



DiskStation

User's Guide

Applied Model:

DS110j, DS210j, DS410j, DS410, DS710+, DS1010+,
DS109, DS109+, DS209, DS209+II, DS409slim, RS409,
RS409+, RS409RP+

Document ID:

Syno_UserGuide_NASeries_enu

Based on Version:

DSM 2.2-1060

COPYRIGHT NOTICE

All title, copyright and other intellectual property rights in and to any Synology Products, the "Products" or "Product" (including but not limited to product design and appearance, firmware, and any relevant media, images, photographs, animations, video, audio, music, text, and applets incorporated into the Products), the accompanying manuals and other documents, and on-line or electronic documents, if any, are owned by Synology Inc. Unless otherwise expressly licensed by Synology Inc. in writing, any provision of the Products does not represent any license of any of the above rights.

Copyright © 2004-2010 Synology Inc.; All rights reserved.

TRADEMARK NOTICE

Synology and other names of Synology Products are proprietary marks or registered trademarks of Synology Inc. Microsoft, Windows series, and Internet Explorer are trademarks of Microsoft Corporation. Apple, Mac, Mac OS series are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Other products and company names mentioned herein are trademarks of their respective holders.

LIMITED WARRANTY AND LIABILITY

Synology provides a limited warranty for its Products only to the initial person or entity that originally purchased the Product from Synology or its authorized distributor or retailer. Synology warrants that every hardware portion of the Products will be free from physical defects in material and workmanship within warranty period, or the Product will be repaired or replaced as determined solely by Synology. The DS1010+, DS710+, DS509+, DS508, RS409RP+, RS409+, RS409, RS408-RP, RS408, RS407, DX510, DX5 and RX4 are covered under a 3.5 year manufacturer warranty, starting from the date of manufacturing. Models not listed above, purchased after 2008/3/1 are covered under a 2.5 year manufacturer warranty, starting from the date of manufacturing. Models purchased before 2008/2/29 are covered under a 1.5 year manufacturer warranty starting from the date of manufacturing. If your product was purchased before 2010/3/15, and there is a conflict between the manufacturer warranty coverage date listed above and the coverage date indicated on your product, then whichever warranty period is longer (the later due date) will be considered the warranty coverage period in effect. If the Product proves defective during this warranty period, you can contact the local dealer in order to obtain assistance. You must provide proof of purchase and a bar code number from the Product's packaging when asking for assistance. Synology Products are barebones devices so Synology makes no warranty of the hard disk installed, nor warranty on compatibility of all hard disks.

SYNOLOGY SHALL HAVE NO LIABILITY TO YOU UNDER THIS LIMITED WARRANTY IF THE PRODUCT IS INSTALLED AND USED IN A MANNER NOT SPECIFIED OR DESCRIBED IN THE PRODUCT SPECIFICATIONS OR DESCRIPTION, THE PRODUCT HAS BEEN MODIFIED OR ALTERED IN ANY WAY BY ANY PARTY OTHER THAN SYNOLOGY, OR THE FAILURE OF THE PRODUCT TO CONFORM TO ITS SPECIFICATIONS CAN BE ATTRIBUTED TO CAUSES THAT NOT THE RESPONSIBILITY OF SYNOLOGY.

SYNOLOGY MAKES NO WARRANTY OR REPRESENTATION, EXPRESSED, IMPLIED, OR STATUTORY, WITH RESPECT TO ITS PRODUCTS OR THE CONTENTS OR USE OF THIS DOCUMENTATION AND ALL ACCOMPANYING SOFTWARE, AND PARTICULARLY DISCLAIMS ITS QUALITY OR PERFORMANCE FOR ANY PARTICULAR PURPOSE.

SYNOLOGY MAKES NO GUARANTEE THAT ALL DATA STORED ON SYNOLOGY PRODUCTS IS ALWAYS SECURE WITHOUT ANY RISKS OF

DATA LOSS. SYNOLOGY REMINDS YOU TO BACK UP THE DATA PERIODICALLY. UNDER NO CIRCUMSTANCES SHALL SYNOLOGY BE LIABLE IN ANY WAY TO THE USER FOR DAMAGES, INCLUDING ANY SAVINGS, LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF, OR INABILITY TO USE SYNOLOGY PRODUCTS OR RESULTING LOSS OF DATA FROM SUCH USE.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE (OR JURISDICTION TO JURISDICTION). SYNOLOGY'S RESPONSIBILITY FOR MALFUNCTIONS AND DEFECTS IN HARDWARE IS LIMITED TO REPAIR OR REPLACEMENT AS SET FOR IN THIS WARRANTY STATEMENT. FOR CUSTOMERS, EXCEPT FOR THE EXPRESS WARRANTIES CONTAINED IN THIS WARRANTY STATEMENT, SYNOLOGY DISCLAIMS ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN IMPLIED WARRANTIES OR CONDITIONS, OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY OR CONDITION LASTS, SO THIS LIMITATION MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY COVERAGE TERMINATES IF YOU SELL OR OTHERWISE TRANSFER THIS PRODUCT TO ANOTHER PARTY.

SYNOLOGY DOES NOT ACCEPT LIABILITY BEYOND THE REMEDIES PROVIDED FOR IN THIS LIMITED WARRANTY OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY LIABILITY FOR THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES, FOR PRODUCTS NOT BEING AVAILABLE FOR USE, OR FOR LOST DATA OR LOST SOFTWARE. SYNOLOGY'S LIABILITY SHALL NOT EXCEED THE AMOUNT YOU PAID FOR THE PRODUCT THAT IS THE SUBJECT OF A CLAIM. THIS IS THE MAXIMUM AMOUNT FOR WHICH SYNOLOGY IS RESPONSIBLE.

SYNOLOGY INC. PRODUCTS ARE NOT INTENDED FOR USE IN MEDICAL, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS.

DISPUTE RESOLUTION

For the purposes of this provision, the term "Dispute" means any dispute, controversy, or claim arising out of or relating to (i) this Agreement, its interpretation, or the breach, termination, applicability or validity thereof, (ii) the related order for, purchase, delivery, receipt or use of any product or service from Synology, or (iii) any other dispute arising out of or relating to the relationship between You and Synology; the term "Synology" means Synology, Inc, its parents, subsidiaries, affiliates, directors, officers, employees, beneficiaries, agents, assigns, component suppliers (both hardware and software), and/or any third party who provides products or services purchased from or distributed by Synology; and the term "You" means the owner or purchaser of the Synology product, or those in privity with you, such as family members or beneficiaries. For US customers, you and Synology agree that any Dispute between You and Synology will be resolved exclusively and finally by arbitration under the current commercial rules of the American Arbitration Association, except as otherwise provided below. The arbitration will be conducted before a single arbitrator, and will be limited solely to the dispute between You and Synology. The arbitration, or any portion of it, will not be consolidated with any other arbitration and will not be conducted on a class-wide or class action basis. The arbitration shall be held in King County, Washington State, United States of America by submission of documents, by telephone,

online or in person as determined by the arbitrator at the request of the parties. The prevailing party in any U.S. or non-U.S. arbitration or other legal action shall receive all costs and reasonable attorneys' fees, including any arbitration fee paid by the prevailing party. Any decision rendered in such arbitration proceedings will be final and binding on the parties, and judgment may be entered thereon in any court of competent jurisdiction. You understand that, in the absence of this provision, You would have had a right to litigate Disputes through a court, including the right to litigate claims on a class-wide or class-action basis, and that You have expressly and knowingly waived those rights and agreed to resolve any disputes through binding arbitration in accordance with the provisions of this paragraph. For non-US customers, any Dispute shall be finally resolved by arbitration conducted by three neutral arbitrators in accordance with the procedures of the R.O.C. Arbitration Law and related enforcement rules. The arbitration shall take place in Taipei, Taiwan, R.O.C., and the arbitration proceedings shall be conducted in English or, if both parties so agree, in Mandarin Chinese. The arbitration award shall be final and binding on the parties and may be enforced in any court having jurisdiction.

REVISIONS

Synology reserves all rights to revise or update its Products, other products, software, or related documentation without further notice.

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.

Index

About this User's Guide	8
Getting to know your Synology DiskStation	9
Introduction	9
Storing and Sharing Files via the Internet.....	9
Sharing Storage Capacity as an iSCSI Target	9
PC Data and Server Data Backup	9
Transferring Data via FTP	9
Managing Files through Web Browsers	9
Sharing Photos, Videos, and Blogs with Photo Station 3	9
Enjoying Entertainment Content on the Server.....	10
Enjoying Music instantly anytime	10
Hosting Websites.....	10
Video Recording with IP Cameras	10
USB Printer Server.....	10
Specification	11
1-bay Models.....	11
2-bay Models.....	12
4-bay Models.....	14
5-bay Models.....	16
Limitations	17
Appearance	18
1-bay & 2-bay DiskStation.....	18
4-bay DiskStation.....	24
4-bay 1U RackStation	30
5-bay DiskStation.....	33
Managing Synology DiskStation	36
Entering Web Management UI.....	36
Using Setup Utility	36
Accessing Web Management UI Manually	38
Managing Synology DiskStation	38
Connecting from Two Different Networks	39
Volume	39
Managing Volume.....	40
Repairing Volume by Hot Swapping	40
Joining Windows ADS Domain	40
Accessing Synology DiskStation via Telnet/SSH	41
Accessing Synology DiskStation via NFS	41
iSCSI Target	42
Protecting Synology DiskStation from Unauthorized Login	42
Built-in Firewall.....	42
Auto Block.....	43
Resetting Administrator Password	43
Reinstalling Synology DiskStation.....	43
Accessing Synology DiskStation Data.....	44
Shared Folders.....	44
System Built-in	44
Administrator-Created.....	45
Setting Privileges	45
Using Network Recycle Bin.....	46
Setting Encoding	46
Accessing Shared Folders	47
Within the Intranet	47
From the Internet	50

From a Mobile Device.....	51
Backup Solutions	52
Local Backup and Network Backup	52
Backing up Personal Data.....	53
Windows Users	53
Mac OS X User	54
Backing up Synology DiskStation Settings	55
From Synology DiskStation to PC Client.....	55
From Synology DiskStation to another Synology DiskStation.....	55
Sharing USB Printers	56
More Features.....	57
Management	57
User Home	57
Applications Privilege Setting	57
Quick Search Box.....	58
Notification.....	58
Firmware Update	58
Audio Station	59
iTunes Service.....	60
Media Server	60
Download Station 2	60
Enabling Download Station 2.....	61
Installing Download Redirector.....	61
Web Station	61
Enabling Web Station and MySQL.....	62
Enabling Virtual Host.....	62
Web Station's detail description.....	62
Photo Station 3.....	62
Enabling Photo Station 3	63
Photo Station 3's detail description	63
Surveillance Station 3.....	63
Enabling Surveillance Station 3.....	63
Surveillance Station 3's detailed description	64
Mail Station.....	64
Mail Station Installation	64
Mail Station Setting.....	64
Mail Station's detailed description	64
USBCopy	65
Setting USBCopy Target Location	65
Expanding Storage Capacity	66
With DX5/RX4	66
With External HDD	66
External USB HDD	66
External SATA HDD.....	67
Replacing Larger Internal HDD	67
For one-bay models	67
For Basic or RAID 0 volume on two and more bays models	68
For RAID 1 volume on two and more bays models*	68
For RAID 5 or RAID 6 volume on four and more bays models.....	68
Adding a HDD to a RAID 5/RAID 6 Volume.....	69
Change Volume Type.....	69
Troubleshooting.....	70
Appendix.....	71
Recommended Peripherals	71

Recommended NTP Server	71
------------------------------	----

About this User's Guide

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

Getting to know your Synology DiskStation

Introduction

Congratulations on your purchase of *Synology DiskStation*. *Synology DiskStation* 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 files in different languages from *Synology DiskStation* simple.

Sharing Storage Capacity as an iSCSI Target

You can designate portion of your *Synology DiskStation* volume space to be an iSCSI Target, which will allow the iSCSI initiator to access the space like a local disk.

PC Data and Server Data Backup

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

Transferring Data via FTP

Synology DiskStation provides FTP service with bandwidth restriction and anonymous login. To transfer data safely, FTP over SSL/TLS and uninvited IP auto-block are also available.

Managing Files through Web Browsers

File Station 2 makes it possible for users to manage their files on *Synology DiskStation* easily through a web interface with Windows style file operations. You can also access the files stored on *Synology DiskStation* with a mobile device.

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 leave comments for your photos. Furthermore, a brand new blogging system is integrated for you to easily share your life 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 DiskStation*. Moreover, if you have an UPnP DMA connected in the LAN, you can share the multimedia files on *Synology DiskStation*. If you just want to share and play mp3 files stored on *Synology DiskStation*, you can enable iTunes Service, and enjoy the music through any iTunes clients on LAN.

The built-in USB Copy button* on the device allows instant copy of photos from the camera to *Synology DiskStation*.

Enjoying Music instantly anytime

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

Hosting Websites

The Virtual Host feature allows you to host up to 30 websites using Web Station, with PHP and MySQL supported.

Video Recording with IP Cameras

Surveillance Station 3 allows you to manage, view, and record videos from multiple IP cameras over the network. By accessing the web-based management interface of Surveillance Station 3, 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.

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

Specification

For the most recent product specification, please visit www.synology.com

1-bay Models

Item	DS109	DS109+	DS110j
Internal HDD	3.5 SATA (II) x 1	3.5 SATA (II) x 1	3.5 SATA (II) x 1
Max. Capacity	2TB	2TB	2TB
Hot Swappable HDD	No	No	No
External HDD Interface	USB x 3 eSATA x 1	USB x 3 eSATA x 1	USB x 3
LAN Port	Gigabit x 1	Gigabit x 1	Gigabit x 1
USBCopy	Yes	Yes	Yes
System Fan (mm)	x 1 (50 x 50)	x 1 (50 x 50)	x 1 (50 x 50)
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"> • Windows 2000 onward • Mac OS X 10.3 onward • Linux 		
Max. User Accounts	1024	2048	512
Max. Group Accounts	128	256	128
Max. Shared Folder	256	256	256
Max. Concurrent Connections	64	256	64
Max. Supported IP Cameras	8	12	5
File System	<ul style="list-style-type: none"> • EXT3 • FAT (External Disk, Read/Write) • NTFS (External Disk, Read/Write) 		
Volume Type	• Basic		
Agency Certifications	• FCC Class B • CE Class B • BSMI Class B		
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	Yes	Yes	Yes
iSCSI	Yes	Yes	Yes
Scheduled Power On/Off	Yes	Yes	Yes
Language Localization	<ul style="list-style-type: none"> • English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk • Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu • Türkçe • Český • 日本語 • 한국어 • 繁體中文 • 简体中文 		
Power Consumption And Environment Requirements	<ul style="list-style-type: none"> • Line voltage: 100V to 240V AC • Frequency: 50/60Hz • Operating Temperature: 40 to 95°F (5 to 35°C) • Storage Temperature: 15 to 155°F (-10 to 70°C) • Relative Humidity: 5% to 95% RH • Maximum Operating Altitude: 10000 feet 		

2-bay Models

Item	DS209	DS209+II	DS210j	DS710+
Internal HDD	3.5 SATA (II) x 2	3.5 SATA (II) x 2	3.5 SATA (II) x 2	SATA(II) x 2
Max. Capacity	4TB (2 x 2TB hard drives)	4TB (2 x 2TB hard drives)	4TB (2 x 2TB hard drives)	4TB (2 x 2TB hard drives)
Hot Swappable HDD	No	No	No	Yes
External HDD Interface	USB x 3	USB x 3 eSATA x 1	USB x 3	USB x 3 eSATA x 1
LAN Port	Gigabit x 1	Gigabit x 1	Gigabit x 1	Gigabit x 1
USBCopy	Yes	Yes	Yes	Yes
System Fan (mm)	x 1 (70 x 70)	x 1 (70 x 70)	x 1 (70 x 70)	x 1 (80 x 80)
Size (HxWxD) (mm)	161 x 88 x 218	161 x 88 x 218	161 x 88 x 218	157 x 103.5 x 232
Weight (Kg)	0.98	0.98	0.98	1.69
Supported Clients	<ul style="list-style-type: none"> • Windows 2000 onward • Mac OS X 10.3 onward • Linux 			
Max. User Accounts	1024	2048	512	2048
Max. Group Accounts	128	256	128	256
Max. Shared Folder	256	256	256	256
Max. Concurrent Connections	128	256	64	512
Max. Supported IP Cameras	8	12	5	16
File System	• EXT3 • FAT (External Disk, Read/Write) • NTFS (External Disk, Read/Write)			
Volume Type	• Basic • JBOD • RAID 0 • RAID 1			
Agency Certifications	• FCC Class B • CE Class B • BSMI Class B			
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	Yes	Yes	Yes	Yes
iSCSI	Yes	Yes	Yes	Yes
Scheduled Power On/Off	Yes	Yes	Yes	Off Only
Language Localization	<ul style="list-style-type: none"> • English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk • Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu • Türkçe • Český • 日本語 • 한국어 • 繁體中文 • 简体中文 			
Power	• Line voltage: 100V to 240V AC			

Item	DS209	DS209+II	DS210j	DS710+
Consumption And Environment Requirements	<ul style="list-style-type: none">• Frequency: 50/60Hz• Operating Temperature: 40 to 95°F (5 to 35°C)• Storage Temperature: 15 to 155°F (-10 to 70°C)<ul style="list-style-type: none">• Relative Humidity: 5% to 95% RH• Maximum Operating Altitude: 10000 feet			

4-bay Models

Item	DS409slim	DS410j	DS410	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	3TB (4 x 750GB hard drives)	8TB (4 x 2TB hard drives)	8TB (4 x 2TB hard drives)	8TB (4 x 2TB hard drives)	8TB (4 x 2TB hard drives)	8TB (4 x 2TB hard drives)
Hot Swappable HDD	No	No	No	Yes	Yes	Yes
External HDD Interface	USB x 2 eSATA x 1	USB x 2	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 x 2	Gigabit x 2
USBCopy	Yes	No	No	No	No	No
System Fan (mm)	x 1 (60 x 60)	x 2 (80 x 80)	x 2 (80 x 80)	x 3 (40 x 40)	x 3 (40 x 40)	x 4 (40 x 40)
Power Fan (mm)	No	No	No	x 1 (40 x 40)	x 1 (40 x 40)	x 1 (40 x 40)
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"> • Windows 2000 Onward • Mac OS X 10.3 Onward • Linux 					
Max. User Accounts	1024	1024	2048	2048	2048	2048
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	8	5	12	8	12	12
File System	<ul style="list-style-type: none"> • EXT3 • FAT (External Disk, Read/Write) • NTFS (External Disk, Read/Write) 					
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			FCC Class A • CE Class A		
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

Item	DS409slim	DS410j	DS410	RS409	RS409+	RS409RP+
HTTPS Connection	Yes	Yes	Yes	Yes	Yes	Yes
Windows ADS Domain	Yes	Yes	Yes	Yes	Yes	Yes
iSCSI	Yes	Yes	Yes	Yes	Yes	Yes
Scheduled Power On/Off	Yes	Yes	Yes	Yes	Yes	Yes
Language Localization	<ul style="list-style-type: none"> • English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk • Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu • Türkçe • Český • 日本語 • 한국어 • 繁體中文 • 简体中文 					
Power Consumption And Environment Requirements	<p>Line voltage: 100V to 240V AC</p> <ul style="list-style-type: none"> • Frequency: 50/60Hz • Operating Temperature: 40 to 95°F (5 to 35°C) • Storage Temperature: 15 to 155°F (-10 to 70°C) <ul style="list-style-type: none"> • Relative Humidity: 5% to 95% RH • Maximum Operating Altitude: 10000 feet 					

5-bay Models

Item	DS1010+
Internal HDD	3.5 SATA (II) x 5
Max. Capacity	10TB (5 x 2TB hard drives)
Hot Swappable HDD	Yes
External HDD Interface	USB x 4 eSATA x 1
LAN Port	Gigabit x 2
USBCopy	No
System Fan (mm)	x 2 (80 x 80)
Power Fan (mm)	x 1 (40 x 40)
Size (HxWxD) (mm)	157 x 248 x 233
Weight (Kg)	4.25
Supported Clients	• Windows 2000 Onward • Mac OS X 10.3 Onward • Linux
Max. User Accounts	2048
Max. Group Accounts	256
Max. Shared Folder	256
Max. Concurrent Connections	512
Max. Supported IP Cameras	20
File System	• EXT3 • FAT (External Disk, Read/Write) • NTFS (External Disk, Read/Write)
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
iSCSI	Yes
Scheduled Power On/Off	Off Only
Language Localization	• English • Deutsch • Français • Italiano • Español • Dansk • Norsk • Svensk • Nederlands • Русский • Polski • Magyar • Português do Brasil • Português Europeu • Türkçe • Český • 日本語 • 한국어 • 繁體中文 • 简体中文

Item	DS1010+
Power Consumption and Environment Requirements	<p>Line voltage: 100V to 240V AC</p> <ul style="list-style-type: none"> • Frequency: 50/60Hz • Operating Temperature: 40 to 95°F (5 to 35°C) • Storage Temperature: 15 to 155°F (-10 to 70°C) <ul style="list-style-type: none"> • Relative Humidity: 5% to 95% RH • Maximum Operating Altitude: 10000 feet

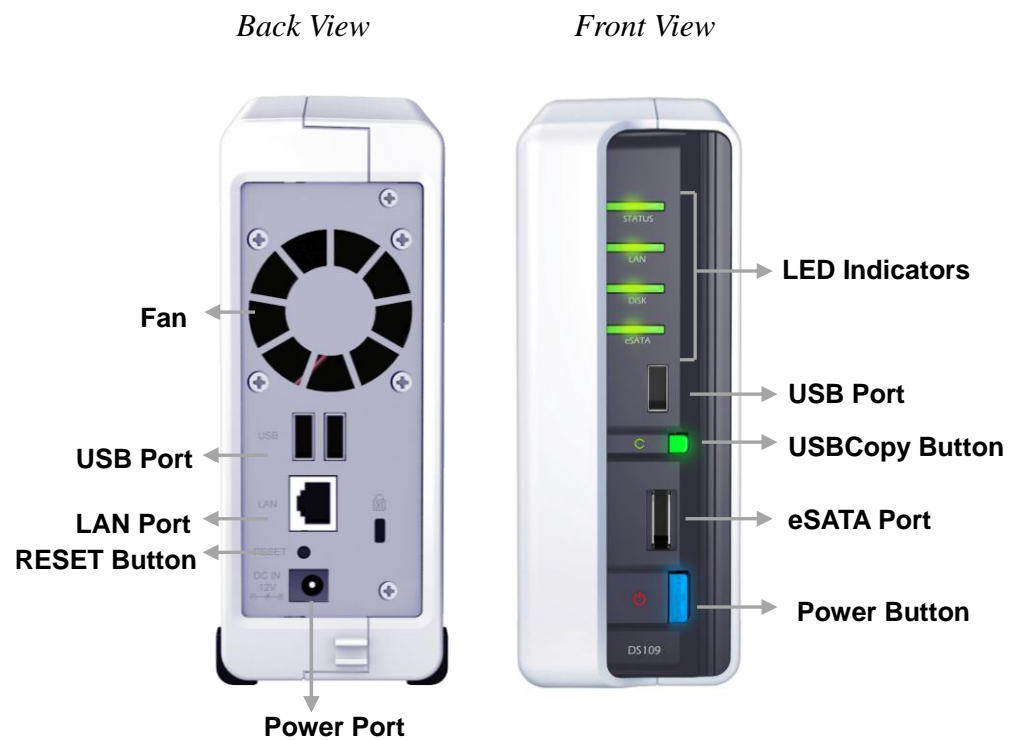
Limitations

1. Each *Synology DiskStation* 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 DiskStation* only supports USB Copy function (No USB share function).
4. For Mac users, *Synology DiskStation* supports only USB printers with PostScript.

Appearance

1-bay & 2-bay DiskStation

DiskStation (DS710+ excluded)



Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn Synology DiskStation on or off. To turn off Synology DiskStation, press the Power Button and hold it until you hear a "beep" sound and the Power LED starts blinking.
LED Indicators	Front Panel	The LED indicator is used to display the status of the internal disk and the system. For more detail please refer to the following LED Indication Table .
USBCopy Button	Front Panel	The USBCopy 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 Synology DiskStation's internal HDD.
USB Port	Front & Back Panel	The Synology DiskStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
eSATA Port	Front Panel	The eSATA port is for connecting with an external SATA HDD.
Fan	Back Panel	The fan is built to exhaust waste heat out of Synology DiskStation. It will start automatically when the server starts. If the fan is malfunctioning, system will "beep" every 1 second.
RESET Button	Back Panel	1. To restore IP, DNS, passwords for the admin account to default value. 2. To reinstall the Synology DiskStation.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to Synology DiskStation.
Power Port	Back Panel	The power port is where you connect the AC adapter to Synology DiskStation.

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 normal
		Blinking	Network is active
		Off	Network is down
DISK / eSATA	Green	Static	Disk is normal
		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
			Shutting down
		Off	Power off

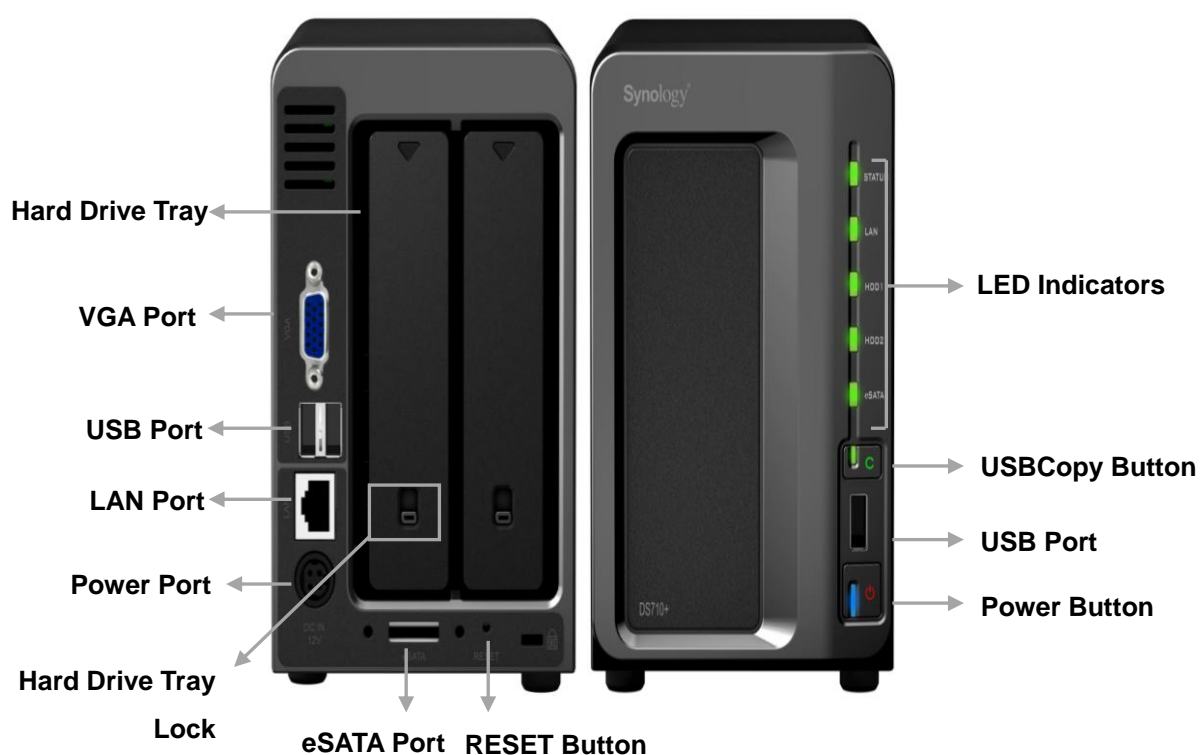
2-bay Models			
LED Indication	Color	Status	Description
STATUS	Blue	Static	Volume normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed
			No volume
LAN	Green	Static	Network is up
		Blinking	Network is active
		Off	Network is down
DISK / eSATA	Green	Static	Disk is ready and idle
		Blinking	Disk is being accessed
		Off	No internal disk

2-bay Models			
LED Indication	Color	Status	Description
	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

DS710+

Back View

Front View



Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn Synology DiskStation on or off. To turn off Synology DiskStation, press the Power Button and hold it until you hear a "beep" sound and the Power LED starts blinking.
LED Indicators	Front Panel	The LED indicator is used to display the status of the internal disk and the system. For more detail please refer to the following LED Indication Table .
USBCopy Button	Front Panel	The USBCopy 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 Synology DiskStation's internal HDD.
USB Port	Front & Back Panel	The Synology DiskStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
eSATA Port	Back Panel	The eSATA port is for connecting with an external SATA HDD.
RESET Button	Back Panel	1. To restore IP, DNS, passwords for the admin account to default value. 2. To reinstall the Synology DiskStation.
Hard Drive Tray	Back Panel	The hard drive tray is designed for loading the hard drives used in Synology DiskStation.
Hard Drive Tray Lock	Back Panel	Each hard drive tray is equipped with one tray lock to lock/unlock the trays to the DiskStation.
VGA Port	Back Panel	The VGA port is where you connect Synology DiskStation directly to a LCD monitor.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to Synology DiskStation.
Power Port	Back Panel	The power port is where you connect the AC adapter to Synology DiskStation.

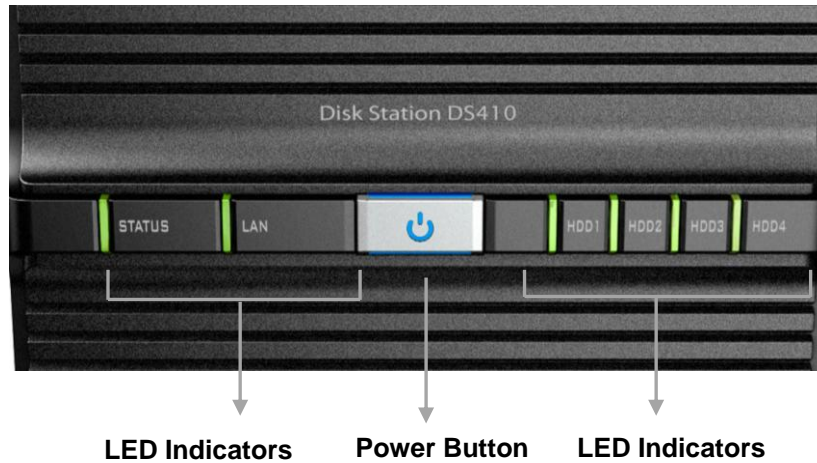
LED Indications Table

DS710+			
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	Gigabit link
		Blinking	Network is active
		Off	Network is down
	Orange	Static	10/100MB link
		Blinking	Network is active
		Off	Network is down
HDD1 & HDD2	Green	Static	Disk ready
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot Read/Write
Power	Blue	Static	System ready
		Blinking	Booting up
			Shutting down
		Off	Power off
USBCopy	Green	Static	USB disk detected
		Blinking	Copying data
		Off	No USB disk attached

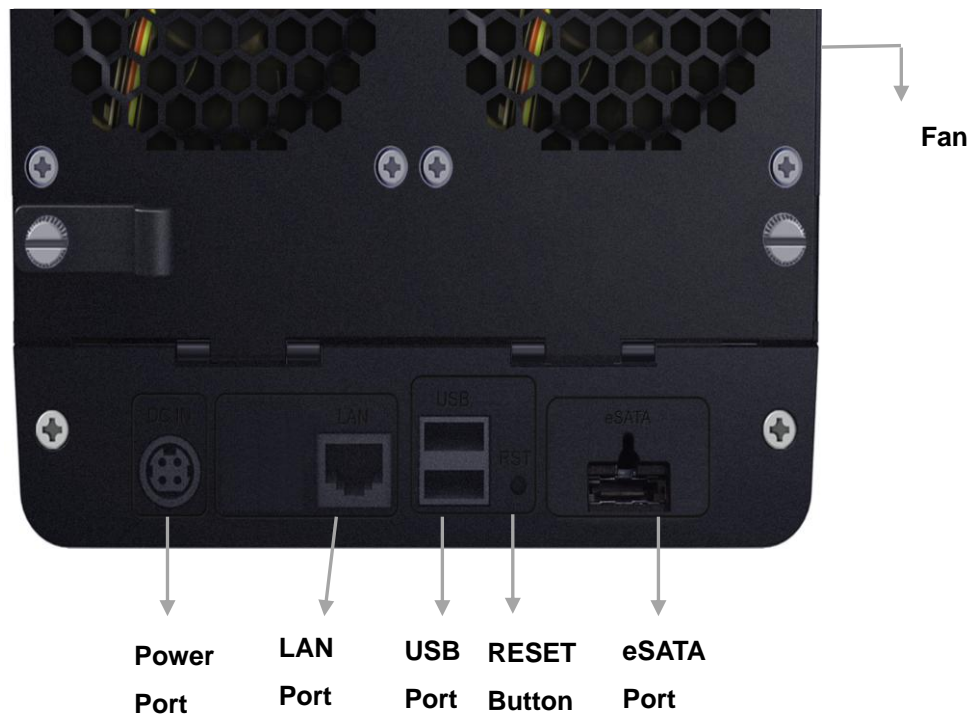
4-bay DiskStation

DiskStation (DS409slim excluded)

Front View



Back View



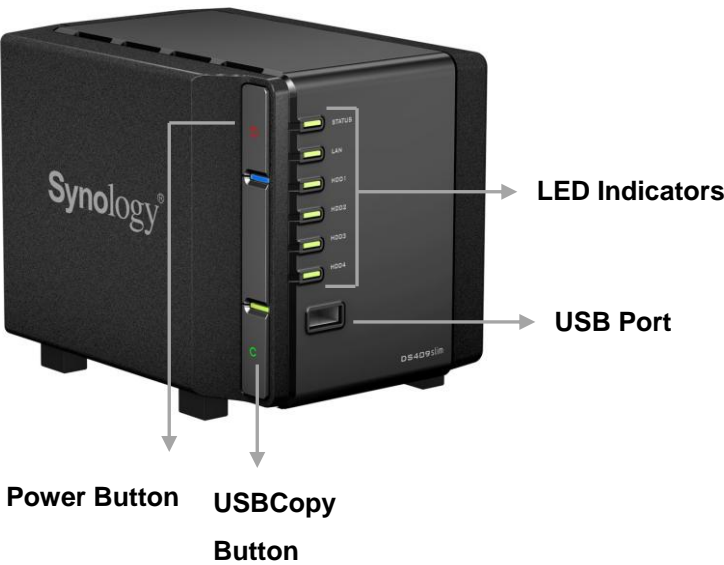
Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn Synology DiskStation on or off. To turn off Synology DiskStation, press the Power Button and hold it until you hear a "beep" sound and the Power LED starts blinking. The shutdown process will complete in 30 seconds
LED Indicators	Front Panel	The LED indicator is used to display the status of the internal disk and the system. For more detail please refer to the following LED Indication Table .
USB Port	Back Panel	The Synology DiskStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
Fan	Back Panel	The fan is built to exhaust waste heat out of Synology DiskStation. It will start automatically when the server starts. If the fan is malfunctioning, system will "beep" every 1 second.
eSATA Port	Back Panel	The eSATA port is for connecting with an external SATA HDD.
RESET Button	Back Panel	1. To restore IP, DNS, passwords for the admin account to default value. 2. To reinstall the Synology DiskStation.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to Synology DiskStation.
Power Port	Back Panel	The power port is where you connect the AC adapter to Synology DiskStation.

LED Indication Table

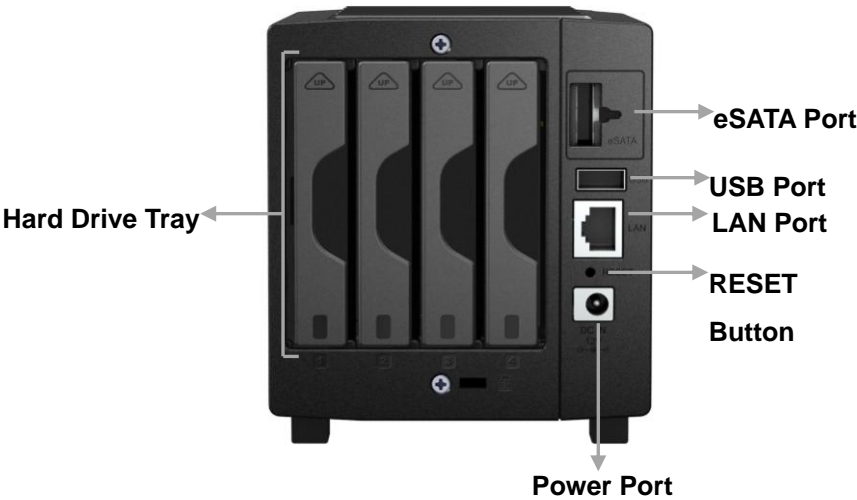
4-bay DiskStation			
LED Indication	Color	Status	Description
STATUS	Green	Static	Volume Normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed
			No volume
LAN	Green	Static	Network is up
		Blinking	Network is active
		Off	Network is down
DISK 1~4	Green	Static	Disk ready
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot Read/ Write
Power	Blue	Static	System ready
		Blinking	Booting up
			Shutting down
		Off	Power off

DS409slim

Front View



Back View



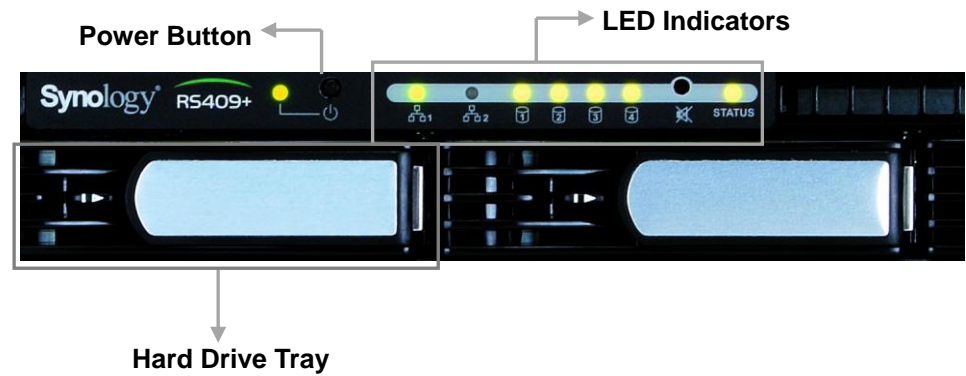
Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn Synology DiskStation on or off. To turn off Synology DiskStation, press the Power Button and hold it until you hear a "beep" sound and the Power LED starts blinking. The shutdown process will complete in 30 seconds.
LED Indicators	Front Panel	The LED indicator is used to display the status of the internal disk and the system. For more detail please refer to the following LED Indication Table .
USBCopy Button	Front Panel	The USBCopy 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 Synology DiskStation's internal HDD.
USB Port	Front & Back Panel	The Synology DiskStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
eSATA Port	Back Panel	The eSATA port is for connecting with an external SATA HDD.
RESET Button	Back Panel	1. To restore IP, DNS, passwords for the admin account to default value. 2. To reinstall the Synology DiskStation.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to Synology DiskStation.
Hard Drive Tray	Back Panel	The hard drive tray is designed for loading the hard drives used in Synology DiskStation.
Power Port	Back Panel	The power port is where you connect the AC adapter to Synology DiskStation.

LED Indication Table

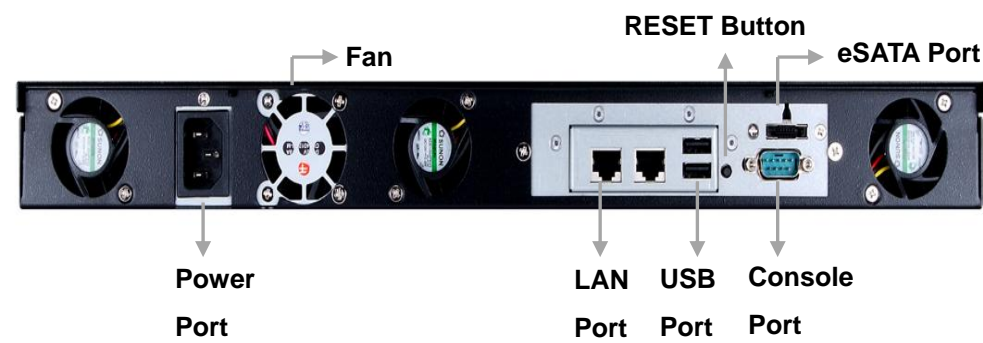
DS409slim			
LED Indication	Color	Status	Description
STATUS	Green	Static	Volume Normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed
			No volume
LAN	Green	Static	Network is up
		Blinking	Network is active
		Off	Network is down
DISK 1~4	Green	Static	Disk ready
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot Read/ Write
Power	Blue	Static	System ready
		Blinking	Bootting up
			Shutting down
		Off	Power off

4-bay 1U RackStation

Front View



Back View



Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn Synology DiskStation on or off. To turn off Synology DiskStation, press the Power Button and hold it until you hear a "beep" sound and the Power LED starts 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. For more detail please refer to the following LED Indication Table .
Hard Drive Tray	Front Panel	The hard drive tray is designed for loading the hard drives used in Synology DiskStation.
USB Port	Back Panel	The Synology DiskStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
Fan	Back Panel	The fan is built to exhaust waste heat out of Synology DiskStation. It will start automatically when the server starts. If the fan is malfunctioning, system will "beep" every 1 second.
eSATA Port	Back Panel	The eSATA port is for connecting with an external SATA HDD.
RESET Button	Back Panel	1. To restore IP, DNS, passwords for the admin account to default value. 2. To reinstall the Synology DiskStation.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to Synology DiskStation.
Console Port	Back Panel	The console port is where you connect Synology DiskStation directly to a computer.
Power Port	Back Panel	The power port is where you connect the AC adapter to Synology DiskStation.

LED Indication Table

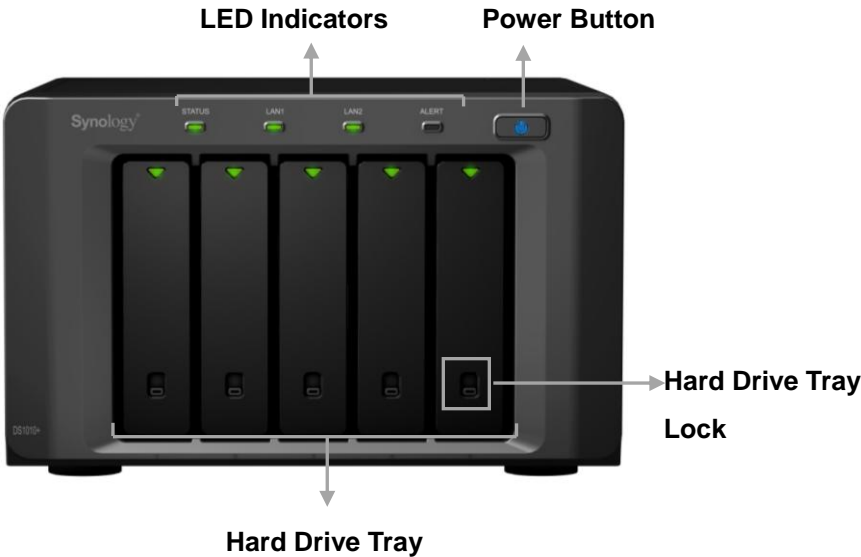
1U RackStation			
LED Indication	Color	Status	Description
STATUS	Green	Static	Volume Normal
		Off	Hibernation
	Orange	Static	Available volume space < 1GB
		Blinking	Volume degraded or crashed
			No volume
LAN	Green	Static	Network is up
		Blinking	Network is active
		Off	Network is down
DISK 1~4	Green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

* RS409RP+ only

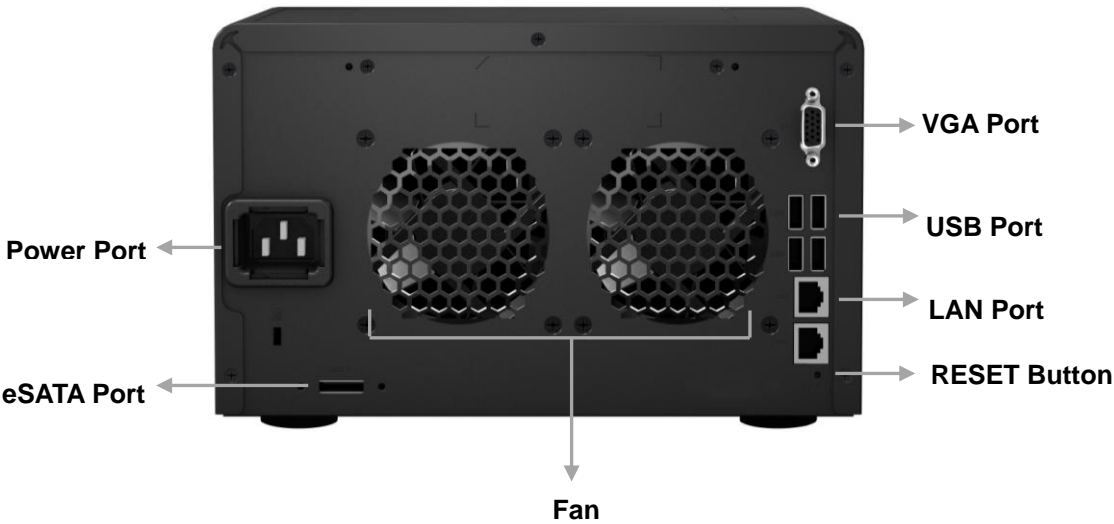
5-bay DiskStation

DS1010+

Front View



Back View



Article Name	Location	Description
Power Button	Front Panel	The Power Button is used to turn Synology DiskStation on or off. To turn off Synology DiskStation, press the Power Button and hold it until you hear a "beep" sound and the Power LED starts 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. For more detail please refer to the following LED Indication Table .
Hard Drive Tray	Front Panel	The hard drive tray is designed for loading the hard drives used in Synology DiskStation.
Hard Drive Tray Lock	Front Panel	Each hard drive tray is equipped with one tray lock to lock/unlock the trays to the DiskStation.
USB Port	Back Panel	The Synology DiskStation offers USB ports for adding additional external hard drives, USB printers, or other USB devices.
Fan	Back Panel	The fan is built to exhaust waste heat out of Synology DiskStation. It will start automatically when the server starts. If the fan is malfunctioning, system will "beep" every 1 second.
eSATA Port	Back Panel	The eSATA port is for connecting with an external SATA HDD.
RESET Button	Back Panel	1. To restore IP, DNS, passwords for the admin account to default value. 2. To reinstall the Synology DiskStation.
LAN Port	Back Panel	The LAN port is where you connect RJ-45 cable to Synology DiskStation.
VGA Port	Back Panel	The VGA port is where you connect Synology DiskStation directly to a LCD monitor.
Power Port	Back Panel	The power port is where you connect the power cord to Synology DiskStation.

LED Indications Table

DS1010+			
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 1 & LAN 2	Green	Static	Gigabit link
		Blinking	Network is active
		Off	Network is down
	Orange	Static	10/100MB link
		Blinking	Network is active
		Off	Network is down
Hard Disk Status Indicator (on tray)	Green	Static	Disk ready and idle
		Blinking	Disk is being accessed
		Off	No internal disk
	Orange	Static	Cannot Read/ Write
ALERT	Orange	Blinking	Hardware error
		Off	System ready
Power	Blue	Static	System ready
		Blinking	Booting up
			Shutting down
		Off	Power off

Managing Synology DiskStation

Entering Web Management UI

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

Using Setup Utility

Windows User

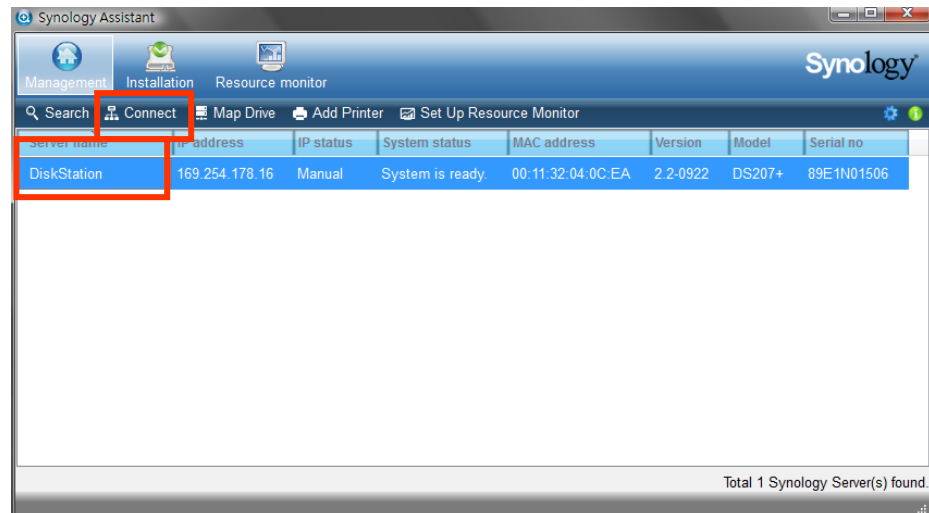
1. Insert the Installation CD into CD/DVD-Rom Drive.
2. Choose **Synology Assistant** on the Autorun Menu.



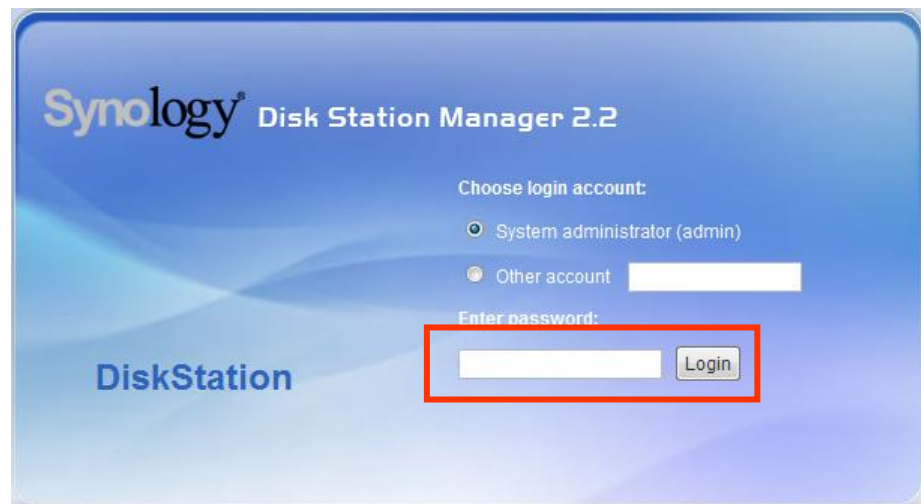
3. Follow the steps to complete installation.
4. After installation, double click on the desktop icon to execute the program.



5. Choose the server you want to manage. Click **Connect** or double-click the selected server to enter the Web Management UI.



6. Choose **System administrator (admin)**, input password, and click **Login**. The default password is empty.



Mac OS X 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 DiskStation*. Click **Connect** or double-click the selected server to enter the Web Management UI.
7. Choose **System administrator (admin)**, input password and click **Enter**. The default password is empty.

Note: To ensure the process runs smoothly, please use the following browsers:

Browser	Version
Internet Explorer	7.0 and onward
Firefox	3.0 and onward
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 DiskStation* 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 **System administrator (admin)**.
5. Input password for admin.
6. Click **Enter** to access Web Management UI.

Managing Synology DiskStation

You can start managing *Synology DiskStation* in Web Management UI. *Synology DiskStation* Web Management UI provides distinctive and straightforward 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.

To help you further manage *Synology DiskStation*, resource monitor allows you to watch over the CPU usage, memory usage, network flow, and volume usage. With SNMP service, you can now monitor *Synology DiskStation* with network management software.

Connecting from Two Different Networks^{*}

Synology DiskStation supports dual LAN allowing you to connect to the network with two LAN cables at the same time, or to set the *Synology DiskStation* 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 DiskStation* to create different types of volumes, and find the data protection level of your need. The *Synology DiskStation* 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	≥ 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	≥ 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	With RAID 1, one of the composed disks is used for backup purposes. The content of disk A is mirrored to disk B to assure data integrity, so the actual available storage capacity equals to the capacity of one hard drive.
RAID 5	≥ 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	≥ 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	≥ 4	This volume type eliminates 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 drives.

^{*} 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*

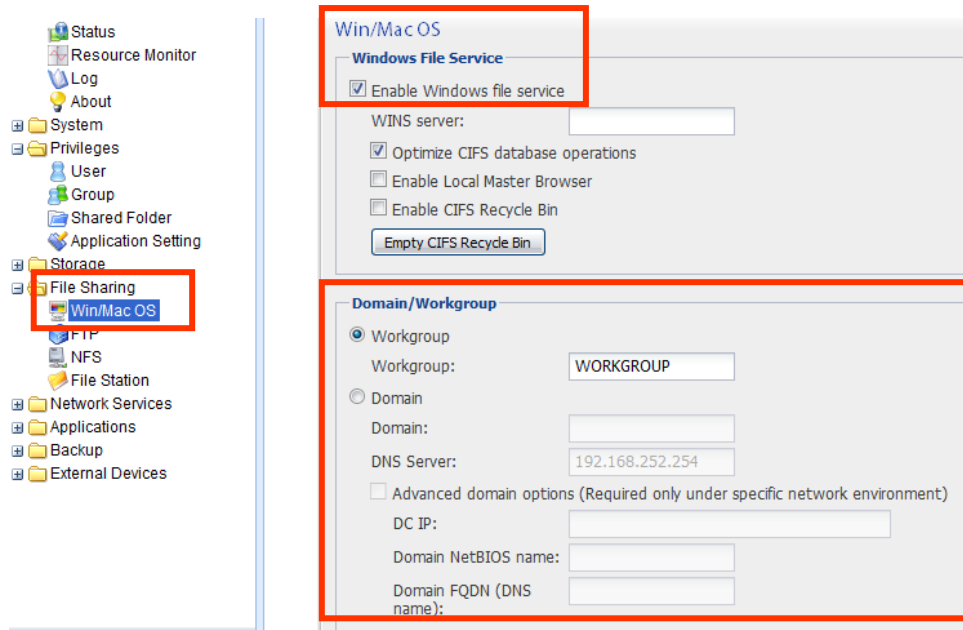
Synology DiskStation provides hot swapping function. When you need to replace crashed disks in *Synology DiskStation*, you don't need to turn off the server. You can refer to the disk status on the management UI, or the front panel LED indicators to identify crashed disks, and directly pull out the hard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

Joining Windows ADS Domain*

You can add *Synology DiskStation* to Windows ADS domain and let the domain users access *Synology DiskStation*. *Synology DiskStation* supports Active Directory Service (ADS) domain. After adding *Synology DiskStation* 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 *Synology DiskStation*, they only need to enter their domain account and password for authentication.

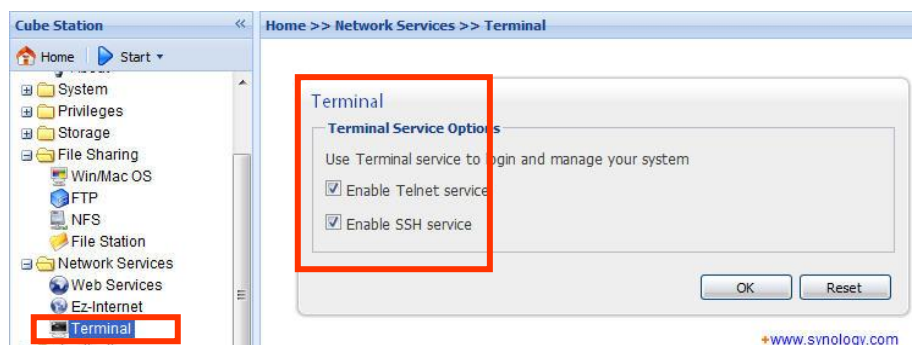
For the detailed description, please refer to Help on **File Sharing > Win/Mac OS** page.

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



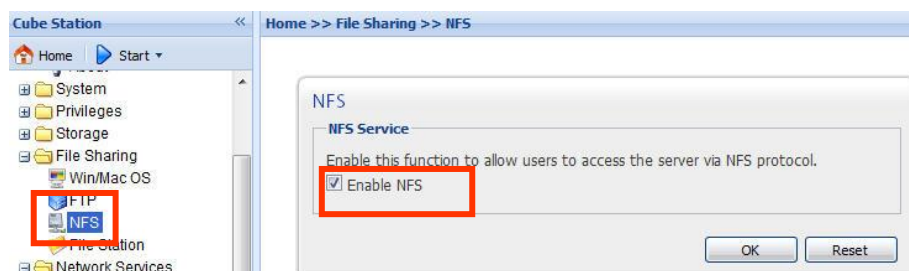
Accessing Synology DiskStation via Telnet/SSH

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



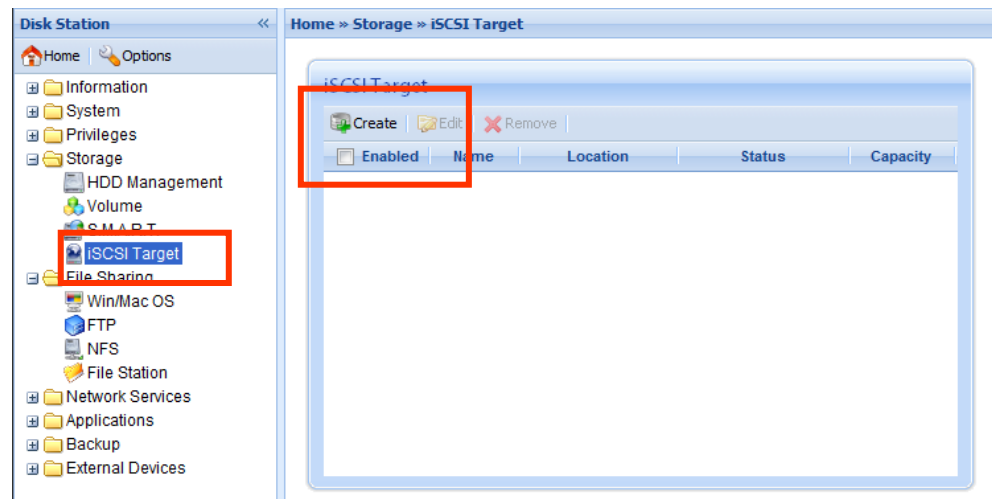
Accessing Synology DiskStation via NFS

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



iSCSI Target*

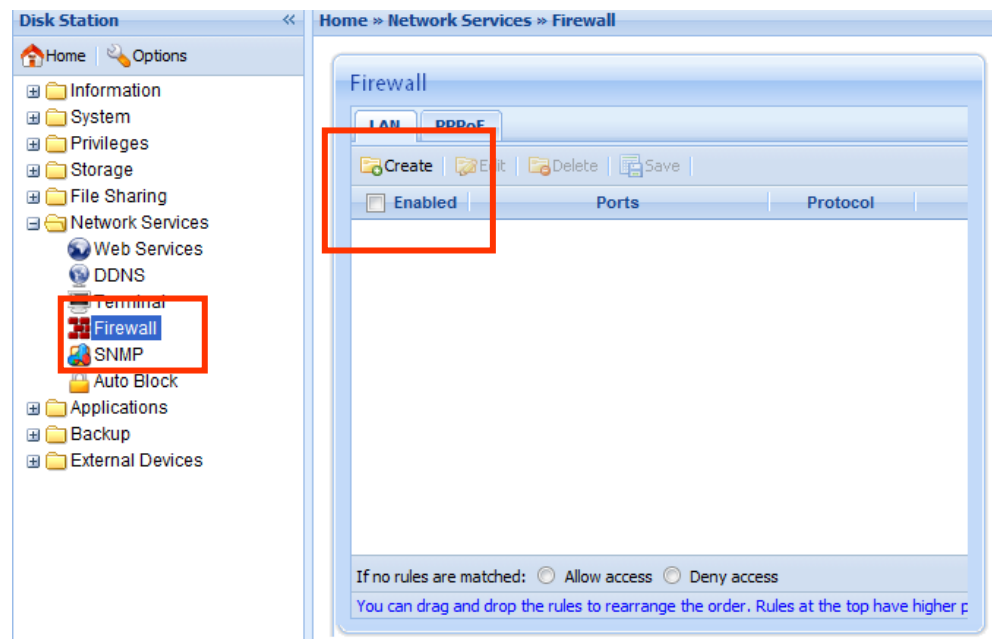
You can designate portion of your volume space to be an iSCSI Target, which will allow clients to access the space like a local disk. Go to **Storage > iSCSI Target** and create an iSCSI target.



Protecting Synology DiskStation from Unauthorized Login

Built-in Firewall

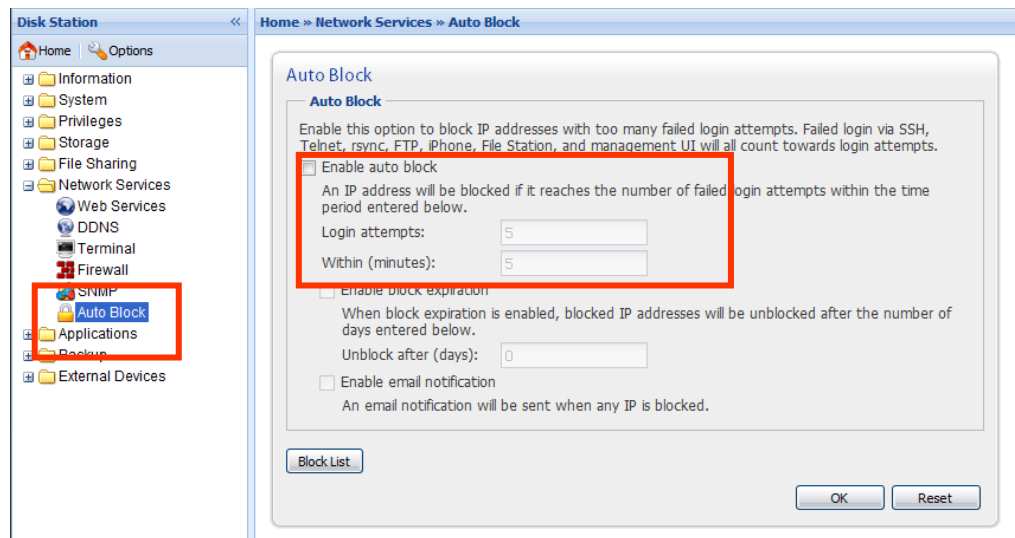
The built-in firewall can prevent unauthorized logins and control which services can be accessed. Go to **Network Services > Firewall** to enable and create firewall rules. You can choose to allow or deny some or all IP addresses from accessing some or all network ports.



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

Auto Block

Auto Block is another method to block unauthorized logins via SSH, Telnet, rsync, FTP, mobile devices, File Station, and management UI. Go to **Network Services > Auto Block** to enable and set up the service so that IP addresses exceeding the specified number of failed login within a time period will be blocked.



Resetting Administrator Password

Pressing the **RESET** button and holding it for about 4 seconds or until you heard a beep sound. This will restore IP, DNS, and the password for the admin account to default value. The default password of the admin account is blank.

Reinstalling Synology DiskStation

If for any reason you have to reinstall the *Synology DiskStation*, you can press the **RESET** button on the back panel twice, and the *Synology DiskStation* will be reinstalled. The data saved on the *Synology DiskStation* 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 DiskStation* 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 DiskStation* emits a beep sound.
3. Run Synology Assistant, and set up the *Synology DiskStation* again.

Accessing Synology DiskStation Data

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

Shared Folders

System Built-in

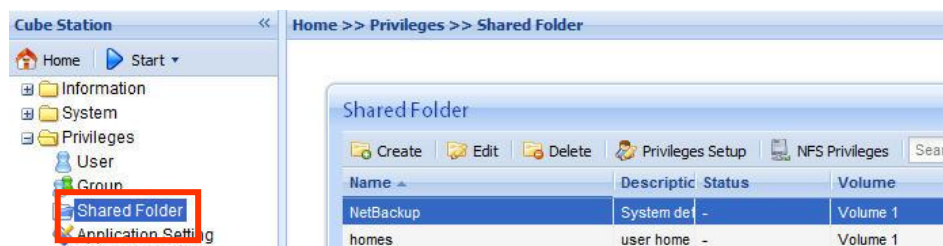
Below are the system built-in shared folders.

Name	Description
public	The public shared folder will be created automatically after the first time you set up 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 the <i>Extra Features > Web Station</i> section.
photo	The shared folder photo is for storing images and videos you want to share on Photo Station 3. It will be created automatically when Photo Station or DLNA/UPnP Media Server is enabled. For detailed information, please refer to descriptions of Photo Station 3 and Media Server.
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 <i>Extra Features > iTunes Service</i> section. In addition, when DLNA/UPnP Media Server is enabled, the music can be shared through a DLNA/UPnP device. For detailed information, please refer to descriptions of Media Server.
video	Video files in the video shared folder can be browsed through DLNA/UPnP DMA when Media Server is enabled. For detailed information, please refer to descriptions of Media Server.
surveillance	The shared folder surveillance is for storing the video files recorded by Surveillance Station 3. It will be created automatically when Surveillance Station 3 is enabled. This shared folder is read-only and can only be accessed with the admin account. For more details, please refer to the <i>Extra Features > Surveillance Station 3</i> 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.
usbshare	After you connect external USB HDD to <i>Synology DiskStation's</i> USB port, system will automatically create a shared folder with the prefix usbshare . Refer to <i>Expanding Storage Capacity > External HDD</i> section for details.
satashare	After you connect external SATA HDD to <i>Synology DiskStation's</i> eSATA port, system will automatically create a shared folder with the prefix satashare . Refer to <i>Expanding Storage Capacity > External HDD</i> section for details.

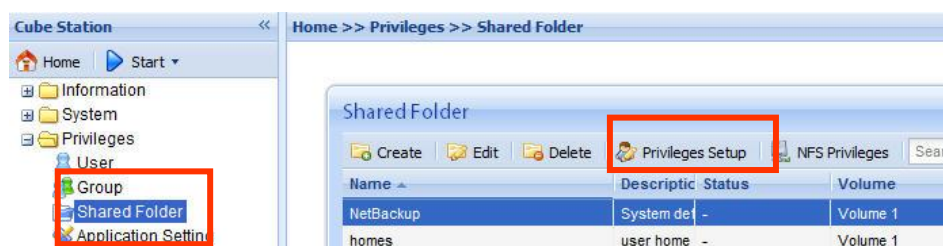
Administrator-Created

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.

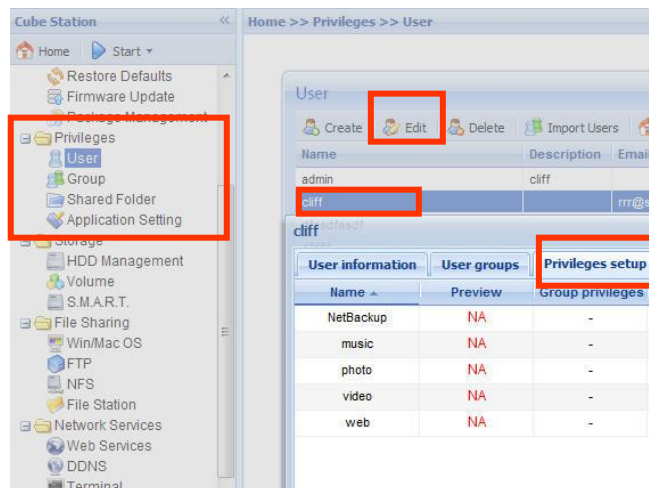


Setting Privileges

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



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

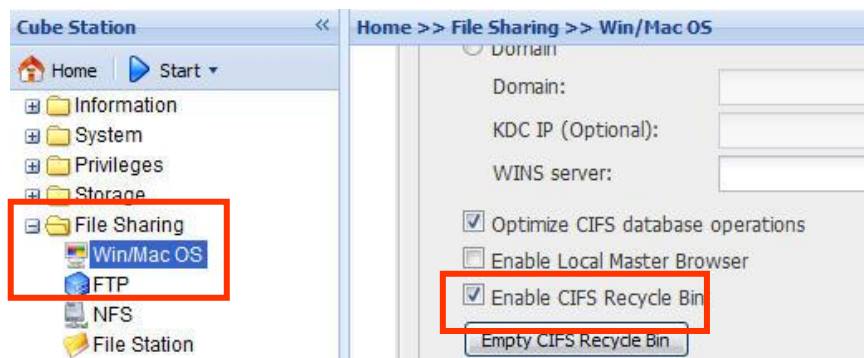


Using Network Recycle Bin

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.

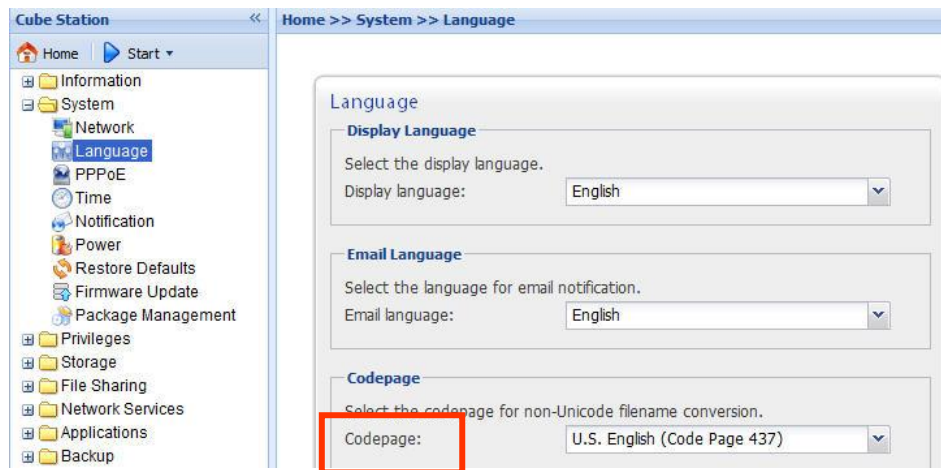
To enable the recycle bins, go to the page **Network Services > Win/Mac OS**, and check the **Enable CIFS Recycle Bin** option.

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



Setting Encoding

Synology DiskStation uses Unicode to avoid file inaccessibility between users who use different languages. For users without Unicode support on their PC, Administrator can set the Codepage of the files on the **System > Language** page of the Web Management UI to overcome the problem.



Accessing Shared Folders

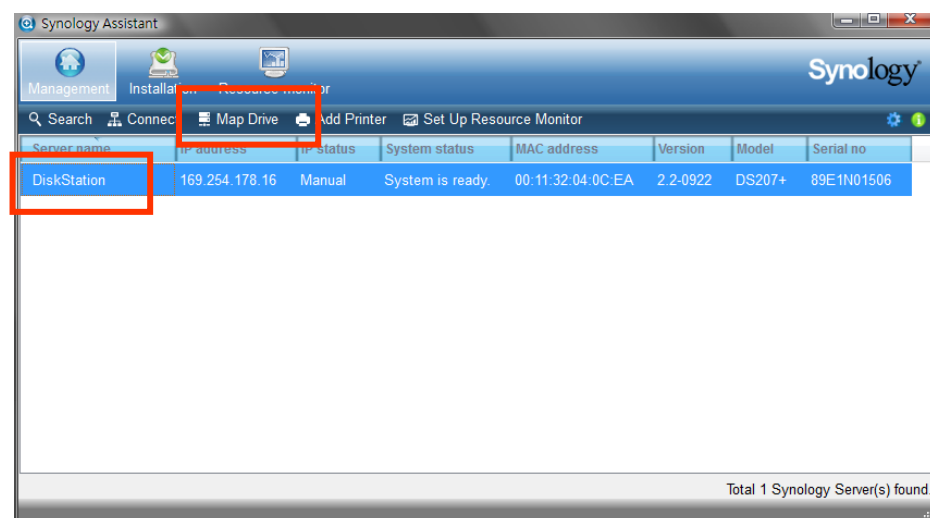
Within the Intranet

Windows User

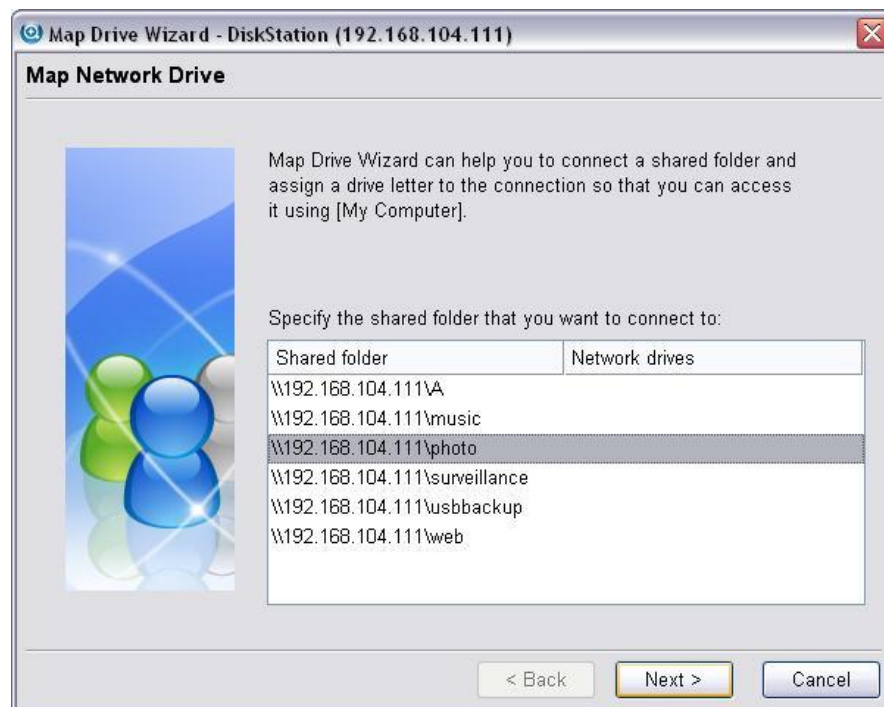
Windows users can access *Synology DiskStation's* shared folders by using Setup Utility to map Network Drive

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

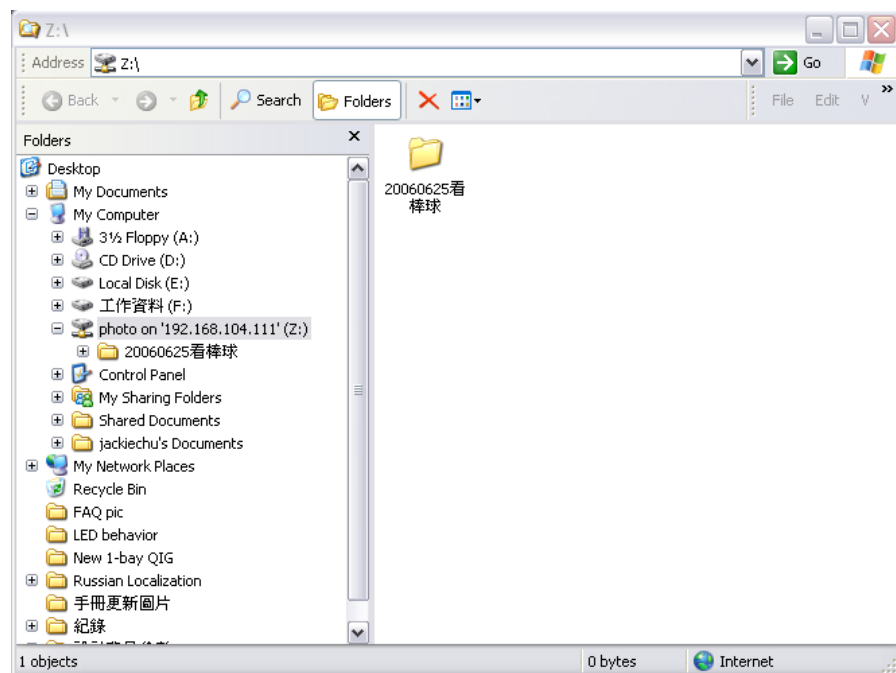
1. Run Synology Assistant.
2. Choose the server to map network drive.
3. Click on the **Map Drive** button.



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

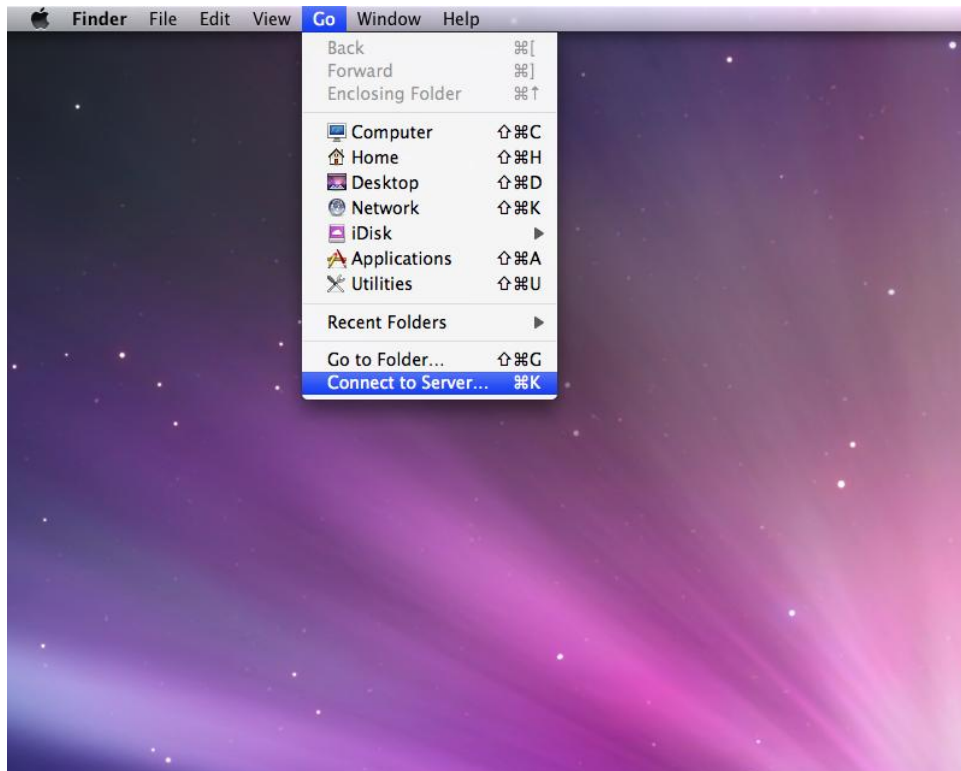


5. Upon completion, user can access the mapped shared folder in Windows Explorer.



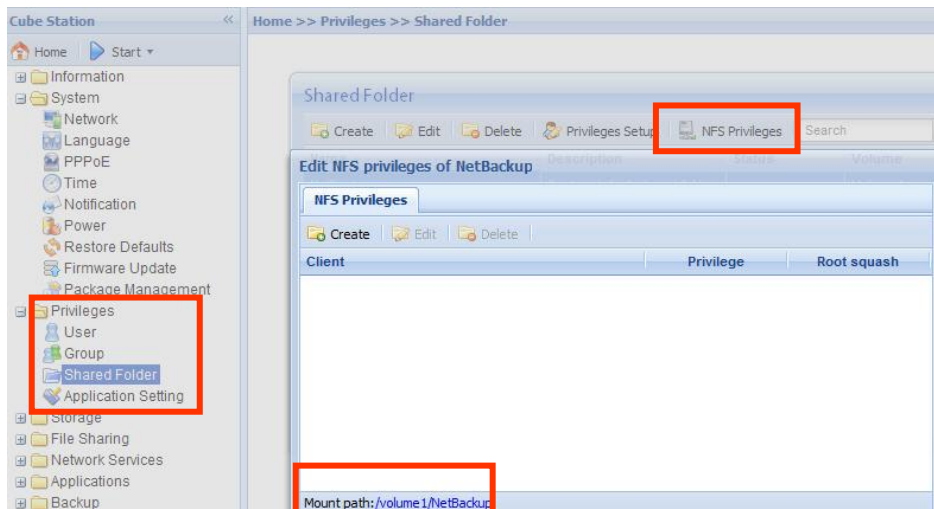
Mac User

Mac user can use **Go > Connect to Server** and type “smb://server_IP” or “afp://server_IP” to connect to a *Synology DiskStation* and access the shared folder on the server, Connecting through “smb://” is suggested for better performance.



Linux User

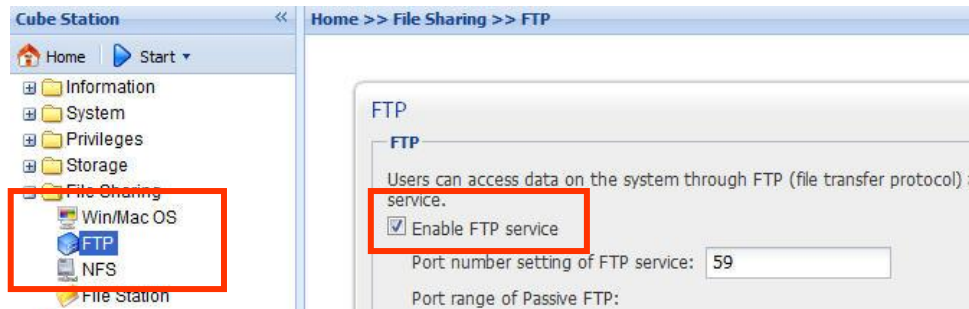
Linux users can mount the shared folders for accessing. Mount path can be found under **Privileges > Shared Folder > NFS Privileges** of the Web Management UI. Before mounting the shared folders, please make sure the NFS service is enabled.



From the Internet

Through FTP

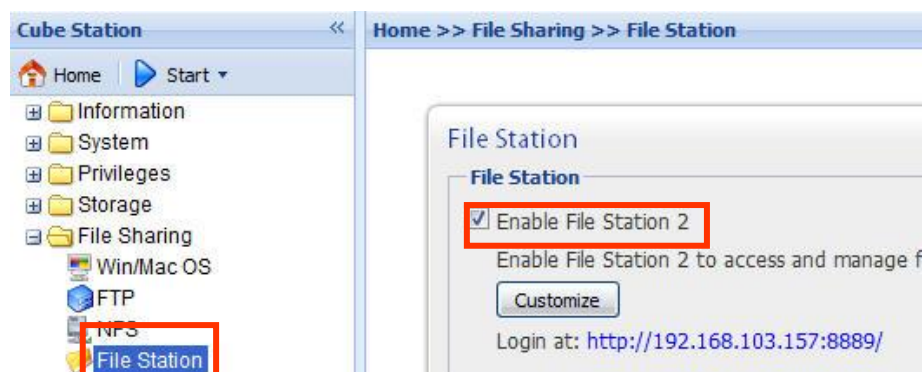
Synology DiskStation provides FTP service. Administrator can enable FTP service on the **File Sharing > FTP** page of the Web Management UI. Users can thus access data in *Synology DiskStation* by FTP Protocol. *Synology DiskStation* supports secure FTP by default when administrator enables the FTP service.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



Note: 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 *Synology DiskStation* with browsers. On File Station 2, you can drag-n-drop to 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.



From a Mobile Device

Mobile device support has been added to allow you to use iPhone OS 2.2.1 onward or Windows Mobile® 6.0 (Internet Explorer® Mobile or Opera® 9.0 and onward) to browse files stored in Files Station and Photo Station.

Backup Solutions

Synology DiskStation provides the following server backup solutions:

1. By using **Local Backup**, Administrator can back up *Synology DiskStation's* data to external USB or SATA HDD.
2. By using **Network Backup**, Administrator can back up *Synology DiskStation's* data to another *Synology DiskStation* or an rsync-compatible server.

Synology DiskStation provides the following personal data backup solutions:

3. By installing Synology Data Replicator 3 software on the client PC, Windows users can back up data from PC to *Synology DiskStation*.
4. By using Time Machine on Mac OS X, Mac users can back up data from their desktop to assigned shared folder on *Synology DiskStation*.

Synology DiskStation also allows you to back up system settings.

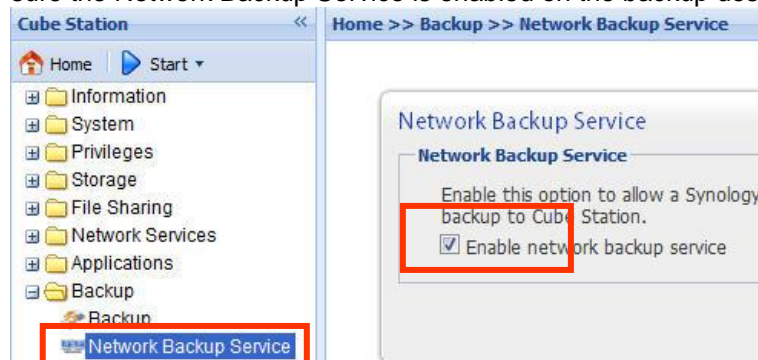
Local Backup and Network Backup

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

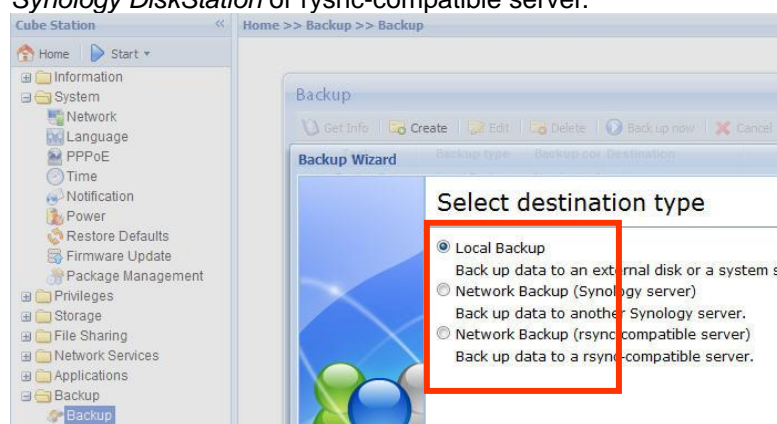
1. Connect an external USB HDD or SATA HDD to the corresponding port on *Synology DiskStation*.
2. Go to the page **External Devices > USB Disk** or **External Devices > eSATA Disk** of the Web Management UI, and format the HDD.



3. If you want to do network backup to another *Synology DiskStation*, 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 DiskStation* or rsync-compatible server.



Backing up Personal Data

Windows Users

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 DiskStation* to maintain a 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 DiskStation* to client PC at user's preference.

Before starting

Before using Synology Data Replicator 3, please ensure:

1. Client PC and *Synology DiskStation* use 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 the data on *Synology DiskStation* that was

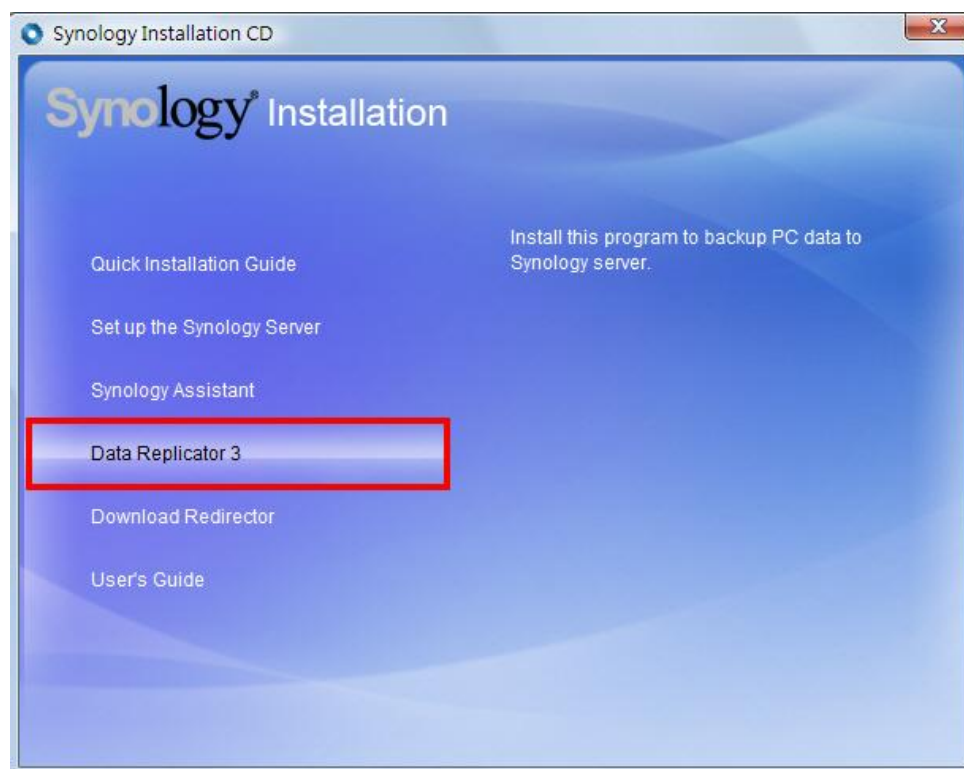
backed up after Data Replicator 3 was installed. If users have backed up data on *Synology DiskStation* using Synology Data Replicator, we recommend restoring data on *Synology DiskStation* to PC first before using Synology Data Replicator 3.

Minimum System Requirement

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

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.



Mac OS X User

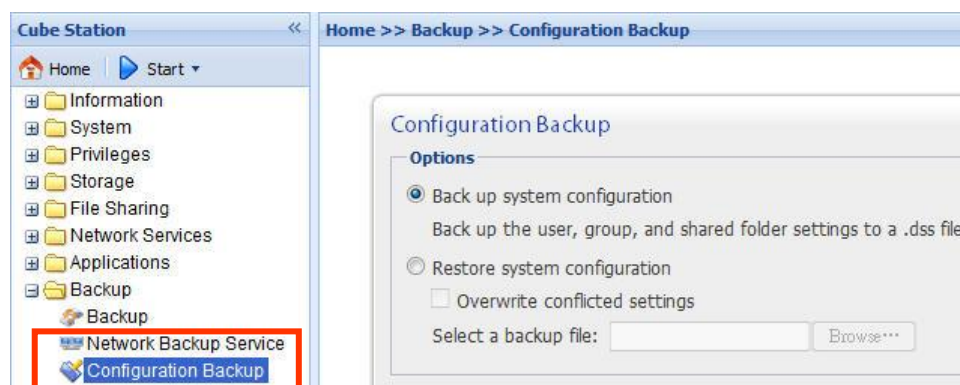
Mac users can use Time Machine to backup personal data to *Synology DiskStation* by enabling AppleTalk and selecting a destination shared folder on the **File Sharing > Win/Mac OS**.

Backing up Synology DiskStation Settings

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

From Synology DiskStation to PC Client

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

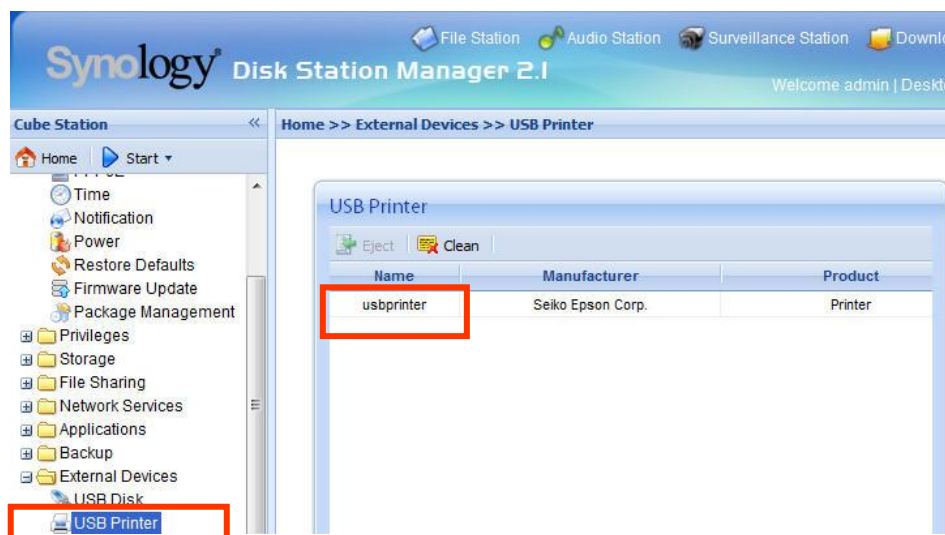


From Synology DiskStation to another Synology DiskStation

The data backed up to another *Synology DiskStation* 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 DiskStation 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.

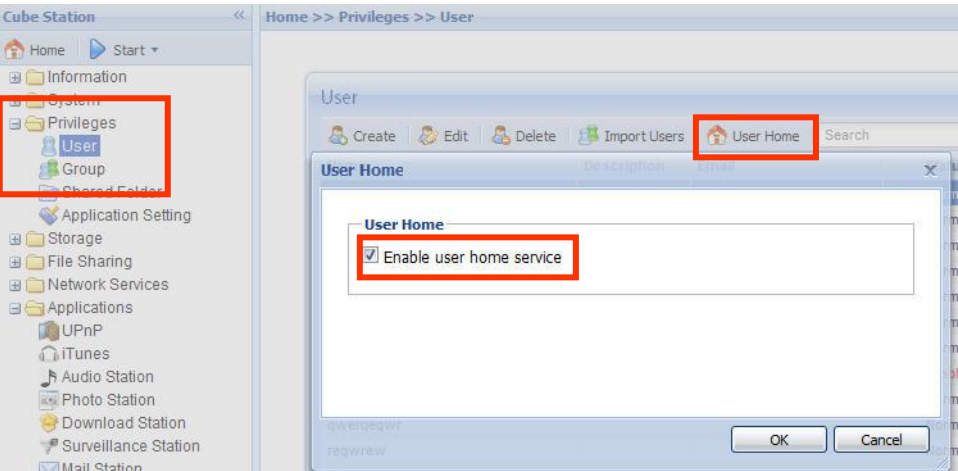


More Features

Management

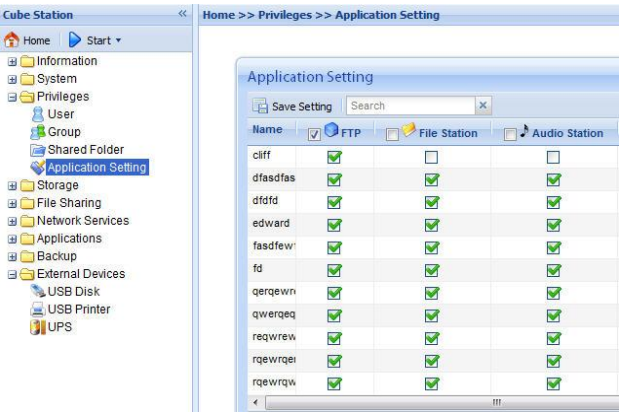
User Home

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



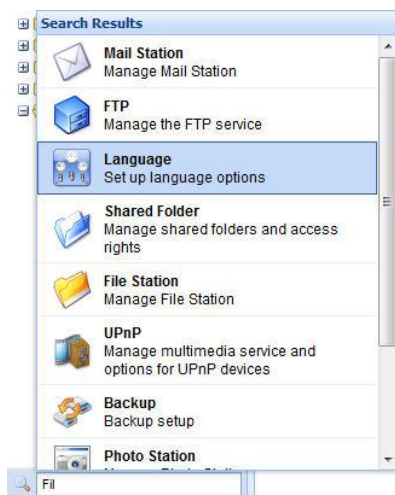
Applications Privilege Setting

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



Quick Search Box

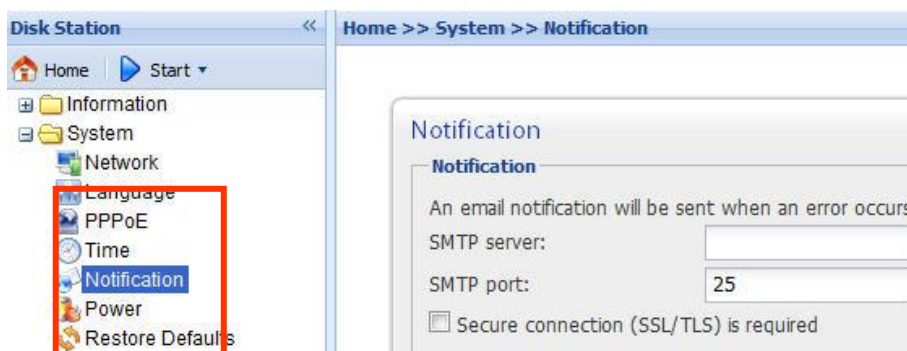
When the **Quick Search Box** is enabled, it will appear at the bottom of the Panel List. The “search while you type” feature helps you to quickly find the applications you want to manage by entering key words.



Notification

Email Notification

Administrator can enter email address and SMTP server information on the page **System > Notification**. *Synology DiskStation* will send email to the address whenever an important event occurs to notify Administrator.

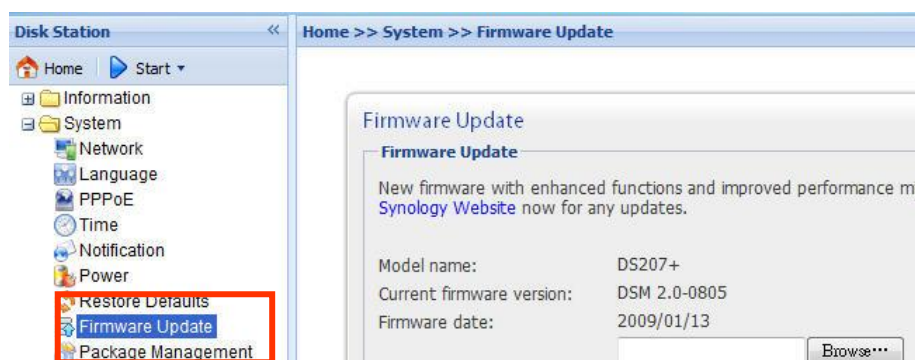


SMS Notification

If you would like to be notified by SMS, enable SMS notifications and enter information for your preferred SMS service provider.

Firmware Update

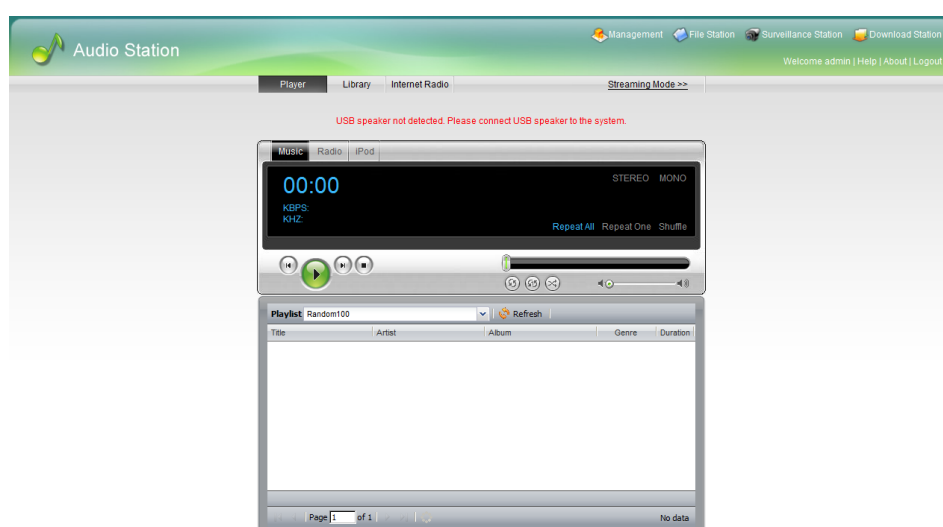
To keep your *Synology DiskStation* up to date, Administrator can go to **System > Firmware Update** page to upgrade firmware.

**Note:**

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

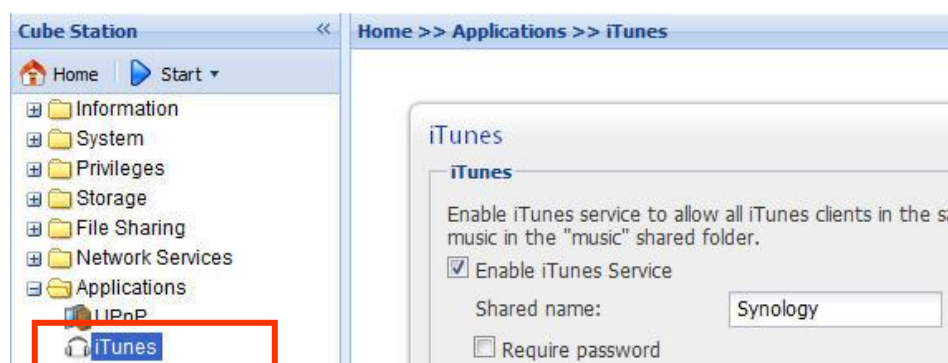
Audio Station

By connecting a set of verified USB speakers and the Synology Remote receptor to the USB ports on the *Synology DiskStation*, users will be able to enjoy the music stored on the *Synology DiskStation* with the music player in the Audio Station web interface, or by the direction-free remote control. Users can also stream music stored on *Synology DiskStation* to the client PC and have the music delivered by built-in speakers. Besides music on the *Synology DiskStation*, users can listen to the Internet radio stations, or play music from the connected iPod as well. 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. DS audio is also available for download on Apple's App Store to stream the music in Audio Station with your iPhone/iPod touch.



iTunes Service

When **iTunes Service** is enabled, users can play music files stored on *Synology DiskStation* 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.



Media Server

Using DLNA/UPnP media server, you can browse the multimedia files stored on the server via a DLNA/UPnP DMA (Digital Media Adapter). After enabling media server on the **Applications > Media Server** page, place the multimedia files in one of the following shared folders: photo, video, or music. You can customize how the files will be organized and displayed on the DMA menu or insert album covers for music files without embedded images. Furthermore, MIME types and transcoders can be enabled to enhance DMA compatibility.



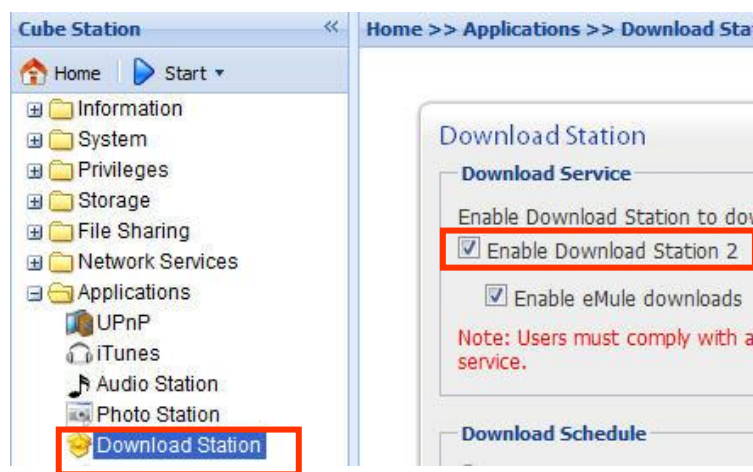
Download Station 2

Synology DiskStation can download files from the Internet through BitTorrent, FTP, HTTP, NZB and eMule. BitTorrent partial file download is also available. E-mail notification upon the download tasks' completion is optional. PC users and Mac users can either install Download Redirector or log in to the **Download Station** page on the Web Management UI to add download tasks and manage the download queue.

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

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.

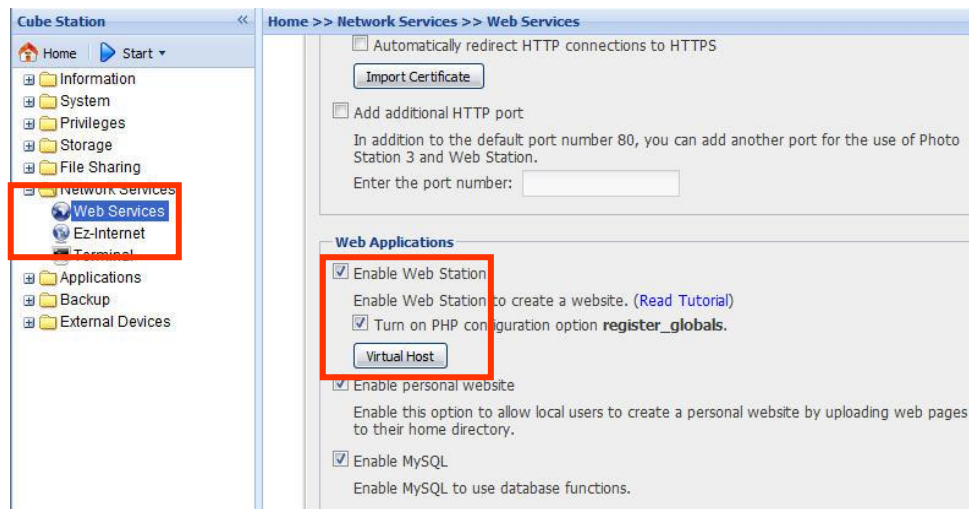
For the detailed description of Download Redirector, please refer to Help on Download Redirector program window.

Web Station

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

Enabling Web Station and MySQL

Go to the **Network Services > Web Services** page.



Enabling Virtual Host

Go to the **Network Services > Web Services** page, and click on **Virtual Host**.

Web Station's detail description

Please click on the **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 a folder containing 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 preferred language. Photo Station 3 also provides users with the search function. By entering key words, users can find the relevant photos, videos, and files. You can also click on the arrow for advanced search.

Photo Station 3 can be accessed on a mobile device with iPhone OS 2.2.1 onward or Windows Mobile® 6.0 (Internet Explorer® Mobile or Opera® 9.0 and onward). You can also download DS photo on Apple's App Store to upload photos stored on their iPhone/iPod Touch to a *Synology DiskStation*.

Enabling Photo Station 3

Go to the **Applications > Photo Station** page.



Photo Station 3's detail description

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

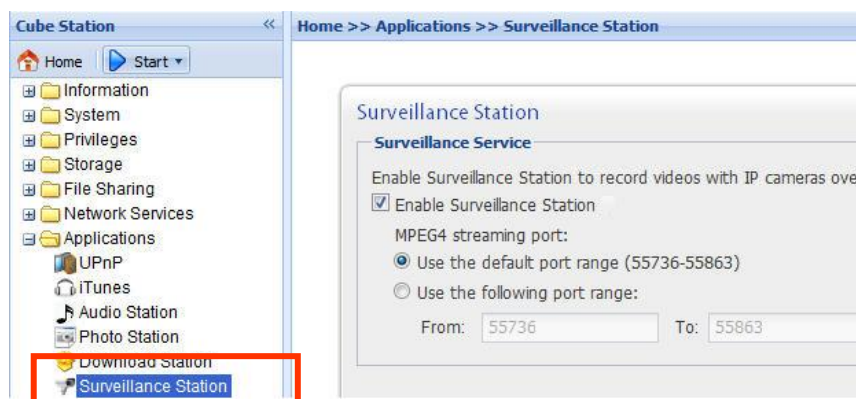
Surveillance Station 3

By using Surveillance Station 3, you can monitor the live image of various IP cameras attached on the network, customize video recording options, and choose among Continuous Recording, Motion Detection Recording, and Alarm Recording modes. When playing back the recording events, you can fast forward, slow down, or play up to 4 channels simultaneously. 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 MPEG4 format and the camera supports audio recording function, both sounds and images will be recorded when the system is recording an event. Centralized management allows you to monitor the live-view of IP cameras installed on multiple DiskStations. SMS notification sends you a notification message when the events you have selected occur.

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 3

Go to the **Applications > Surveillance Station** page.



Surveillance Station 3's detailed description

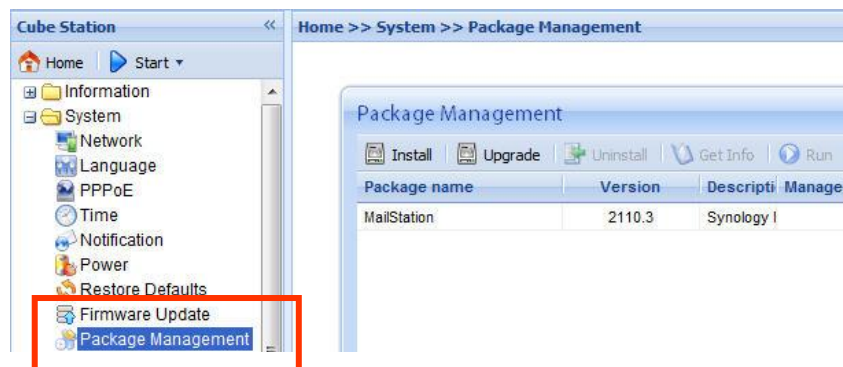
For detailed function descriptions, please click **Help** on the Surveillance Station 3 Web Management UI. Surveillance Station requires IE 7.0 browser.

Mail Station

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

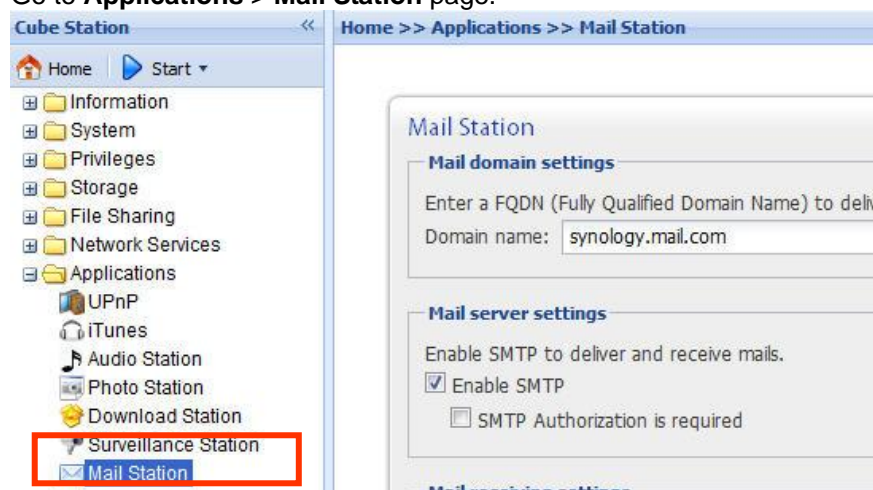
Mail Station Installation

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 USBCopy button all the data in the USB Device will be copied to *Synology DiskStation's* internal HDD.

Setting USBCopy Target Location

You can setup USBCopy target location on the **External Devices > USBCopy** page of the Web Management UI, data will be copied to the target location when you press the USBCopy button.



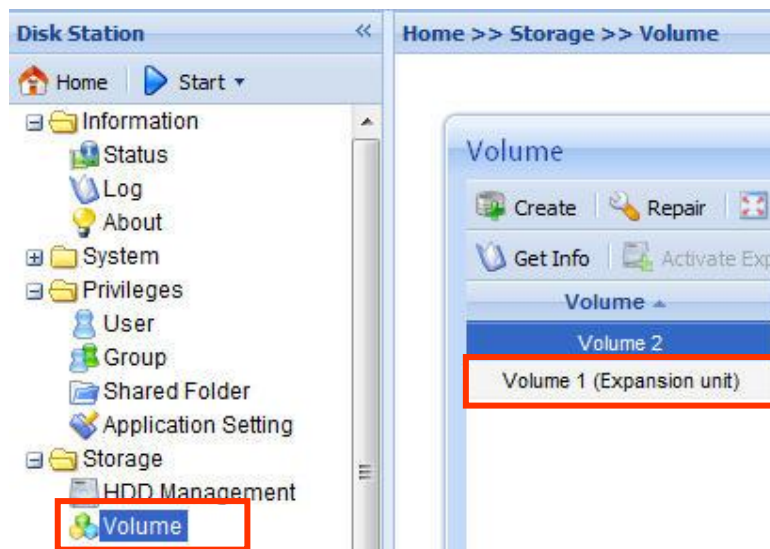
^{*} Supported on specific models only. Please refer to the product Specification table.

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^{*}

You can expand the storage capacity of your *Synology DiskStation* by 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 DiskStation*'s USB port, **usbshare1** shared folder will be created automatically. Upon disconnecting external USB HDD, the shared folder will be removed. When 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.

^{*} Supported on specific models only. Please refer to www.synology.com.



External SATA HDD^{*}

When connecting an external SATA HDD to *Synology DiskStation'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 runs out, Administrator can follow the steps below to replace a larger HDD but keep the original data:

For one-bay models^{*}

1. Turn off the *Synology DiskStation*.
2. Replace the internal hard drive with a larger one.
3. Turn on the *Synology DiskStation*.
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 DiskStation*.
2. Turn off the *Synology DiskStation*.
3. Replace the internal hard drives with larger ones.
4. Turn on the *Synology DiskStation*.
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 DiskStation*.
2. Replace the first internal hard drive with a larger hard drive.
3. Turn on the *Synology DiskStation* 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.

Note:

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 DiskStation*.
2. Replace the first internal hard drive with a larger hard drive.
3. Turn on the *Synology DiskStation* 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.

Note:

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

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

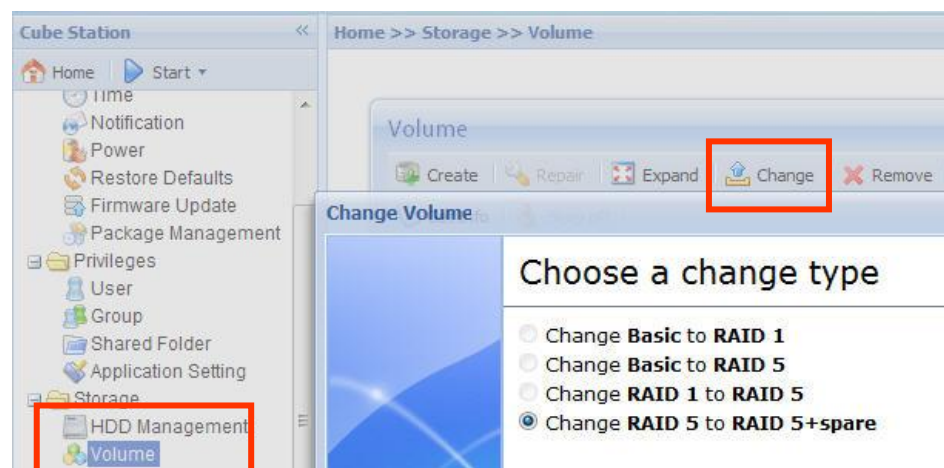
Adding a HDD to a RAID 5/RAID 6 Volume^{*}

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 you have created a Basic, RAID 1 or RAID 5 volume, you could add a new drive to the *Synology DiskStation*, and then click “Change” on the Volume page to change the volume type. 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 RAID 5+Spare



^{*} Supported on specific models only. Please refer to the product Specification table.

Troubleshooting

For any questions about managing your *Synology DiskStation*, 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 for further assistance.

Appendix

Recommended Peripherals

For recommended peripheral models, including hard drive, USB printer, DMA, and UPS, please visit 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
2. time.asia.apple.com
3. time.euro.apple.com
4. time.nist.gov
5. time.windows.com

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