
Samsung	SV1604N	160GB
Samsung	SV1203N	120GB
Hitachi	IC35L180AVV207-1	185GB
Hitachi	HDS722525VLAT80	250GB
Hitachi	Deskstar 7K400	400GB
Maxtor	DiamondMax Plus 9	200GB
Maxtor	DiamondMax 16	160GB
Maxtor	DiamondMax 10	300GB
Maxtor	MaxLine II 5A300J0	300GB
Maxtor	MaxLine II Plus 7Y250B0	250GB
WD	WD1600	160GB
WD	WD2500	250GB

★ Hitachi Deskstar 7K400 and Maxtor DiamondMax 10 are for version 2.0116 or later.

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## Appendix B Technical Support

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### 1. Hardware Problem

If you need any assistance on hardware, please contact your local authorized Synology dealer or the suppliers.

### 2. Firmware Update

If you need to upgrade your system, please visit [www.synology.com](http://www.synology.com) to download the updated firmware version.

### 3. Installation and Setup Problem

If you need any help while installing or setting up the system, please contact your local authorized Synology authorized local dealer or the suppliers.