



# Disk Station

## User's Guide

### Applied Model:

DS109j, DS109, DS109+, DS209j, DS209, DS209+, DS209+II,  
DS409, DS409slim, DS409+, RS409, RS409+, RS409RP+,  
DS509+

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# About this User's Guide

This user's guide covers all major functions of Synology NAS Server ("Synology Disk Station"). Some of the functions may only be available on specific models. Please refer to product specification for further details.

# Getting to know your Synology Disk Station

## Introduction

Congratulations on your purchase of *Synology Disk Station*. *Synology Disk Station* is specially designed for the following purposes:

### Storing and Sharing Files via the Internet

Windows users, Mac users, and Linux users can easily share files within the Intranet or through the Internet. Unicode language support makes sharing different language files from *Synology Disk Station* smoothly.

### PC Data and Server Data Backup

*Synology Disk Station* provides various backup solutions to back up PC data to *Synology Disk Station*, back up *Synology Disk Station* data to an external hard drive, or another *Synology Disk Station* or an rsync-compatible server.

### Transferring Data via FTP

*Synology Disk Station* provides FTP service with bandwidth restriction and anonymous login. To transfer data safely, "FTP over SSL/TLS" and uninvited IP auto-black are also available.

### Managing Files through Web Browsers

File Station 2 makes it possible for users to manage their files on the *Synology Disk Station* easily through a web interface with Windows style file operations.

### Sharing Photos, Videos and Blogs with Photo Station 3

"Photo Station 3" gives you the freedom to share photos and videos over the Internet without complicated upload steps. Album control ensures the content is shared with the right persons. Visitors can even leave comments for your photos. Furthermore, a brand new blogging system is integrated for you to easily share your living and thoughts over the Internet.

### Enjoying Entertainment Content on the Server

"Download Station" allows you to download files from the Internet through BitTorrent, FTP, HTTP, eMule and NZB to *Synology Disk Station*. Moreover, if you have UPnP DMA connected in the LAN, you can share the multimedia files on *Synology Disk Station*. If you just want to share and play mp3 files stored on *Synology Disk Station*, you can enable "iTunes Service", and enjoy the music through any iTunes clients on LAN.

The build-in "Copy" button on the device allows instant copy of photos from the camera to *Synology Disk Station*.

## **Enjoying Music instantly anytime**

When a pair of USB speakers is connected to the *Synology Disk Station*, "Audio Station" allows users to listen to music stored on the *Synology Disk Station*, from the connected iPod, or even stream the Internet Radio stations. In addition, users can stream music from the *Synology Disk Station* with a web browser over the Internet.

## **Hosting Websites**

The Virtual Host feature allows hosting up to 30 websites with "Web Station", with PHP and MySQL supported.

## **Video Recording with IP Cameras**

"Surveillance Station 2" allows you to manage, view, and record videos from multiple IP cameras over the network. By accessing the Surveillance Station 2's web-based management interface, you can watch the real-time image the camera is monitoring, and record videos continuously, in motion-detection mode, or in alarm-recording mode.

## **USB Printer Server**

You can share up to 2 USB 2.0 Printers through the LAN.

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\* Supported on specific models only. Please refer to the product Specification table.

# Specification

Note: For the most recent product specification, please visit [www.synology.com](http://www.synology.com)

## 1-bay Models

Item	DS109j	DS109	DS109+
Internal HDD	3.5 SATA (II) x 1	3.5 SATA (II) x 1	3.5 SATA (II) x 1
Max. Capacity	1TB	1.5TB	1.5TB
Hot Swappable HDD	No	No	No
External HDD Interface	USB x 3	USB x 3 eSATA x 1	USB x 3 eSATA x 1
LAN Port	Gigabit X 1	Gigabit X 1	Gigabit X 1
USBCopy	Yes	Yes	Yes
System Fan	X 1 (50mmX50mm)	X 1 (50mmX50mm)	X 1 (50mmX50mm)
Size (HxWxD) (mm)	160 X 63 X 218	160 X 63 X 218	160 X 63 X 218
Weight (Kg)	0.81	0.81	0.81
Supported Clients	<ul style="list-style-type: none"> <li>• Windows 2000 Onward</li> <li>• Mac OS X 10.3 Onward</li> </ul>		
Max. User Accounts	128	1024	2048
Max. Group Accounts	64	128	256
Max. Shared Folder	128	256	256
Max. Concurrent Connections	32	64	256
Max. Supported IP Cameras	1	5	10
File System	<ul style="list-style-type: none"> <li>• EXT3 • FAT (External Disk Only)</li> <li>• NTFS (External Disk Read Only)</li> </ul>		
Volume Type	Basic		
Agency Certifications	<ul style="list-style-type: none"> <li>• FCC Class B • CE Class B</li> <li>• BSMI Class B</li> </ul>		
HDD Hibernation	Yes	Yes	Yes
Event Notification	Yes	Yes	Yes
NTP	Yes	Yes	Yes
FTP over SSL/TLS	Yes	Yes	Yes
HTTPS Connection	Yes	Yes	Yes
Windows ADS Domain	No	Yes	Yes
Encrypted Network Backup	Yes	Yes	Yes
Scheduled Power On/Off	Yes	Yes	Yes
Language Localization	<ul style="list-style-type: none"> <li>• English • German • French • Italian • Spanish</li> <li>• Danish • Norwegian • Polish • Swedish • Dutch</li> <li>• Russian • Japanese • Korean • Traditional Chinese</li> <li>• Simplified Chinese Hungarian • Turkish • Portuguese European • Portuguese Brazil</li> </ul>		
Power Consumption And Environment Requirements	<ul style="list-style-type: none"> <li>• Line voltage: 100V to 240V AC •</li> <li>• Frequency: 50 / 60Hz</li> <li>• Operating Temperature: 40 to 95° F (5 to 35° C)</li> <li>• Storage Temperature: 15 to 155° F (-10 to 70° C)</li> <li>• Relative Humidity: 5% to 95% RH</li> <li>• Maximum Operating Altitude: 10,000 feet</li> </ul>		

## 2-bay Models

Item	DS209j	DS209	DS209+	DS209+II
Internal HDD	3.5 SATA (II) x 2	3.5 SATA (II) x 2	3.5 SATA (II) x 2	3.5 SATA (II) x 2
Max. Capacity	1TB	1.5TB	1.5TB	1.5TB
Hot Swappable HDD	No	No	No	No
External HDD Interface	USB x 3	USB x 3	USB x 3 eSATA x 1	USB x 3 eSATA x 1
LAN Port	Gigabit X 1	Gigabit X 1	Gigabit X 1	Gigabit X1
USBCopy	Yes	Yes	Yes	Yes
System Fan	X 1 (70mmX70mm)	X 1 (70mmX70mm)	X 1 (70mmX70mm)	X 1 (70mmX70mm)
Size (HxWxD) (mm)	161 X 88 X 218	161 X 88 X 218	161 X 88 X 218	161 X 88 X 218
Weight (Kg)	0.98	0.98	0.98	0.98
Supported Clients	<ul style="list-style-type: none"> <li>• Windows 2000 Onward</li> <li>• Mac OS X 10.3 Onward</li> </ul>			
Max. User Accounts	128	1024	2048	2048
Max. Group Accounts	64	128	256	256
Max. Shared Folder	128	256	256	256
Max. Concurrent Connections	32	128	256	256
Max. Supported IP Cameras	1	5	10	10
File System	<ul style="list-style-type: none"> <li>• EXT3 • FAT (External Disk Only)</li> <li>• NTFS (External Disk Read Only)</li> </ul>			
Volume Type	<ul style="list-style-type: none"> <li>• Basic • JBOD • RAID 0 • RAID 1</li> </ul>			
Agency Certifications	<ul style="list-style-type: none"> <li>• FCC Class B • CE Class B</li> <li>• BSMI Class B</li> </ul>			
HDD Hibernation	Yes	Yes	Yes	Yes
Event Notification	Yes	Yes	Yes	Yes
NTP	Yes	Yes	Yes	Yes
FTP over SSL/TLS	Yes	Yes	Yes	Yes
HTTPS Connection	Yes	Yes	Yes	Yes
Windows ADS Domain	No	Yes	Yes	Yes
Encrypted Network Backup	Yes	Yes	Yes	Yes
Scheduled Power On/Off	Yes	Yes	Yes	Yes
Language Localization	<ul style="list-style-type: none"> <li>• English • German • French • Italian • Spanish</li> <li>• Danish • Norwegian • Polish • Swedish • Dutch</li> <li>• Russian • Japanese • Korean • Traditional Chinese</li> <li>• Simplified Chinese Hungarian • Turkish • Portuguese European • Portuguese Brazil</li> </ul>			
Power Consumption And Environment Requirements	<ul style="list-style-type: none"> <li>• Line voltage: 100V to 240V AC</li> <li>• Frequency: 50 / 60Hz</li> <li>• Operating Temperature: 40 to 95° F (5 to 35° C)</li> <li>• Storage Temperature: 15 to 155° F (-10 to 70° C)</li> <li>• Relative Humidity: 5% to 95% RH</li> <li>• Maximum Operating Altitude: 10,000 feet</li> </ul>			

## 4-bay Models

Item	DS409slim	DS409	DS409+	RS409	RS409+	RS409RP+
Internal HDD	2.5 SATA (II) x 4	3.5 SATA (II) x 4	3.5 SATA (II) x 4	3.5 SATA (II) x 4	3.5 SATA (II) x 4	3.5 SATA (II) x 4
Max. Capacity	500GB	1.5TB	1.5TB	1.5TB	1.5TB	1.5TB
Hot Swappable HDD	No	No	No	Yes	Yes	Yes
External HDD Interface	USB x 2 eSATA x 1	USB x 2 eSATA x 1	USB x 2 eSATA x 1	USB x 2 eSATA x 1	USB x 2 eSATA x 1	USB x 2 eSATA x 1
LAN Port	Gigabit X 1	Gigabit X 1	Gigabit X 1	Gigabit X 2	Gigabit X2	Gigabit X2
USBCopy	Yes	No	No	No	No	No
System Fan	X 1 (60mmX60mm)	X 2 (80mmX80mm)	X 2 (80mmX80mm)	X 3 (40mmX40mm)	X 3 (40mmX40mm)	X 4 (40mmX40mm)
Power Fan	No	No	No	X 1 (40mmX40mm)	X 1 (40mmX40mm)	X 1 (40mmX40mm)
Size (HxWxD) (mm)	120 X 105 X 142	168 X 184 X 230	168 X 184 X 230	44 X 430.5 X 457.5	44 X 430.5 X 457.5	44 X 430.5 X 457.5
Weight (Kg)	0.66	2.23	2.23	7.1	7.1	9.68
Supported Clients	<ul style="list-style-type: none"> <li>Windows 2000 Onward</li> <li>Mac OS X 10.3 Onward</li> </ul>					
Max. User Accounts	1024	2048	2,048	2,048	2,048	2,048
Max. Group Accounts	128	256	256	256	256	256
Max. Shared Folder	256	256	256	256	256	256
Max. Concurrent Connections	64	128	256	128	512	512
Max. Supported IP Cameras	5	5	10	5	10	10
File System	<ul style="list-style-type: none"> <li>EXT3 • FAT (External Disk Only)</li> <li>NTFS (External Disk Read Only)</li> </ul>					
Volume Type	<ul style="list-style-type: none"> <li>Basic • JBOD • RAID 0 • RAID 1 • RAID 5 • RAID 5+Spare • RAID 6</li> </ul>					
Agency Certifications	<ul style="list-style-type: none"> <li>FCC Class B • CE Class B</li> <li>BSMI Class B</li> </ul>			<ul style="list-style-type: none"> <li>FCC Class A • CE Class A</li> </ul>		
HDD Hibernation	Yes	Yes	Yes	Yes	Yes	Yes
Event Notification	Yes	Yes	Yes	Yes	Yes	Yes
NTP	Yes	Yes	Yes	Yes	Yes	Yes
FTP over SSL/TLS	Yes	Yes	Yes	Yes	Yes	Yes
HTTPS Connection	Yes	Yes	Yes	Yes	Yes	Yes
Windows ADS Domain	Yes	Yes	Yes	Yes	Yes	Yes
Encrypted Network Backup	Yes	Yes	Yes	Yes	Yes	Yes
Scheduled Power On/Off	Yes	Yes	Yes	Yes	Yes	Yes
Language Localization	<ul style="list-style-type: none"> <li>English • German • French • Italian • Spanish</li> <li>Danish • Norwegian • Polish • Swedish • Dutch</li> <li>Russian • Japanese • Korean • Traditional Chinese</li> <li>Simplified Chinese Hungarian • Turkish • Portuguese European • Portuguese Brazil</li> </ul>					
Power Consumption And Environment Requirements	<ul style="list-style-type: none"> <li>Line voltage: 100V to 240V AC</li> <li>Frequency: 50 / 60Hz</li> <li>perating Temperature: 40 to 95° F (5 to 35° C)</li> <li>Storage Temperature: 15 to 155° F (-10 to 70° C)</li> </ul>					

Item	DS409slim	DS409	DS409+	RS409	RS409+	RS409RP+
	<ul style="list-style-type: none"><li>• Relative Humidity: 5% to 95% RH</li><li>• Maximum Operating Altitude: 10,000 feet</li></ul>					

## 5-bay Models

Item	DS509+
Internal HDD	3.5 SATA (II) x 5
Max. Capacity	1.5TB
Hot Swappable HDD	Yes
External HDD Interface	USB x 2 eSATA x 1
LAN Port	Gigabit X 2
USB Copy	No
System Fan	X 2(80mmX80mm)
Power Fan	X 1(40mmX40mm)
Size (HxWxD) (mm)	177 X 203 X 242
Weight (Kg)	4.75
Supported Clients	<ul style="list-style-type: none"> <li>• Windows 2000 Onward</li> <li>• Mac OS X 10.3 Onward</li> </ul>
Max. User Accounts	2,048
Max. Group Accounts	256
Max. Shared Folder	256
Max. Concurrent Connections	512
Max. Supported IP Cameras	10
File System	<ul style="list-style-type: none"> <li>• EXT3 • FAT (External Disk Only)</li> <li>• NTFS (External Disk Read Only)</li> </ul>
Volume Type	• Basic • JBOD • RAID 0 • RAID 1 • RAID 5 • RAID 5+Spare • RAID 6
Agency Certifications	• FCC Class B • CE Class B • BSMI Class B
HDD Hibernation	Yes
Event Notification	Yes
NTP	Yes
FTP over SSL/TLS	Yes
HTTPS Connection	Yes
Windows ADS Domain	Yes
Encrypted Network Backup	Yes
Scheduled Power On/Off	Yes
Language Localization	<ul style="list-style-type: none"> <li>• English • German • French • Italian • Spanish</li> <li>• Danish • Norwegian • Polish • Swedish • Dutch</li> <li>• Russian • Japanese • Korean • Traditional Chinese</li> <li>• Simplified Chinese Hungarian • Turkish • Portuguese European • Portuguese Brazil</li> </ul>
Power Consumption And Environment Requirements	<ul style="list-style-type: none"> <li>• Line voltage: 100V to 240V AC</li> <li>• Frequency: 50 / 60Hz</li> <li>• Operating Temperature: 40 to 95° F (5 to 35° C)</li> <li>• Storage Temperature: 15 to 155° F (-10 to 70° C)</li> <li>• Relative Humidity: 5% to 95% RH</li> <li>• Maximum Operating Allitude: 10,000 feet</li> </ul>

## Limitations

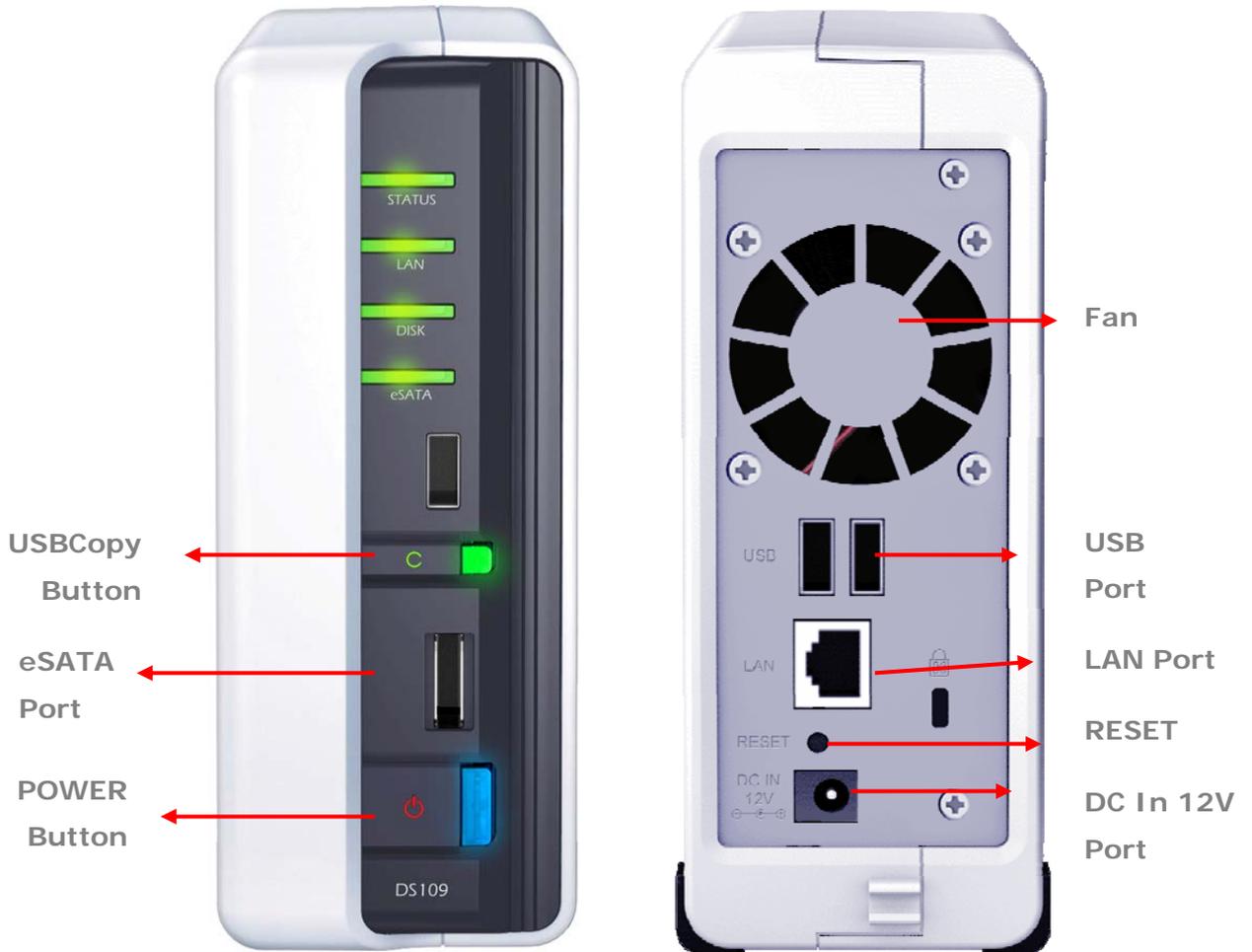
1. Each *Synology Disk Station* supports up to 2 USB printers.
2. USB Copy function only supports USB disks with FAT32 file system.
3. Some digital cameras are defined as a Still Image Device, such as Canon. For such devices, *Synology Disk Station* only supports USB Copy function (No USB share function).
4. For Mac users, *Synology Disk Station* supports only USB printers with PostScript.

# Appearance

## 1-bay & 2-bay Disk Station

*Front View*

*Rear View*



\*

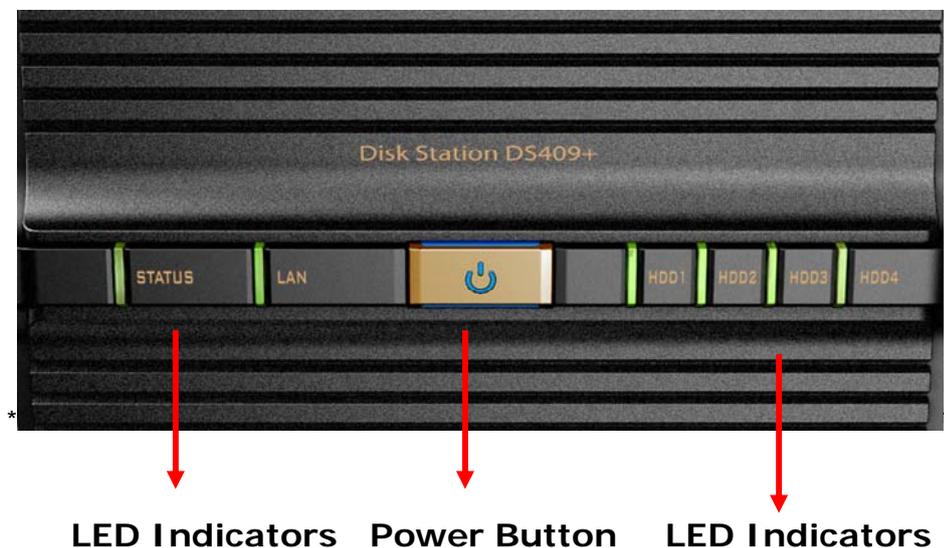
\*

Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn the <i>Synology Disk Station</i> On or Off. To turn Off <i>Synology Disk Station</i> , press the Power Button and hold it until you hear a "beep" sound and the Power LED starts blinking.
COPY Button	Front Panel	The COPY Button lights up when you connect a USB Device (for example: digital camera, USB flash disk). Pressing the button will copy the data from the connected USB device to the <i>Synology Disk Station's</i> internal HDD.
USB Port	Front & Back Panel	The <i>Synology Disk Station</i> offers 3 USB ports for adding additional external hard drives, USB printers,

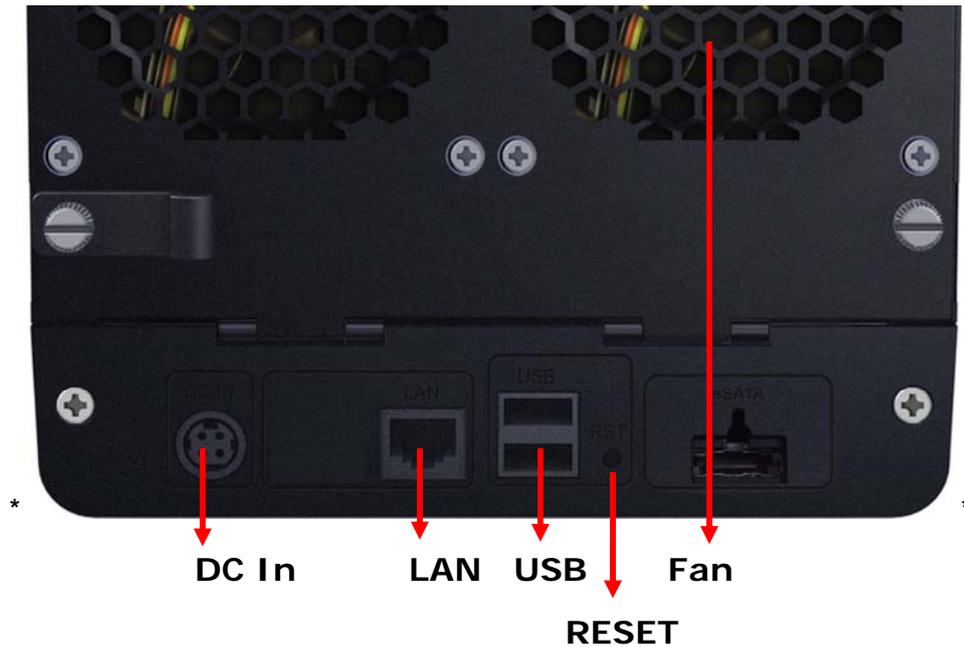
Article Name	Location	Description
		or other USB devices. One at the front, and other two at the back.
Smart Fan Ventilation	Back Panel	The fan is to exhaust waste heat out of <i>Synology Disk Station</i> . It will start automatically when the server starts. If the fan is malfunctioning, system will "beep" every 1 second.
eSATA Port	Front Panel	The eSATA port is for connecting with an external SATA HDD.
RESET Button	Back Panel	<ol style="list-style-type: none"> <li>To restore IP, DNS, passwords for the "admin" account to default value, and reset the "guest" account to the "enabled" status. (Please refer to "Resetting Administrator Password" chapter.)</li> <li>To reinstall the <i>Synology Disk Station</i>. (Please refer to "Reinstalling <i>Synology Disk Station</i>" chapter.)</li> </ol>
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to <i>Synology Disk Station</i> .
DC IN 12V Port	Back Panel	The DC IN 12V Port is where you connect the AC Power Adapter.

## 4-bay Cube/Disk Station

*Front View*



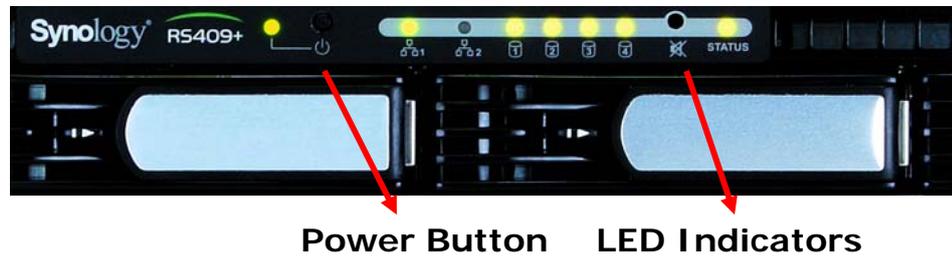
## Rear View



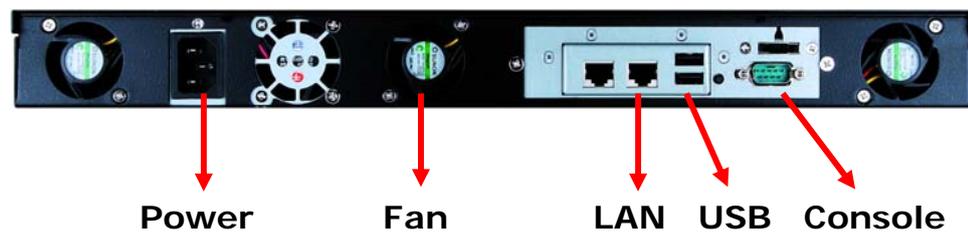
Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn <i>Synology Disk Station</i> On or Off. To turn Off <i>Synology Disk Station</i> , press the Power Button until you hear a "beep" and the Power LED begins blinking. The shutdown process will complete in 30 seconds.
LED Indicators	Front Panel	The LED indicator is used to display the status of the internal disk and the system.
USB Port	Back Panel	<i>Synology Disk Station</i> offers 2 USB ports for adding additional external hard drives, USB printers, or other USB devices.
Fan Ventilation	Back Panel	The fan is to exhaust waste heat out of <i>Synology Disk Station</i> . It will start automatically when the server starts. If the fan is malfunctioning, system will "beep" every 1 second.
RESET Button	Back Panel	<ol style="list-style-type: none"> <li>To restore IP, DNS, passwords for the "admin" account to default value, and reset the "guest" account to the "enabled" status. (Please refer to "Resetting Administrator Password" chapter.)</li> <li>To reinstall the <i>Synology Disk Station</i>. (Please refer to "Reinstalling <i>Synology Disk Station</i>" chapter.)</li> </ol>
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to <i>Synology Disk Station</i> .
DC IN Port	Back Panel	The DC IN Port is where you connect the AC Power Adapter.

## 4-bay 1U Rack Station

### Front View



### Rear View

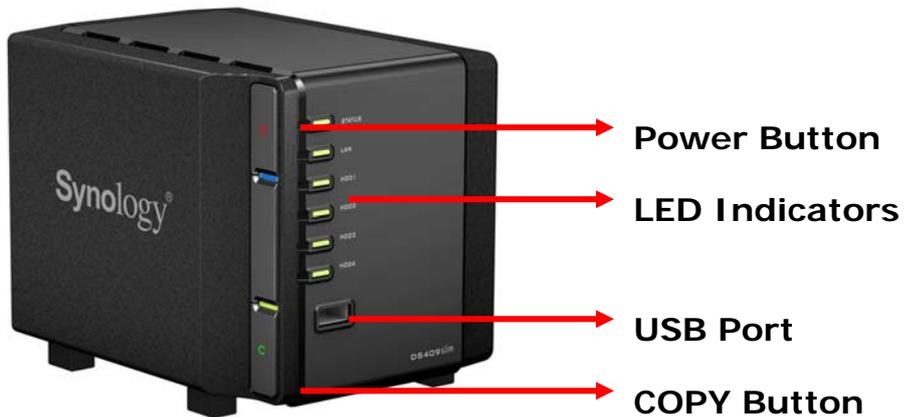


Article Name	Location	Description
Power Button	Back Panel	The Power Button is used to turn <i>Synology Disk Station</i> On or Off. To turn Off <i>Synology Disk Station</i> , press the Power Button until you hear a "beep" and the Power LED begins blinking. The shutdown process will complete in 30 seconds.
LED Indicators	Front Panel	The LED Indicator is used to display the status of the internal disk and the system.
USB Port	Back Panel	<i>Synology Disk Station</i> offers 2 USB ports for adding additional external hard drives or other USB devices.
Fan	Back Panel	There are 3 fans on the back panel. The fans are used to exhaust waste heat out of <i>Synology Disk Station</i> . The fans will start automatically when <i>Synology Disk Station</i> starts. If the fan is malfunctioning, system will "beep" every 1 second.
Console port	Back Panel	The console port is where you connect <i>Synology Disk Station</i> directly to a computer.
RESET Button	Back Panel	<ol style="list-style-type: none"> <li>To restore IP, DNS, passwords for the "admin" account to default value, and reset the "guest" account to the "enabled" status. (Please refer to "Resetting Administrator Password" chapter.)</li> <li>To reinstall the <i>Synology Disk Station</i>. (Please refer to "Reinstalling <i>Synology Disk Station</i>" chapter.)</li> </ol>
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to the <i>Synology Disk Station</i> .

Article Name	Location	Description
Power Port	Back Panel	The power port is where you connect the AC power cord.

## DS409slim

### Front View



### Rear View

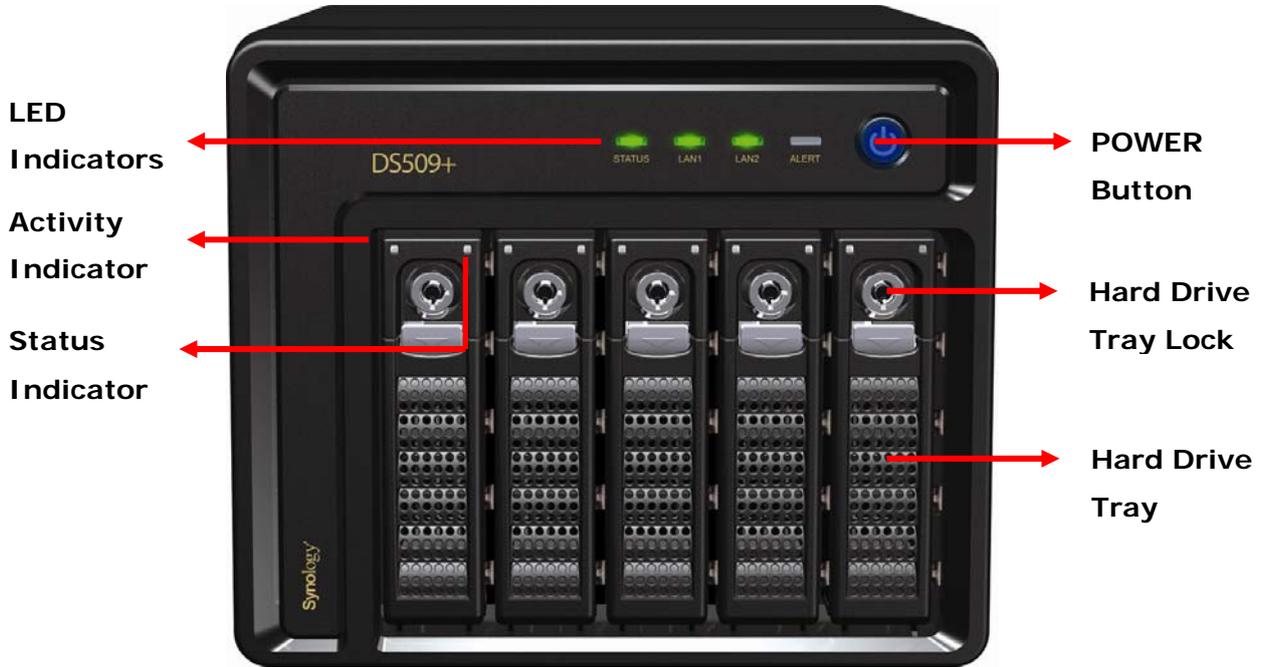


Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn <i>Synology Disk Station</i> On or Off. To turn Off <i>Synology Disk Station</i> , press the Power Button until you hear a "beep" and the Power LED begins blinking. The shutdown process will complete in 30 seconds.
LED Indicators	Front Panel	The LED Indicator is used to display the status of the internal disk and the system.
USB Port	Front and Back Panel	<i>Synology Disk Station</i> offers 2 USB ports for adding additional external hard drives or other USB devices.

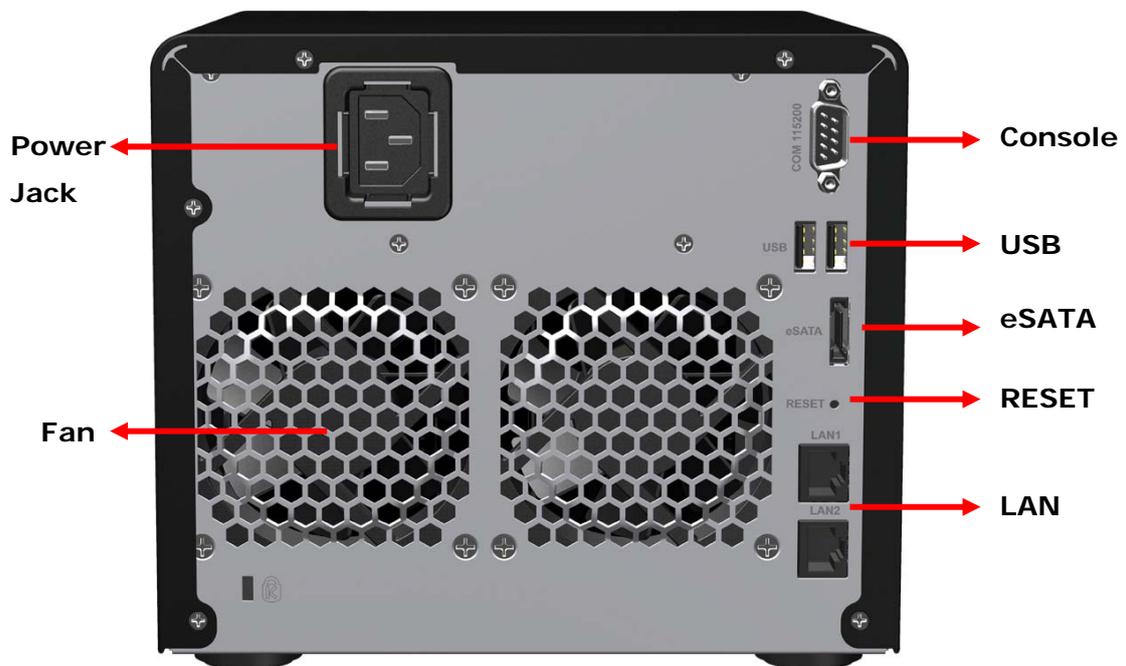
Article Name	Location	Description
COPY Button	Front Panel	The COPY Button lights up when you connect a USB Device (for example: digital camera, USB flash disk). Pressing the button will copy the data from the connected USB device to the <i>Synology Disk Station's</i> internal HDD.
RESET Button	Back Panel	<ol style="list-style-type: none"> <li>1. To restore IP, DNS, passwords for the "admin" account to default value, and reset the "guest" account to the "enabled" status. (Please refer to "Resetting Administrator Password" chapter.)</li> <li>2. To reinstall the <i>Synology Disk Station</i>. (Please refer to "Reinstalling <i>Synology Disk Station</i>" chapter.)</li> </ol>
eSATA Port	Back Panel	The eSATA port is for connecting with an external SATA HDD.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to the <i>Synology Disk Station</i> .
Power Port	Back Panel	The power port is where you connect the AC power cord.

# 5-bay Disk Station

Front View



Rear View



Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn <i>Synology Disk Station</i> On or Off. To turn Off <i>Synology Disk Station</i> , press the Power Button until you hear a "beep" and the Power LED begins blinking. The shutdown process will complete in 30 seconds.
LED Indicator	Front Panel	The LED Indicator is used to display the status of the internal disk and the system.
Hard Drive Tray	Front Panel	There are 5 hard drive trays on the front panel. Each tray is designed to hold a hard drive vertically.
Hard Drive Tray Lock	Front Panel	Each of the 5 hard drive trays is equipped with one tray lock. Use the tubular key in the package to lock/unlock the trays to the system.
USB Port	Back Panel	<i>Synology Disk Station</i> offers 2 USB ports for adding additional external hard drives or other USB devices.
Fan	Back Panel	There are 2 fans on the back panel. The fans are used to exhaust waste heat out of <i>Synology Disk Station</i> . The fans will start automatically when <i>Synology Disk Station</i> starts. If the fan is malfunctioning, system will "beep" every 1 second.
Console port	Back Panel	The console port is where you connect <i>Synology Disk Station</i> directly to a computer.
RESET Button	Back Panel	<ol style="list-style-type: none"> <li>To restore IP, DNS, passwords for the "admin" account to default value, and reset the "guest" account to the "enabled" status. (Please refer to "Resetting Administrator Password" chapter.)</li> <li>To reinstall the <i>Synology Disk Station</i>. (Please refer to "Reinstalling <i>Synology Disk Station</i>" chapter.)</li> </ol>
LAN Port	Back Panel	There are 2 LAN ports on the back panel. The LAN port is where you connect RJ-45 cable to your <i>Synology Disk Station</i> .
Power Jack	Back Panel	The power jack is where you connect the AC power cord.
eSATA	Back Panel	The eSATA port is for connecting with an external SATA HDD.

# LED Indications Table

## 1-bay Models

LED Indication	Color	Status	Description
STATUS	Green	Static	Volume normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed No volume
LAN	Green	Static	Network is up
		Blinking	Network is active
		Off	Network is down
DISK / eSATA	Green	Blinking	Disk is being accessed
		Off	No internal disk
USBCopy	Green	Static	USB disk detected
		Blinking	Copying data
		Off	No USB disk attached
Power	Blue	Static	System ready
		Blinking	Booting up or Shutting down
		Off	Power off

## 2-bay Models

LED Indication	Color	Status	Description
STATUS	Green	Static	Volume normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed No volume
LAN	Green	Static	Network is up
		Blinking	Network is active
		Off	Network is down
DISK / eSATA	Green	Static	Disk is ready and idle
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot Read/Write
USBCopy	Green	Static	USB disk detected
		Blinking	Copying data
		Off	No USB disk attached
Power	Blue	Static	System ready
		Blinking	Booting up or Shutting down
		Off	Power off

## 4-bay Models

LED Indication	Color	Status	Description
STATUS	Green	Static	Volume normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed No volume
LAN	Green	Solid	Network is up
		Blinking	Network is active
		Off	Network is down
DISK 1~4	Green	Solid	Disk ready
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot Read/Write
Power	Blue	Static	System ready
		Blinking	Booting up or Shutting down
		Off	Power off
RPS-STATUS*	Green	Static	Two redundant power supply are working
		Blinking	1 RPS not working

\* RS409RP+ only

## 5-bay Models

LED Indication	Color	Status	Description
STATUS	Green	Solid	Volume Normal
		Off	Hibernation
	Orange	Solid	Available volume size < 1GB
		Blinking	Volume degraded or crashed No volume
LAN1 & LAN2	Green	Solid	Network is up
		Blinking	Network is active
		Off	Network is down
ALERT	Orange	Blinking	Hardware Error
		Off	System is healthy
Power	Blue	Solid	System ready
		Blinking	Booting up Shutting down
		Off	System off
Status Indicator (on tray)	Green	Solid	Disk ready
		Off	No disk
	Orange	Static	Volume crashed
Activity Indicator (on tray)	Green	Blinking	Disk being accessed
		Off	Disk idle

# Managing Synology Disk Station

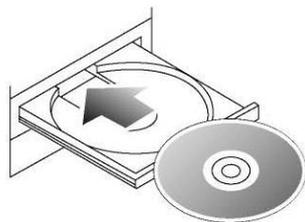
## Entering Web Management UI

System administrator can manage the *Synology Disk Station* by entering the web management UI. There are two options for you to enter the management UI:

### Using Setup Utility

#### Windows User

1. Insert the Installation CD into CD/DVD-Rom Drive.



2. Choose "Synology Assistant" at the Autoup Menu.

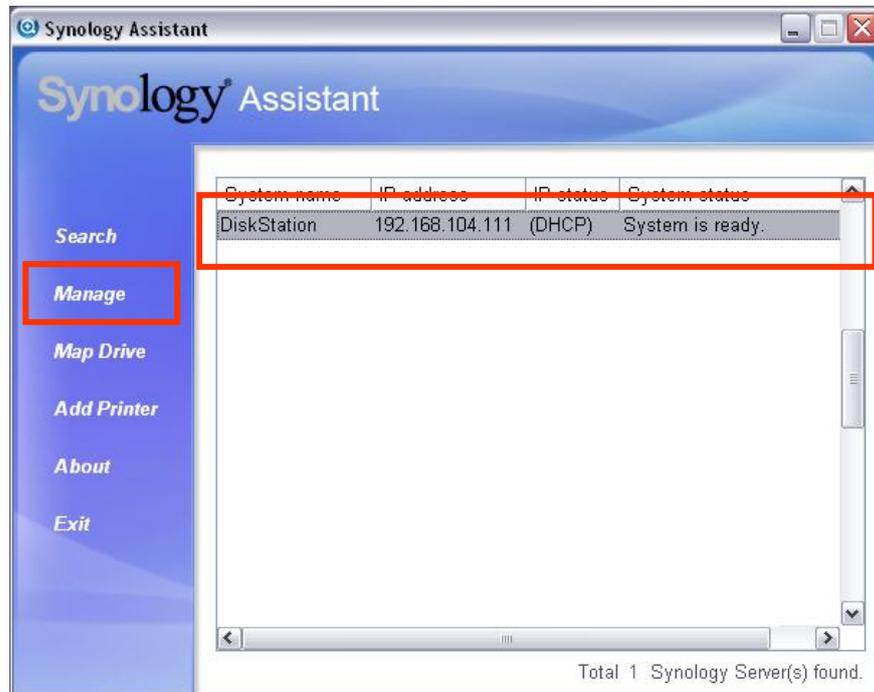


3. Follow the steps to complete installation.

4. After installation, double click on the desktop icon to execute the program.



5. Choose the server you want to manage and click "Manage" to enter the Web Management UI.



6. Click on "Management". Choose "login as system administrator (admin)", input password and click "Enter".



### Mac OSX User

1. Insert the Installation CD into CD/DVD-Rom Drive.
2. Double-Click CD-Rom Drive thumbnail.
3. Double-Click "MacOSX" thumbnail.

4. Double-Click "Synology Assistant-SYNOLOGY.dmg" thumbnail.
5. Double-Click "Synology Assistant" thumbnail to run setup wizard.
6. Choose a *Synology Disk Station* and click "Manage" to enter the Web Management UI.
7. Choose "login as system administrator (admin)", input password and click "Enter".

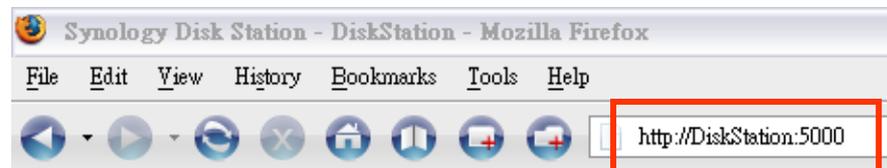
Please note:

To ensure flawless management process, please use the following browsers:

Browser	Version
The Internet Explorer	6.0 and onward
Firefox	2.0
Safari (Mac only)	3.0 and onward

## Accessing Web Management UI Manually

1. Open a web browser window.
2. At the address line input "http://Synology\_Server\_Name:5000/", where "Synology\_Server\_Name" should be replaced with the name you set up for *Synology Disk Station* during the setup process. If you choose "One-step Setup" during the setup process, the "Synology\_Server\_Name" will be "DiskStation", "CubeStation", or "RackStation".



3. Press "Enter" key on the keyboard.
4. Choose "login as system administrator (admin)".
5. Input password for admin.
6. Click "Enter" to access Web Management UI.

## Managing Synology Disk Station

You can start managing *Synology Disk Station* in Web Management UI. *Synology Disk Station* Web Management UI provides distinctive and straight forward design for easy management. You will find an online "Help" button  at the upper right corner of every page of the Web Management UI. Click on the "Help" button for further information whenever you encounter any problem.

## Connecting from Two Different Networks\*

*Synology Disk Station* supports dual LAN that allows you to connect to the network with two LAN cables at the same time, or to set the *Synology Disk Station* using two IP addresses under different subnets. With Link Aggregation enabled, trunking and network fault tolerances are supported. Please go to the "System > Network" page of the Web Management UI for setup.

## Volume\*

You can combine hard drives on *Synology Disk Station* to create different types of volumes, and find the data protection level of your need. The *Synology Disk Station* provides you various volume types as follows:

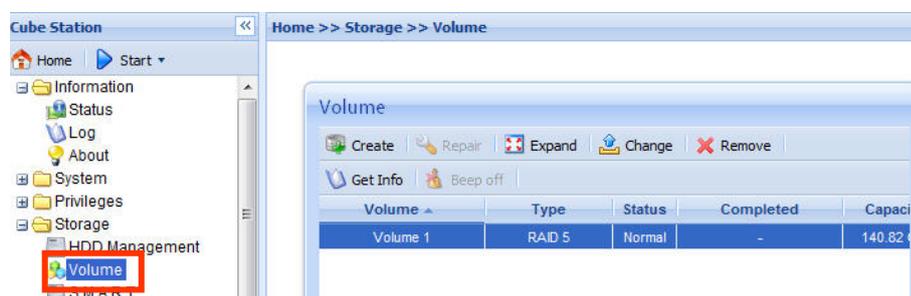
Volume Type	Amount of composed hard drive	Functionality
Basic	1	A Basic (non-RAID) volume must be created with one hard drive as an independent unit. When creating a Basic volume, you can select only one hard drive at a time.
JBOD	$\geq 2$	JBOD is a collection of hard drives. The maximum capacity of a JBOD volume is the total capacity of all hard drives.
RAID 0	$\geq 2$	Combining multiple disks to build a volume, RAID 0 offers Striping, a process of dividing data into blocks and spreading the data blocks across several hard drives, but without safety measures.
RAID 1	2	One of the composed disks is used for backup purposes; the content of disk A is mirrored to disk B to assure data integrity. Therefore the actual available storage capacity equals to only the capacity of one hard drive.
RAID 5	$\geq 3$	This configuration includes a backup option. It uses parity mode to store redundant data on space equal to the size of one disk for later data recovery. Therefore the actual available storage capacity equals to the capacity of n-1 hard drives.
RAID 5+Spare	$\geq 4$	RAID 5+Spare is a new management mechanism to secure the data. It requires at least four drives to establish a RAID 5+Spare volume, and one will act as a hot Spare drive to rebuild the failed drive of the volume automatically.
RAID 6	$\geq 4$	This volume type cuts off the risk of volume failure and provides extra data protection. It uses parity mode to store redundant data on space equal to the size of two disks for later data recovery. Therefore the actual available storage capacity equals to the capacity of n-2 hard drive

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\* Supported on specific models only. Please refer to the product Specification table.

## Managing Volume\*

You can create, remove, and repair volumes. For the detailed description, please refer to Help on “Storage > Volume” page.



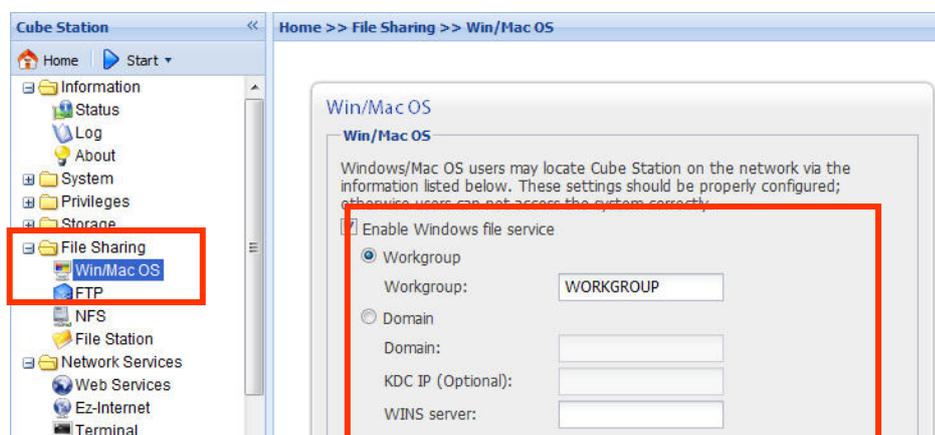
## Repairing Volume by Hot Swapping\*

*Synology Disk Station* provides hot swapping function. When you need to replace crashed disks in *Synology Disk Station*, you don't need to turn off the server. You can refer to the disk status on the management UI, or the front panel LED indicators to identify crashed disks, and directly pull out the hard drive tray to replace the crashed disk with a new one. Then follow the steps on management UI to repair the degraded volume right after replacing the hard drive.

## Joining Windows Domain\*

You can add *Synology Disk Station* to Windows domain and let the domain users access the *Synology Disk Station*. *Synology Disk Station* supports Active Directory Service (ADS) domain. After adding the *Synology Disk Station* to a Windows domain, you can go to the "Privileges > Shared Folder" page to assign the domain users' privileges of shared folders on the server. When domain users access the *Synology Disk Station*, they only need to enter their domain account and password for authentication.

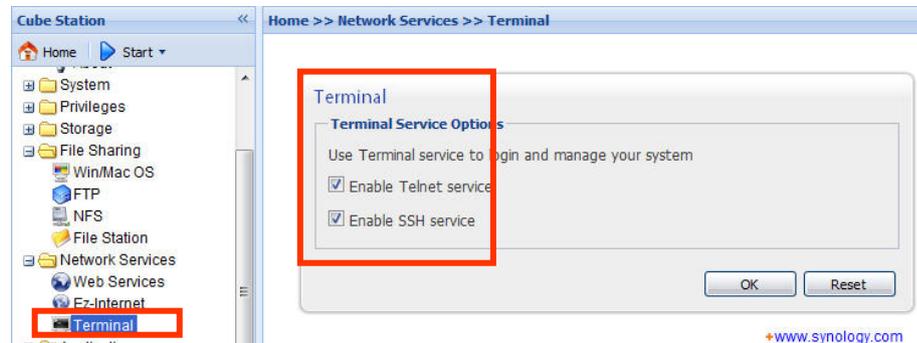
For the detailed description, please refer to Help on “File Sharing > Win/Mac OS” page.



\* Supported on specific models only. Please refer to the product Specification table.

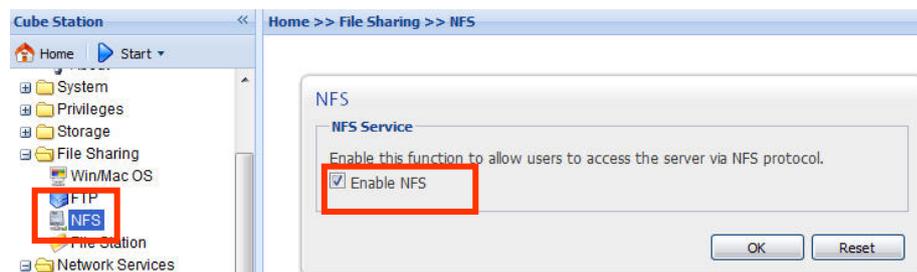
## Accessing Synology Disk Station via Telnet/SSH

To be able to access *Synology Disk Station* via Telnet/SSH, go to "Network Services > Terminal" and enable the terminal service.



## Accessing Synology Disk Station via NFS

With the built-in NFS option, the administrator can quickly enable NFS and set up privileges on the UI by a few checks only. Go to "File Sharing > NFS" and check the box to enable this function. Go to "Privileges > Shared Folder" to setup the NFS privileges.



## Resetting Administrator Password

Pressing the "RESET" button and hold it for about 4 seconds before you heard a beep sound will restore IP, DNS, passwords for the "admin" account to default value, and reset the "guest" account to the "enabled" status. The default password of the "admin" account is blank.

## Reinstalling Synology Disk Station

If for any reason you have to reinstall the *Synology Disk Station*, you can press the RESET button on the back panel twice, and the *Synology Disk Station* will be reinstalled. The data saved on the *Synology Disk Station* will not be erased during the reinstallation. However, for security's reason, we strongly recommend that you back up the data on the server.

To reinstall the server:

1. Press the "RESET" button and hold it for about 4 seconds. Release the button when the *Synology Disk Station* emits a beep sound.

2. Within the next 10 seconds, press the “RESET” button and hold it for about 4 seconds again. Release the button when the *Synology Disk Station* emits a beep sound.
3. Run Synology Assistant, and set up the *Synology Disk Station* again.

Note: The version of Synology Assistant should be identical to the version of the firmware patch file you install.

# Accessing Synology Disk Station Data

File sharing service is one of the *Synology Disk Station's* major functions. Administrator can setup access rights for users to access shared folders.

## Shared Folders

### System Built-in

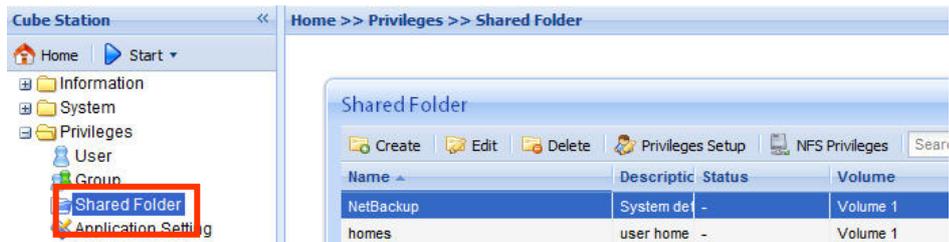
Below are system built-in shared folders.

Name	Description
public	The "public" shared folder will be created automatically after the first-time setup on Synology 1-bay models.
web	The shared folder "web" is for storing web pages. When Web Station is enabled, the "web" shared folder will be created automatically. You can upload web pages to the "web" shared folder to build your website. For detailed information, please refer to "Extra Features > Web Station" section.
photo	The shared folder "photo" is for storing image and video files you want to share on Photo Station 3. It will be created automatically when Photo Station or UPnP Support is enabled.  Image files in "photo" shared folder can be browsed when Photo Station or UPnP Service is enabled. For detailed information, please refer to descriptions of Photo Station 3 and Multimedia Service.
music	You can store music files in the "music" shared folder. When iTunes Service is enabled, you can browse the music files on iTunes. For more details on the iTunes Service, refer to the "Extra Features > iTunes Service" section. In addition, when UPnP Support is enabled, you can be browsed through UPnP DMA. For detailed information, please refer to descriptions of Multimedia Service.
video	Video files in the "video" shared folder can be browsed through UPnP DMA when Multimedia Service is enabled. For detailed information, please refer to descriptions of Multimedia Service.
surveillance	The shared folder "surveillance" is for storing the video files recorded by Surveillance Station 2. It will be created automatically when Surveillance Station 2 is enabled. This shared folder is read-only and can only be accessed with the "admin" account. For more details, please refer to the "Extra Features > Surveillance Station 2" section.
home	The system will create a "home" folder for each user once User Home is enabled. It provides a private space for each user to store data where no other users can access.
homes	Once User Home is enabled, admin will be able to see and manage all users' "home" folders which are under "homes" folder.

Name	Description
NetBackup	The shared folder “NetBackup” is for saving backed up files using Network Backup. Please refer to the “Backup > Network Backup” page of the Web Management UI.
usbshare	After you connect external USB HDD to <i>Synology Disk Station's</i> USB port, system will automatically create a shared folder with the prefix “usbshare”. Refer to “Expanding Storage Capacity> External HDD” section for details.
satashare	After you connect external SATA HDD to <i>Synology Disk Station's</i> eSATA port, system will automatically create a shared folder with the prefix “satashare”. Refer to “Expanding Storage Capacity> External HDD” section for details.

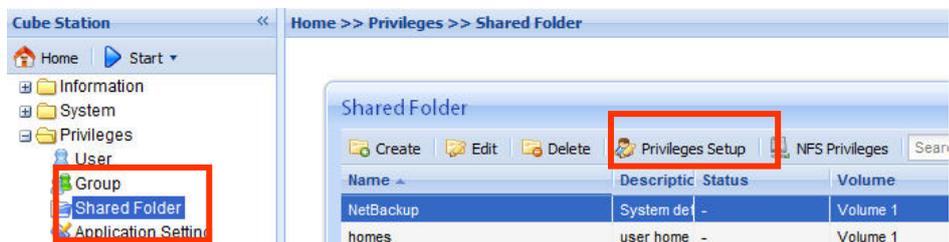
## Administrator-Created

Apart from the above system built-in shared folders, Administrator can create shared folders on the page “Privileges > Shared Folder” of the Web Management UI. Shared folders created by Administrator can be deleted or renamed at any time.

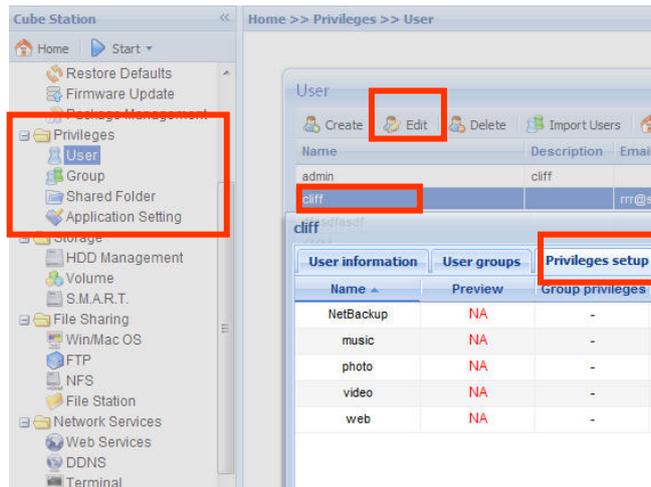


## Setting Access Control

For security reasons, Administrator can go to the “Privileges > Shared Folder” page of the Web Management UI and assign user privileges of accessing the shared folders.



You can also setup each user’s privileges of accessing to shared folders by going to “Privileges > User” page. Choose the user account and click “Edit”, then go to “Privileges setup” to setup the user’s privileges. For the detailed description, please refer to Help on “Privileges > User”.

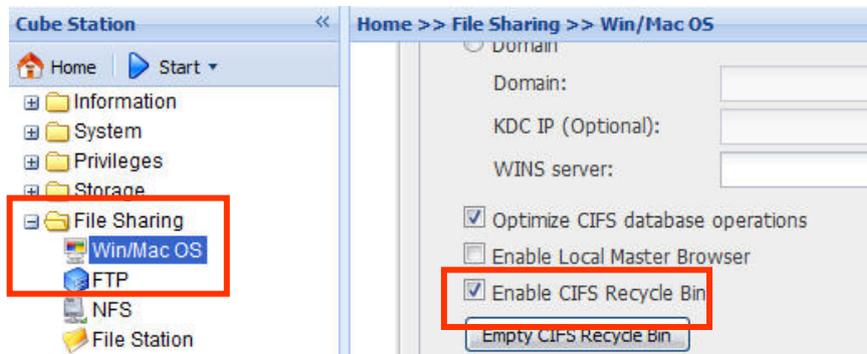


## Using Network Recycle Bin

When users delete files in the shared folders via the SMB/CIFS protocol (ex: on Windows), the deleted files will be moved into the automatically-created folder "#recycle" in the same shared folder to avoid files being unintentionally deleted.

To enable the recycle bins, going to the page "Network Services > Win/Mac OS", and check the "Enable CIFS Recycle Bin" option.

To permanently deleted files in a shared folder, just delete the "#recycle" folder; to permanently delete files in all shared folder, click the "Empty CIFS Recycle Bin" button.



## Setting Encoding

*Synology Disk Station* uses Unicode to manage files. The benefit of using Unicode is to avoid file inaccessibility between users who use different languages. However, for users without Unicode support on their PC, Administrator can set the encoding method of the files to overcome the problem. Please go to the page "System > Language" of the Web Management UI for setup.



## Accessing Shared Folders

### Within the Intranet

#### Windows User

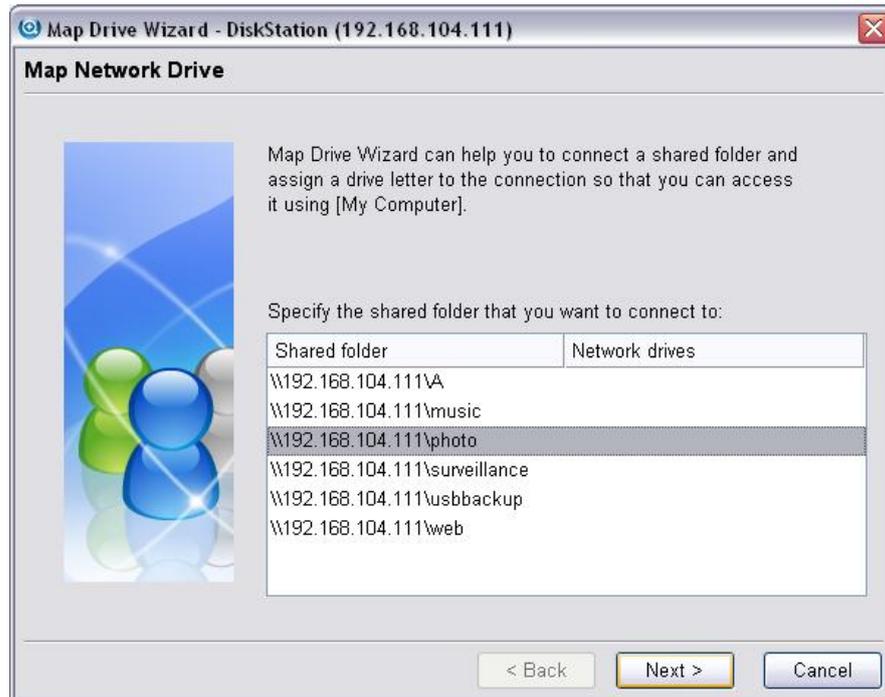
Windows users can access the *Synology Disk Station's* shared folders by using Setup Utility to map Network Drive

Synology Assistant, which is included in the Installation CD, not only helps Administrator manage *Synology Disk Station*, but also provides users with the following steps to map Network Drive:

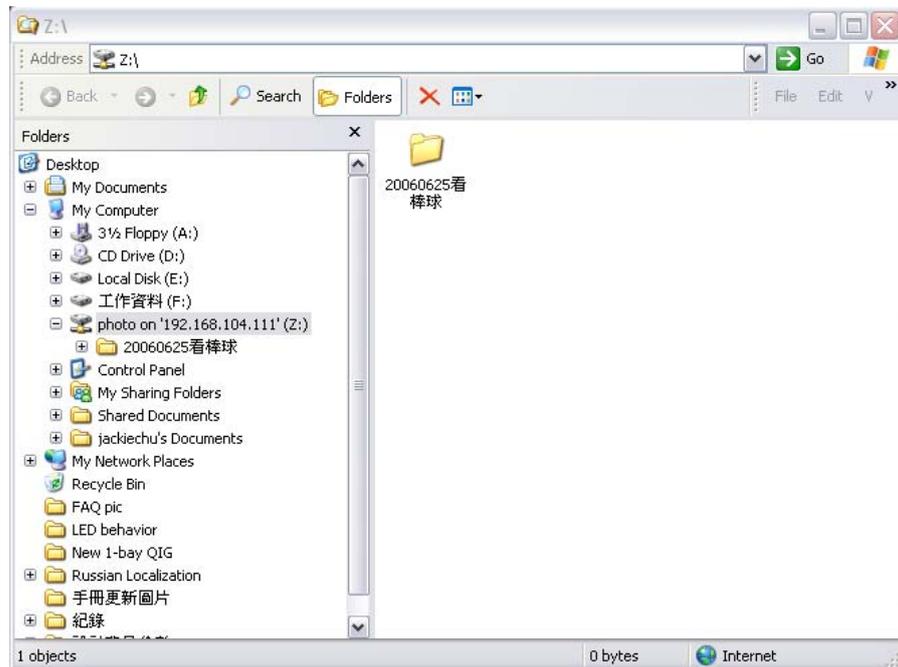
1. Run Synology Assistant.
2. Choose the server to map network drive.
3. Click on the "Map Drive" button on the left.



4. Follow the on-screen steps to finish the setup.

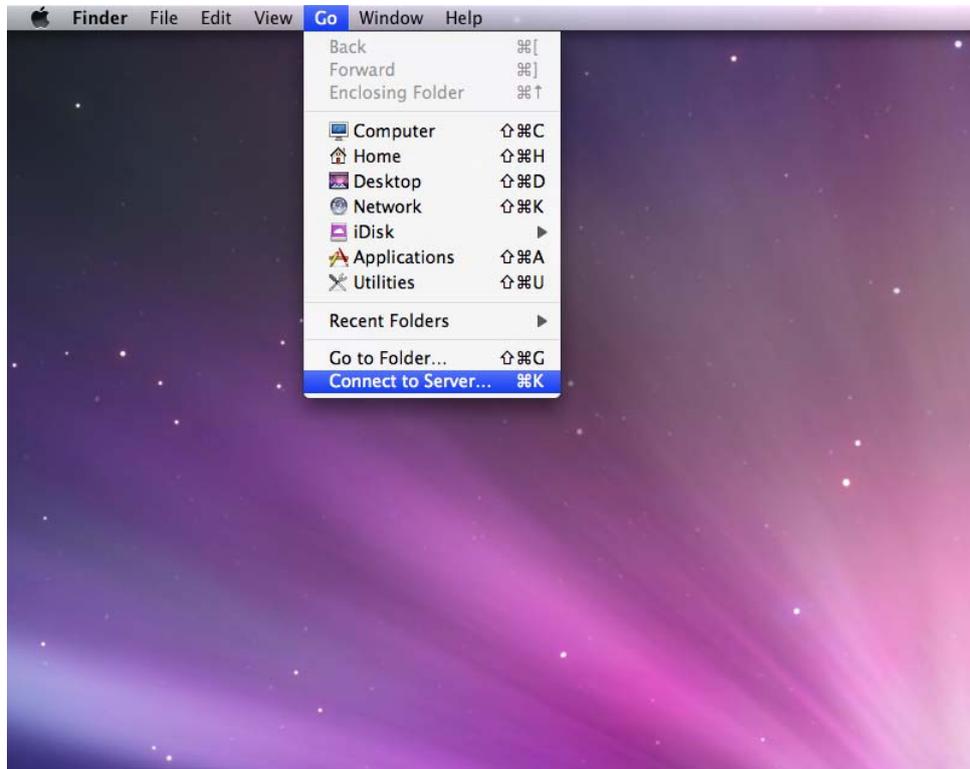


5. Upon completion, user can access the mapped shared folder in Windows Explorer.



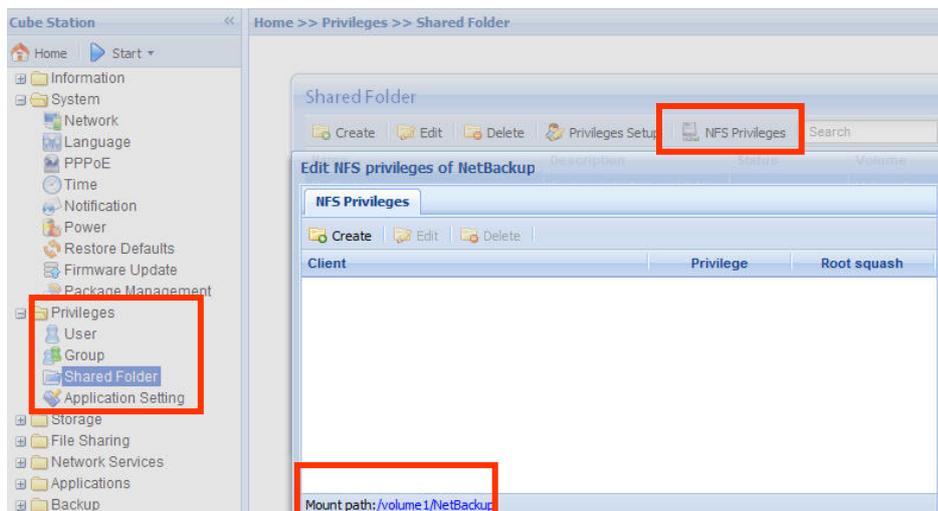
## Mac User

Mac user can use “Go > Connect to Server” to choose a *Synology Disk Station* and access the shared folder on the server.



## Linux User

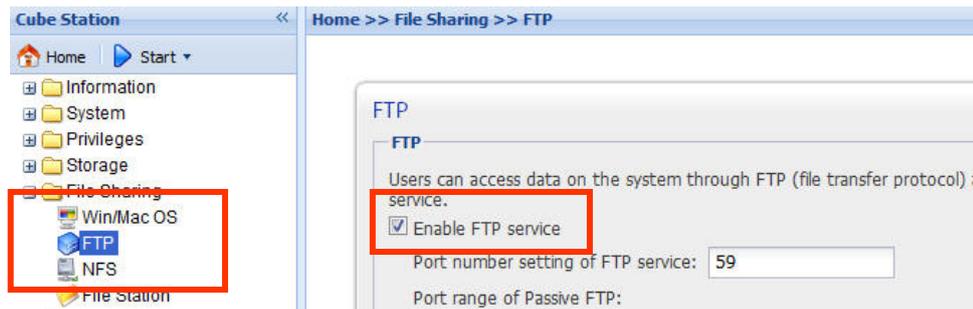
Linux users can mount the shared folders for accessing. Mount path can be found under “Privileges > Shared Folder > NFS Privileges” of the Web Management UI. Before mounting the shared folders, please make sure the NFS service is enabled.



## From the Internet

### Through FTP

*Synology Disk Station* provides FTP service. Administrator can enable FTP service on the “File Sharing > FTP” page of the Web Management UI. Users can thus access data in *Synology Disk Station* by FTP Protocol. *Synology Disk Station* supports secure FTP by default when administrator enables the FTP service. To prevent data from being access while transferring, users can also use “FTP over SSL/TLS” on the FTP client to make the data more secure. For the detailed information of using FTP and its limitation, please refer to Help on “File Sharing > FTP” page.

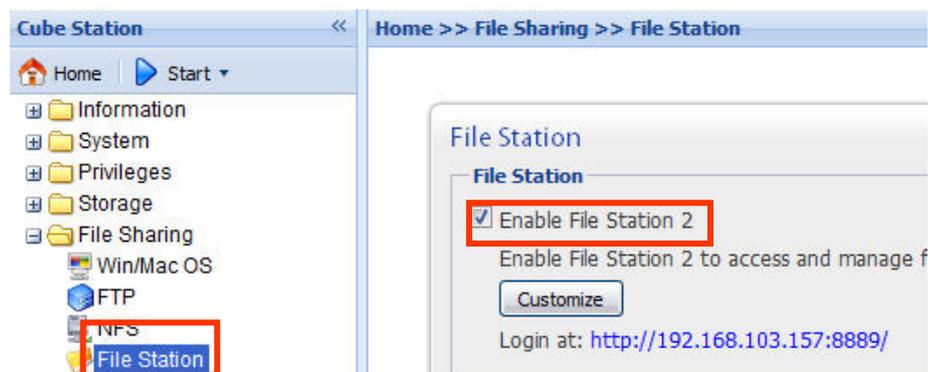


Please note:

1. Administrator has the option to adjust FTP Bandwidth or enable Anonymous login.

### Through File Station 2

Synology File Station 2 is a web-based file management tool. Administrator can enable File Station 2 service on the “File Sharing > File Station” page of the Web Management UI. Users can thus access or manage data stored on the *Synology Disk Station* with browsers. On File Station 2, you can drag-n-drop and move files among folders, and use the right-click action to manage the files. Also you can upload or download multiple files at the same time. Furthermore, authorized users can assign the privileges of other users to access the folders, sub-folders, and files. For detailed function descriptions, please refer to the online Help in the File Station 2 user interface.



# Server Backup and PC Backup Solutions

*Synology Disk Station* provides complete backup solutions:

1. By using “Local Backup”, Administrator can back up *Synology Disk Station*'s data to external USB or SATA HDD.
2. By using “Network Backup”, Administrator can back up *Synology Disk Station*'s data to another *Synology Disk Station* or an rsync compatible server.
3. By installing Synology Data Replicator 3 software on the client PC, Windows users can back up data from PC to *Synology Disk Station*.
4. Administrator can back up MySQL database, as well as the settings and all photos, titles, descriptions, comments and logs of Photo Station 3 via Local and Network Backup solutions.
5. Administrator can also back up *Synology Disk Station*'s User, Group, and Shared folders (see details below).

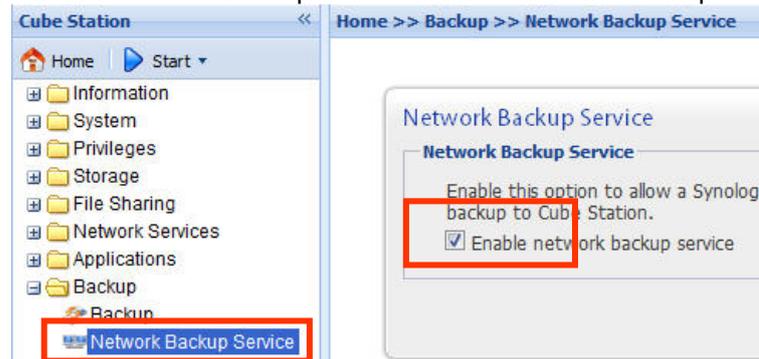
## Local Backup and Network Backup

Please follow the below steps to perform Local and Network Backup:

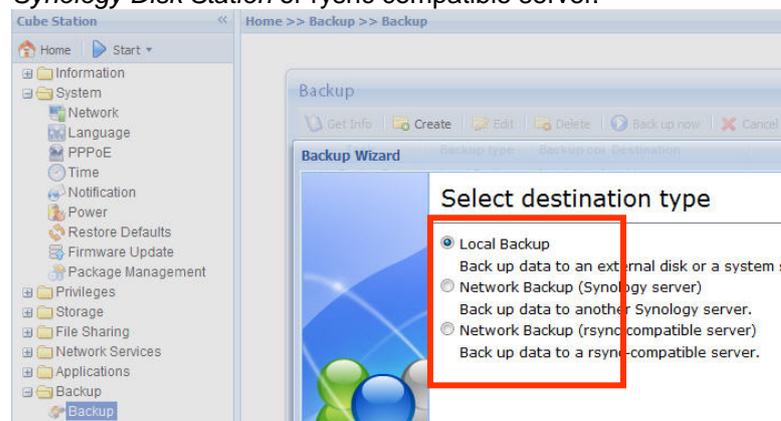
1. Connect an external USB HDD or SATA HDD to the corresponding port on *Synology Disk Station*.
2. Go to the page “External Devices > USB Disk” or “External Devices > eSATA Disk” of the Web Management UI, and format the HDD.



3. If you want to do network backup to another *Synology Disk Station*, make sure the Network Backup Service is enabled on the backup destination.



4. Go to "Backup > Backup" to set up your backup task. When creating a task, you could choose Local Backup, or perform Network Backup to another *Synology Disk Station* or rsync compatible server.



## Backing up Personal Data

Windows users can install "Synology Data Replicator 3" backup software which can be found on the installation CD. They can back up client PC data to *Synology Disk Station* to maintain a good copy of data whenever needed.

Using Synology Data Replicator 3, users can:

1. Monitor selected folders on client PC and perform real-time backup when any modification to the file is made.
2. Adjust backup versions and restore points.
3. Restore backup data on *Synology Disk Station* to client PC at user's preference.

### Before starting

Before using Synology Data Replicator 3, please ensure:

1. Client PC and *Synology Disk Station* uses the same encoding for backup to perform adequately.
2. Synology Data Replicator 3 is the next generation of Synology Data Replicator. It can only restore backup data on *Synology Disk Station* generated by itself. If users have backed up data on *Synology Disk Station*

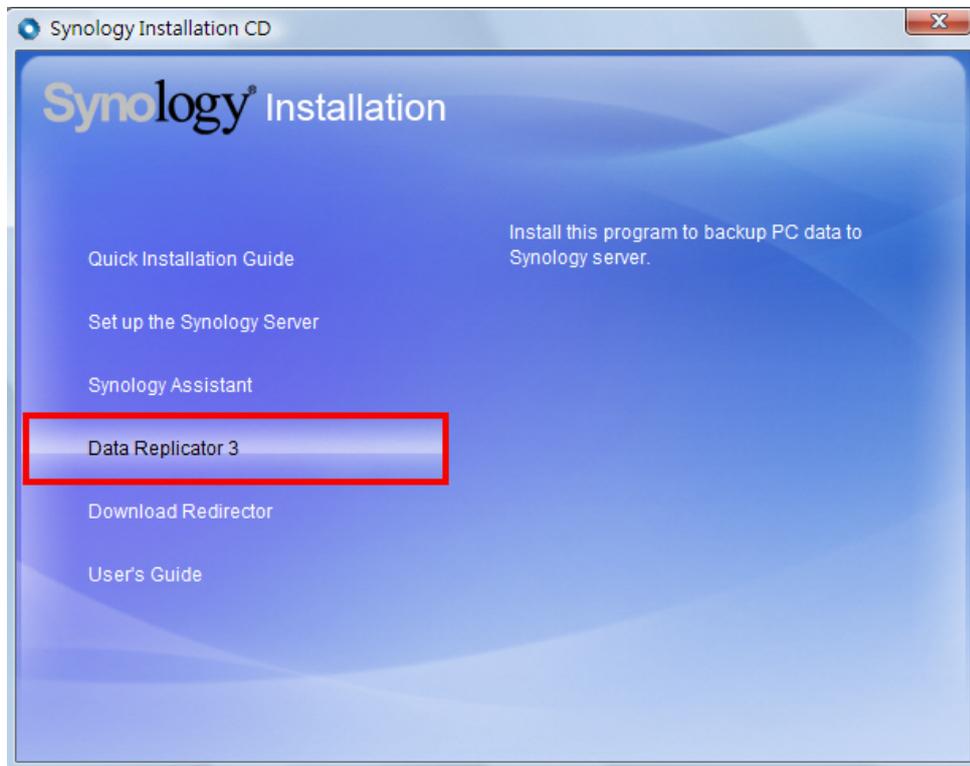
using Synology Data Replicator, we recommend restoring data on *Synology Disk Station* to PC first before using Synology Data Replicator 3.

## Minimum System Requirement

1. Free HDD Space: 5MB
2. Operating System: Windows 2000 and onward
3. Best Screen Resolution: 1024\*768 and above
4. Microsoft Networking over TCP/IP enabled and has network connection with *Synology Disk Station*.

## Installing Synology Data Replicator 3

Insert Installation CD into Windows user CD/DVD-Rom drive. Click on “Synology Data Replicator 3”, and follow on-screen instructions.



## Using Synology Data Replicator 3

After installation, double click on the software icon to execute the program. Click on “Help” for detail description.

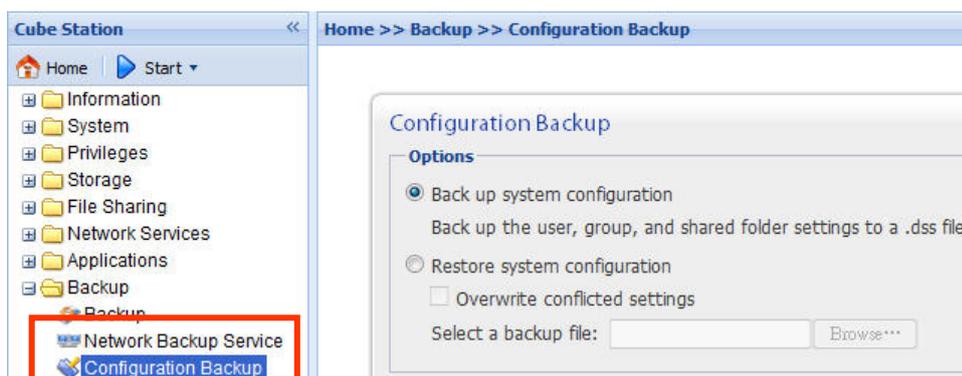


## Backing up Synology Disk Station Settings

There are two options for you to back up *Synology Disk Station's* “User”, “Group”, and “Shared Folder” settings for easy maintenance and restoration.

### From Synology Disk Station to PC Client

Go to the page “Backup > Configuration Backup” of the Web Management UI to back up settings from *Synology Disk Station* to PC Client.

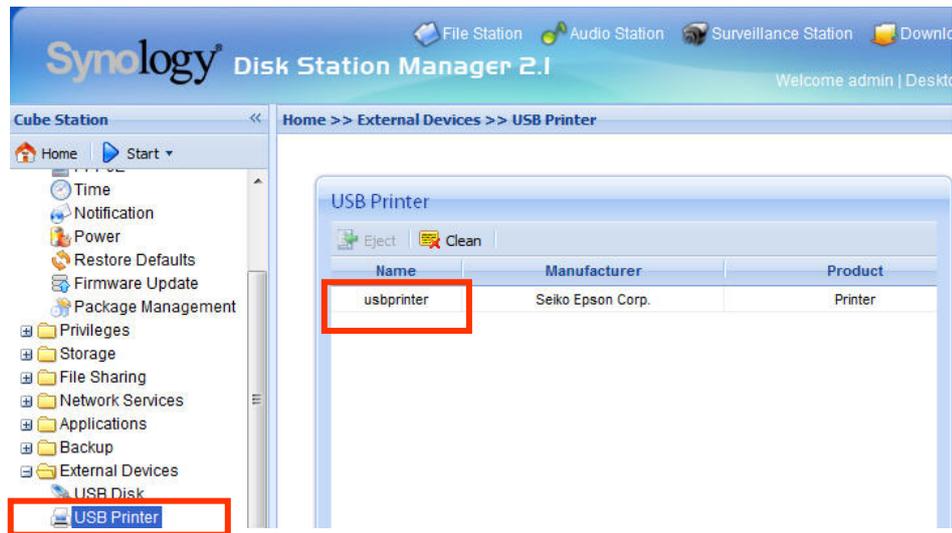


### From Synology Disk Station to another Synology Disk Station

The data backed up to another *Synology Disk Station* or an rsync compatible server using “Network Backup” automatically includes the “User”, “Group”, “Shared Folder” settings. When you recover the data, you can choose if you want to recover these settings.

# Sharing USB Printers

Synology Disk Station helps users to share up to 2 USB Printers. Please refer to Help on the “External Devices > USB Printer” page of the Web Management UI for the detailed settings on different platforms.

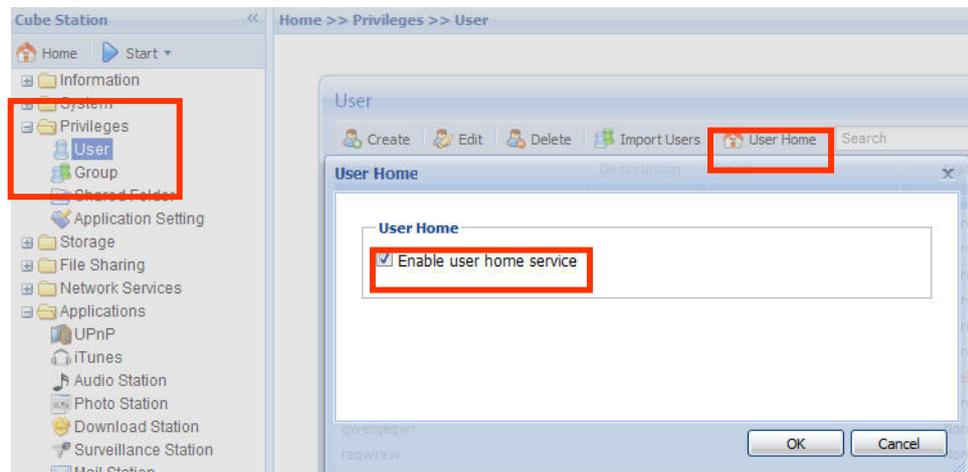


# More Features

## Management

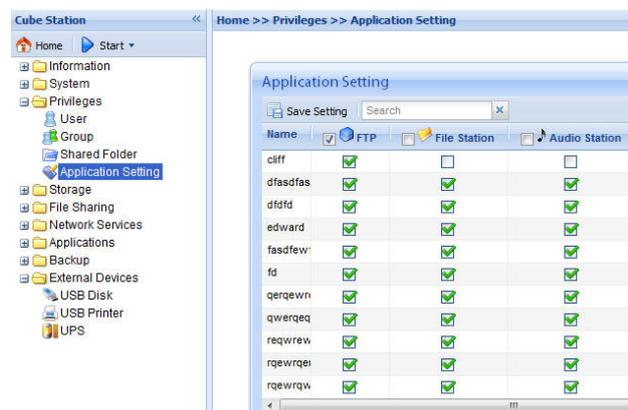
### User Home

When the “User Home” function is enabled, the system will automatically create a “home” folder for each user account. And users can store data to their own “home” folder.



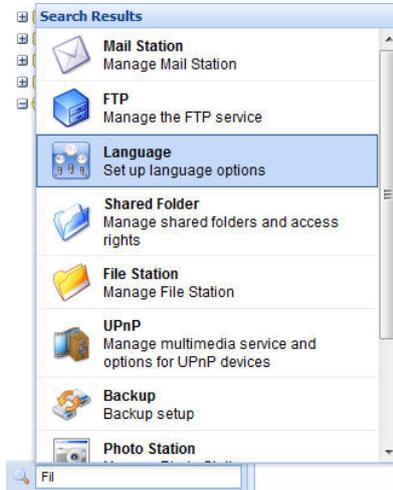
### Applications Privilege Setting

Admin can assign privileges to other users for accessing to applications at “Privileges > Application Setting” page.



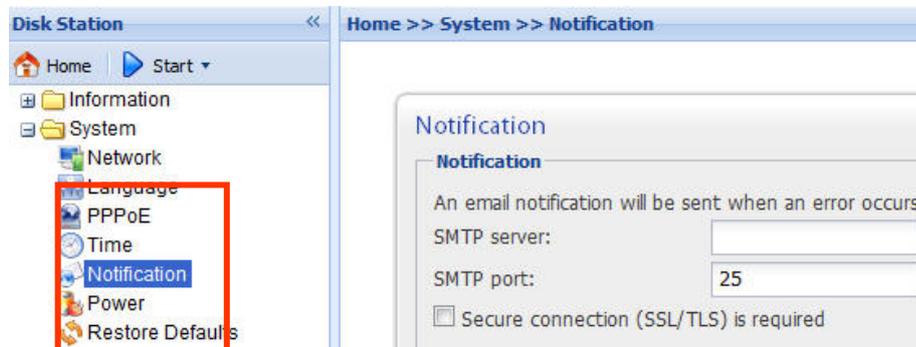
## Quick Search Box

When the Quick Search Box is enabled, it will appear at the bottom of the Panel List. The “search while you type” feature helps you to quickly find the applications in the DSM 2.1 you want to manage by entering key words.



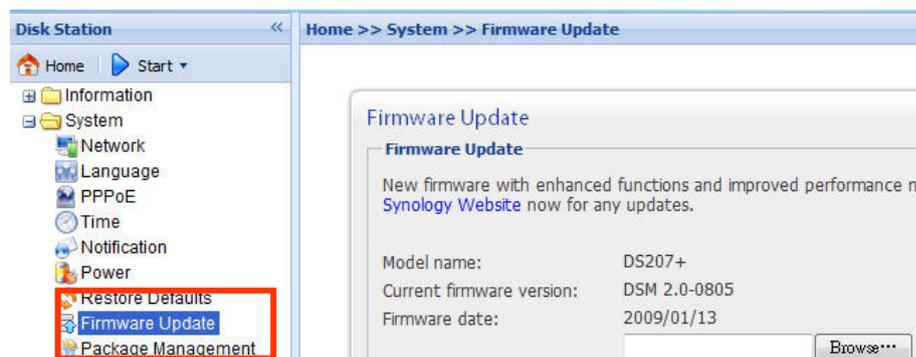
## Mail Notification

Administrator can enter email address on the page “System > Notification”. *Synology Disk Station* will send email to the address whenever an important event occurs to notify Administrator.



## Firmware Update

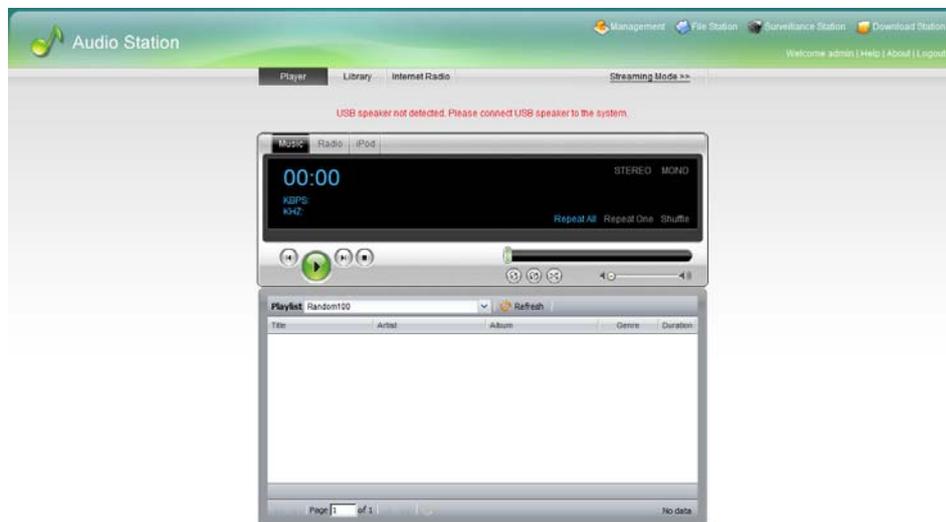
To keep your *Synology Disk Station* up to date, Administrator can go to “System > Firmware Update” page to upgrade firmware.



**Note:** Normally, upgrading the firmware of the *Synology Disk Station* will not affect data on the *Synology Disk Station*. However, to ensure data security, it is recommended that you back up your data before update.

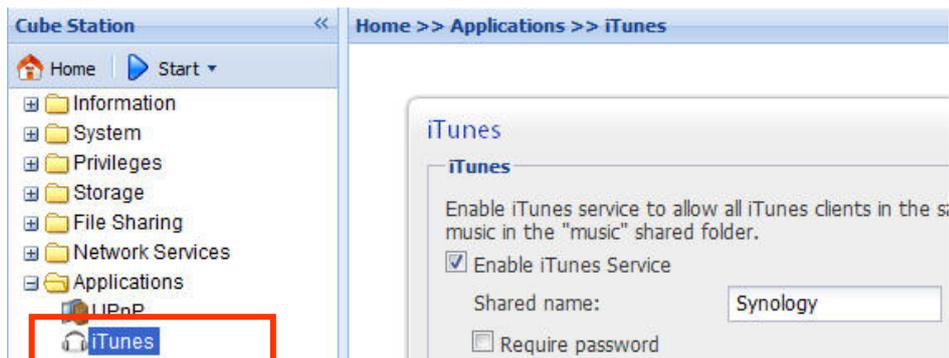
## Audio Station

By connecting a set of verified USB speakers and the Synology Remote receptor to the USB ports on the *Synology Disk Station*, users will be able to enjoy the music stored on the *Synology Disk Station* with the music player in the Audio Station web interface, or by the direction-free remote control. Besides music on the *Synology Disk Station*, users can also listen to the Internet radio stations, or play music from the connected iPod. Users can also stream music stored on the *Synology Disk Station* to the client PC and have the music delivered by built-in speakers. A built-in playlist “Random100” will randomly choose and play 100 songs each time this function is selected. For detailed function descriptions, please refer to the online Help in the Audio Station web interface.



## iTunes Service

When “iTunes Service” is enabled, users can play music files stored on *Synology Disk Station* with any iTunes clients on the same subnet. For the detailed information and its limitation, please refer to Help on “Applications > iTunes” page of the Web Management UI.



## Download Station 2

*Synology Disk Station* can download files from the Internet through BitTorrent, FTP, HTTP, NZB and eMule. BitTorrent partial file download is also available. PC users and Mac users can either install Download Redirector or login the “Download Station” page on the Web Management UI to add download tasks and manage the download queue.

Before start adding download tasks, you should enable Download Station on the *Synology Disk Station*.

### Enabling Download Station 2

Go to the “Applications > Download Station” page.



### Installing Download Redirector

Insert Installation CD into the CD/DVD-Rom drive. Click on “Download Redirector”, and follow on-screen instructions to complete installation.

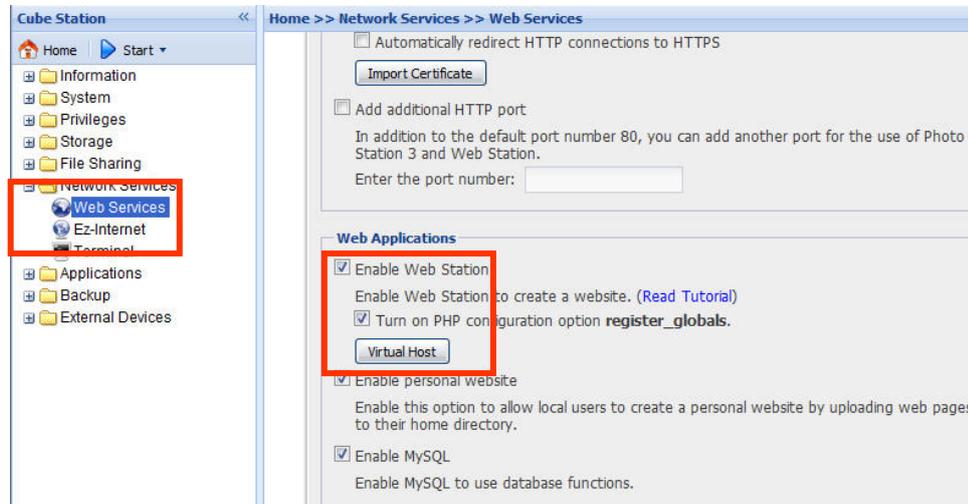
For the detailed description of Download Redirector, please refer to Help on Download Redirector program window.

## Web Station

Personal or corporate website can be easily setup using “Web Station.” By integrating with PHP and MySQL, users can also setup online shop. PHP support is turned on by default, MySQL requires manually enabling. With the Web Station enabled, the Virtual Host support allows you to host up to 30 websites on one *Synology Disk Station*.

## Enabling Web Station and MySQL

Go to the “Network Services > Web Services” page.



## Enabling Virtual Host

Go to the “Network Services > Web Services” page, click on “Virtual Host”.

## Web Station’s detail description

Please click on “Read Tutorial” link next to “Enable Web Station”.

## Photo Station 3

“Photo Station 3” is the new online album function integrating a blogging system. After uploading the folder which contains photos and videos to the “photo” shared folder, Photo Station 3 will start to create thumbnails automatically. Administrator can then sign in to Photo Station 3 to manage the album and create blogs. Administrator can customize Photo Station 3 background and theme, and choose the language by preference. Photo Station 3 also provides users with the search function. By entering key words, users can find the relative photos, videos and files. You can also click the drop down message for advanced search.

## Enabling Photo Station 3

Go to the "Applications > Web Services" page.



## Photo Station 3's detail description

Please click on "Read Tutorial" link next to "Enable Photo Station 3".

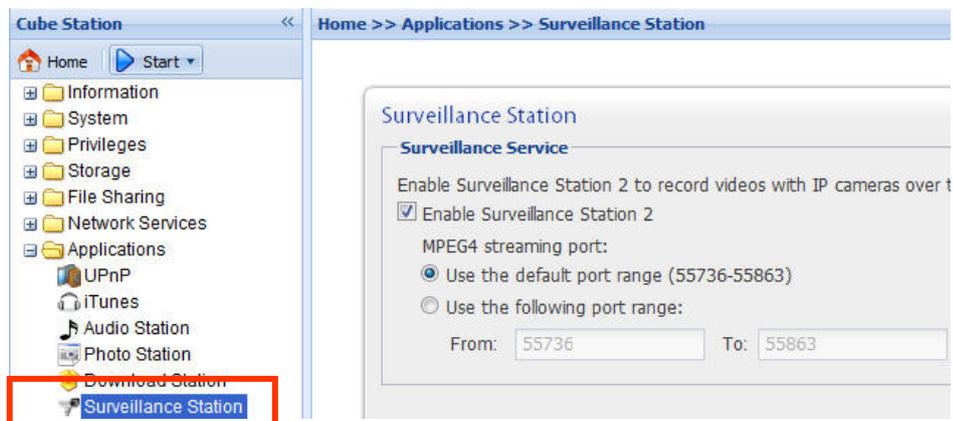
## Surveillance Station 2

By using "Surveillance Station 2", you can monitor the live image of various IP cameras attached on the network, flexibly control the video recording options and record the videos by choosing among Continuous Recording, Motion Detection Recording, and Alarm Recording modes. Both M-JPEG video format and MPEG4 format are supported; based on the IP camera's ability, megapixel video live-view and recording can also be supported. If you record the event with the format of MPEG4 and the camera supports audio recording function, both sounds and images will be recorded when the system is recording an event.

The supported camera number varies from different models for the best performance. For the supported camera number, please refer to the product specification table.

## Enabling Surveillance Station 2

Go to the "Applications > Surveillance Station" page.



## Surveillance Station 2's detailed description

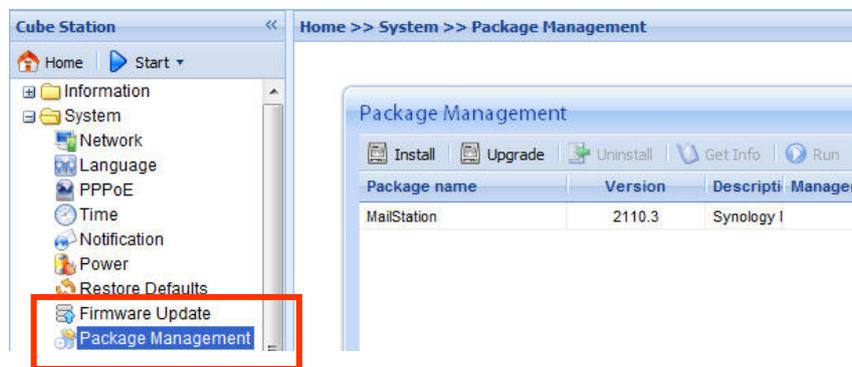
For detailed function descriptions, please click "Help" on the Surveillance Station 2 Web Management UI.

## Mail Station

With the Mail Station add-on, you can turn your *Synology Disk Station* into a mail server to receive and deliver e-mails.

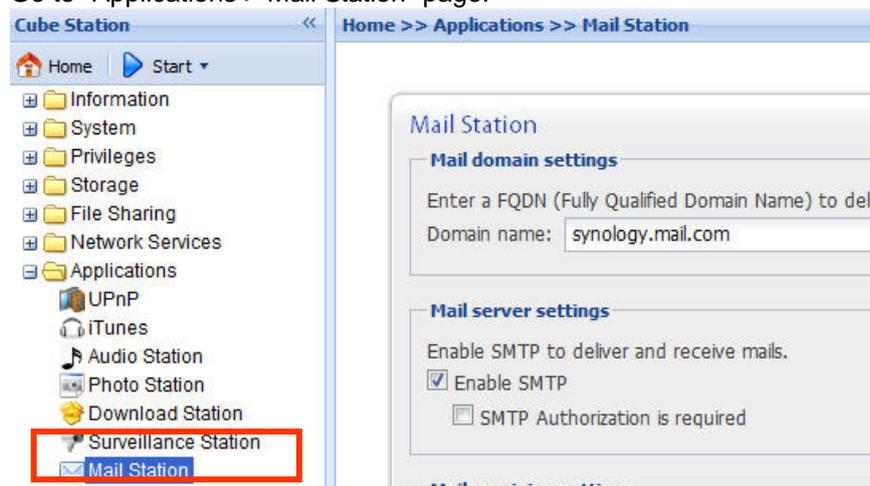
### Mail Station Installation

Go to the "System > Package Management" page and install the Mail Station package which is available on Synology website. For detailed instructions please visit Synology website.



### Mail Station Setting

Go to "Applications > Mail Station" page.



### Mail Station's detailed description

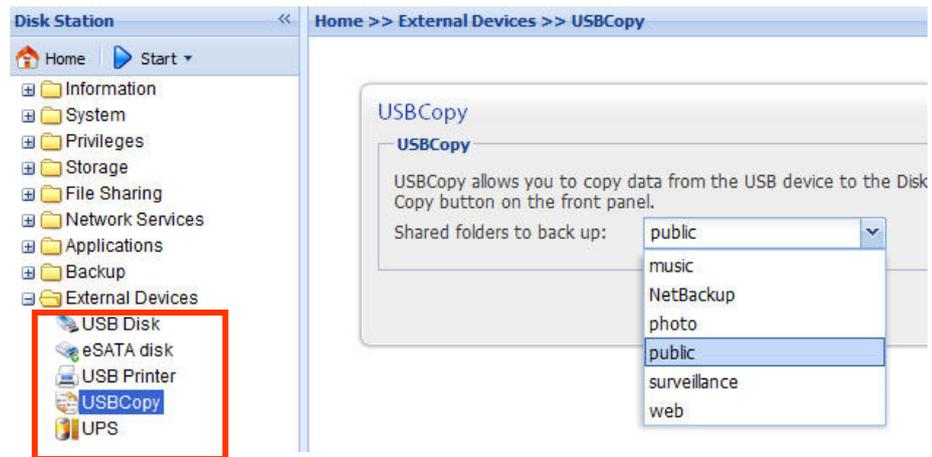
For detailed function descriptions, please click "Help" on the "Applications > Mail Station" page.

# USBCopy\*

When a USB Device is connected to the USB port at the front panel, by pressing the “COPY” button all the data in the USB Device will be copied to *Synology Disk Station’s* internal HDD.

## Setting USBCopy Target Location

You can setup USBCopy target location on the “External Devices > USBCopy” page of the Web Management UI. When pressing the “Copy” button from now on, data will be copied to the target location.



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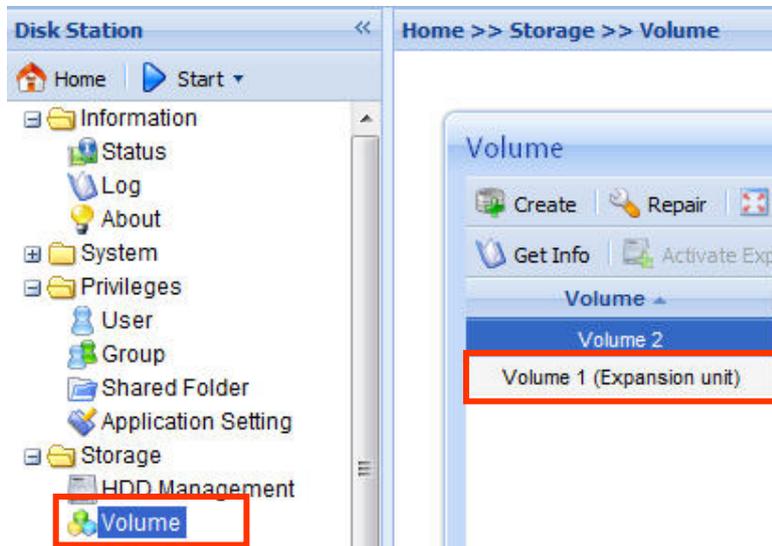
\* Supported on specific models only. Please refer to the product Specification table.

# Expanding Storage Capacity

Administrator can expand the storage capacity by connecting external hard drives, replacing the internal hard drive with a larger one, or adding a hard drive to the volume.

## With DX5/ RX4<sup>1</sup>

You can expand the storage capacity of your *Synology Disk Station* by a connecting a DX5/RX4. For detailed function descriptions, please click “Help” on the Volume page.



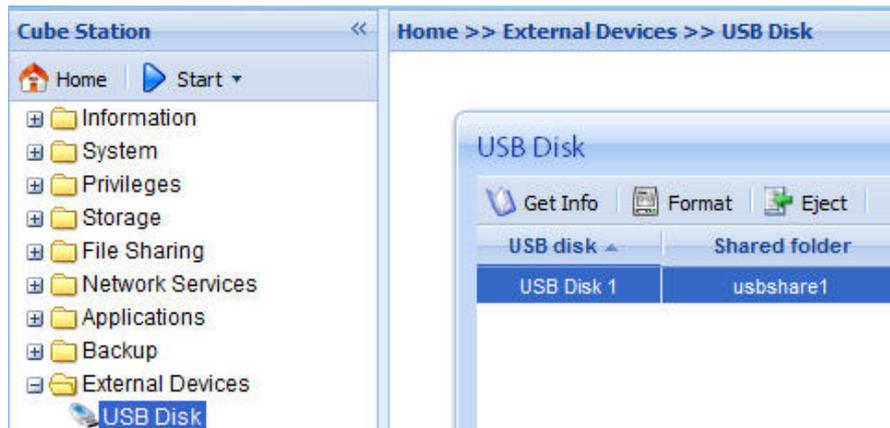
## With External HDD

### External USB HDD

When connecting an external USB HDD to *Synology Disk Station's* USB port, “usbshare1” shared folder will be created automatically. Upon disconnecting external USB HDD, the shared folder will be removed. For more than 1 external USB HDD is connected, “usbshare2”, “usbshare3” will be created accordingly.

To Eject or Format external USB HDD, go to the page “External Devices > USB Disk” of the Web Management UI.

<sup>1</sup> Supported on DS509+, RS409+, RS409RP+ only.



## External SATA HDD\*

When connecting an external SATA HDD to *Synology Disk Station's* eSATA port, "satashare" shared folder will be created automatically. Upon disconnecting External SATA HDD, shared folder will be removed.

To Eject or Format external SATA HDD, go to the page "External Devices > eSATA Disk" of the Web Management UI.



## Replacing Larger Internal HDD

When the internal HDD storage is run out, Administrator can follow the steps to replace a larger HDD and keep using the original data:

### For one-bay models\*

1. Turn off the *Synology Disk Station*.
2. Replace the internal hard drive with a larger one.
3. Turn on the *Synology Disk Station*.
4. Reinstall the system.
5. Connect the replaced hard drive to the USB or eSATA port.
6. Copy the data from the replaced hard drive to the new hard drive.

\* Supported on specific models only. Please refer to the product Specification table.

7. Remove the replaced hard drive.

### **For Basic or RAID 0 volume on two and more bays models\***

1. Back up all data stored on the *Synology Disk Station*.
2. Turn off the *Synology Disk Station*.
3. Replace the internal hard drives with larger ones.
4. Turn on the *Synology Disk Station*
5. Reinstall the system.
6. Copy the backed up data to the new volume.

### **For RAID 1 volume on two and more bays models\***

1. Turn off the *Synology Disk Station*.
2. Replace the first internal hard drive with a larger hard drive.
3. Turn on the *Synology Disk Station* and rebuild the volume.
4. Repeat step 1 to 3 until all internal hard drives are replaced with larger hard drives.
5. Click the “Expand” button to expand the volume size.

p.s. For hot-swappable models, you can perform the above procedures when the model is powered on.

### **For RAID 5 or RAID 6 volume on four and more bays models\***

1. Turn off the *Synology Disk Station*.
2. Replace the first internal hard drive with a larger hard drive.
3. Turn on the *Synology Disk Station* and rebuild the volume.
4. Repeat step 1 to 3 until all internal hard drives are replaced with larger hard drives.
5. Click the “Expand” button to expand the volume size.

p.s. For hot-swappable models, you can perform the above procedures when the model is powered on.

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\* Supported on specific models only. Please refer to the product Specification table.

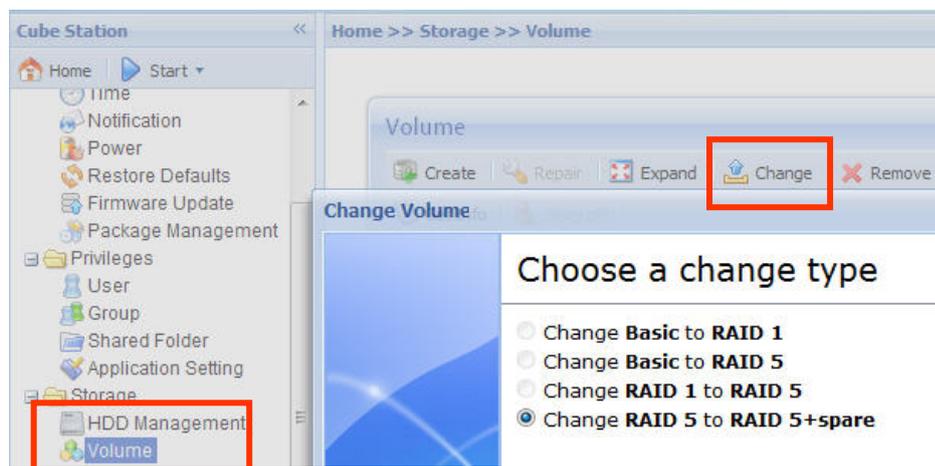
## Adding an HDD to a RAID 5/RAID 6 Volume\*

You can expand the storage capacity of the RAID 5/RAID 6 volume by adding a Spare HDD to the RAID 5/RAID 6 volume. Please refer to the online Help on the "Storage > Volume" page of the Web Management UI for detailed instructions.

## Change Volume Type

If a volume type of Basic, RAID 1 or RAID 5 has been created, you could add a new drive to the *Synology Disk Station*. Then, go to the Volume page, click "Change". You have following options:

1. Change Basic to RAID 1
2. Change Basic to RAID 5
3. Change RAID 1 to RAID 5
4. Change RAID 5 to RAID5+Spare



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\* Supported on specific models only. Please refer to the product Specification table.

# Troubleshooting

For any questions about managing your *Synology Disk Station*, please refer to the “Help” button at every page of the Web Management UI. For any questions other than that, please visit Synology Inc. website ([www.synology.com](http://www.synology.com)) for further assistant.

# Appendix

## Recommended Peripherals

For recommended peripheral models, including hard drive, USB printer, DMA, and UPS, please visit [www.synology.com](http://www.synology.com).

## Recommended NTP Server

The main purpose of Network Time Protocol (NTP) is for synchronizing clocks of computer system over data network. We have provided a few recommended NTP servers. For more information about NTP Server, please visit <http://www.eecis.udel.edu/~mills/ntp/servers.html>

Below are few recommended NTP servers:

1. [time.apple.com](http://time.apple.com)
2. [time.asia.apple.com](http://time.asia.apple.com)
3. [time.euro.apple.com](http://time.euro.apple.com)
4. [time.nist.gov](http://time.nist.gov)
5. [time.windows.com](http://time.windows.com)

For more information, please refer to:  
<http://ntp.isc.org/bin/view/Servers/WebHome>